

Illegal substance use prevention programme for adolescent learners

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“It always seems impossible until it's done”

Nelson Mandela

But, for God everything is possible (Matthew, 19:26). He has helped me all the way (1 Samuel: 7:12). Therefore, I will thank Him and praise Him for ever and ever (Psalm, 145:1-2)

Thesis layout

This thesis on illegal substance use prevention programme for adolescent learners is presented in article format. The PhD candidate, Mr Leepile Alfred Sehularo, conducted the research and wrote the manuscripts. Prof. Mofatiki Eva Manyedi and Prof. Emmerentia du Plessis acted as promoters and critical reviewers in the research process. Prof. Abel Jacobus Pienaar was an expert consultant in the research. The thesis is presented in the following sequence:

Section One: Overview of the research

Section Two: Manuscripts

Manuscript One: Substance use prevention programmes among adolescents focusing on resilience as a protective factor: A systematic review (Published in *African Journal for Physical Activity and Health Sciences*)

Manuscript Two: Stakeholders' perceptions of resilience as a protective factor in illegal substance use prevention programme for adolescent learners (Submitted to *African Journal for Physical Activity and Health Sciences*)

Manuscript Three: Stakeholders' perceptions of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor (Submitted to *African Journal for Physical Activity and Health Sciences*)

Manuscript Four: Conceptual framework for illegal substance use prevention programme for adolescent learners (To be submitted to *African Journal for Physical Activity and Health Sciences*)

Manuscript Five: Illegal substance use prevention programme for adolescent learners (To be submitted to *African Journal for Physical Activity and Health Sciences*)

Section Three: Conclusions, Limitations and Recommendations

Declaration

I, Leepile Alfred Sehularo, declare that this thesis on **illegal substance use prevention programme for adolescent learners** which I submit for the degree of Doctor of Philosophy in the School of Nursing Science, Faculty of Agriculture, Science and Technology at the Mafikeng Campus of the North-West University, is my own original work and that all sources and references used in the thesis have been acknowledged accordingly.

Signature

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Abstract

Illegal substance use among adolescent learners is a major global concern for government policy-makers, researchers and mental health care practitioners. The consequences of illegal substance use among adolescent learners include negative social, health and behavioural consequences including mental and physical health problems, violence and aggressive behaviour. The purpose of this research was to develop and validate an illegal substance use prevention programme for adolescent learners in the North West Province of South Africa. An intervention research design was followed to address the research problem. The design involved four phases, namely problem analysis and planning, information gathering and synthesis, design as well as early development and validation.

Phase one included an overview of the research which consists of introduction, background, problem statement, research purpose and objectives, central theoretical argument, definition of main concepts as well as a brief description of the research methodology. Phase two included two stages namely a systematic review and a qualitative, explorative, descriptive and contextual approach. In stage one, a systematic review was done to explore and describe current evidence on substance use prevention programmes among adolescents, focusing on resilience as a protective factor. In stage two, a qualitative, exploratory, descriptive and contextual approach was followed to explore stakeholders' perceptions of resilience as a protective factor in illegal substance use prevention programme for adolescent learners and their perceptions of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor in the North West Province of South Africa. Phase three included the design of a conceptual framework for the programme. A survey list of the Practice Oriented Theory of Dickoff, James and Wiedenbach as well as Mouton and Marais' characteristics of precursive theoretical models were used as a guide for deducing the conceptual framework. Phase four comprised the development and validation of the proposed programme. Information from the first three phases was used to develop the programme. The findings of this thesis confirmed the content of the programme, and indicated that the programme should focus on strengthening adolescents' resilience and on mobilising protective factors. Experts in mental health and substance use disorders as well as adolescent learners validated the programme. Both experts and adolescent learners indicated that the

programme is clear, simple, general, accessible and important. The programme contributes important information to the field of psychiatry and mental health. Recommendations were made for implementation of the programme.

Keywords: adolescent learners, substance use, substance abuse, illegal substance use, prevention programme

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Section One: Overview of the research

Section One: Overview of the research

1.1 Introduction

This section provides an overview of the research on illegal substance use prevention programme for adolescent learners. The section consists of a background, problem statement, research purpose and objectives, central theoretical argument, definition of key concepts as well as a description of the research methodology.

1.2 Background

Illegal substance use among adolescent learners is a major problem facing the whole world. Interestingly, French *et al.* (2008:272) indicate that in the United States of America (USA), adolescent learners themselves reported their serious concern about illegal substance use, a challenge they perceived to be more serious than any other issue, including violence, crime, social pressure, or academic pressure. Illegal substance use among adolescent learners is also a major concern in South Africa (SA) in general. For instance, Mohasoa (2010:2) reveals that illegal substance use by adolescent learners costs South Africa large amounts of money every year. This is evident in large sums of money that are used in prevention and treatment of illegal substance use among adolescent learners in substance rehabilitation centres throughout SA (Mohasoa, 2010:2).

It is also mentioned in the National Drug Master Plan (2013-2017:51) that the money spent and the effort put into prevention programmes for illegal substance use such as “*Ke moja*” (meaning I’m fine with drugs) can, and in many cases do lead to fruitless expenditure and effort. Weich (2006:436) adds that illegal substance use among adolescent learners is common and costly to their physical and mental well-being, their parents, families, guardians, peers and employers, the legal, health and welfare services

and to the country at large. Similarly, Sehularo *et al.*, (2010:45) established mixed feelings on the issue of the money spent on illegal substances. For instance, most of the participants who were adolescent learners in their study mentioned that illegal substances such as marijuana are very cheap or that they get them for free. These adolescent learners mentioned that they get marijuana for R2, R3 or R5. Other participants differed by saying that using illegal substances such as marijuana is just a waste of money which could have been used on something else. These participants further said that sometimes they have to rob people, putting their lives at risk, just to get money in order to get illegal substances like marijuana.

According to Amoateng *et al.*, (2007:27), adolescent learners use illegal substances for reasons varying from socio-cultural changes, entertainment, coping with stress, enhancing school performance to reducing physical and emotional pain. Matheson and McGrath (2012:1) add that researchers have found that adolescent learners start using illegal substances for five main reasons, that is, to improve their mood, to receive social rewards, to reduce negative feelings, to avoid social rejection, and peer pressure. In the NWP of SA, reasons for adolescent learners' use of illegal substances include experimentation, depression, biological, peer group pressure, availability, and family structure (Mohasoa & Fourie, 2012:34). Again, Mohasoa (2010:34) found that in addition to poly-substance use, adolescent learners use illegal substances such as alcohol, tobacco, marijuana, cocaine, glue, nyaope and heroin. According to the researcher's personal experience as a mental health nurse specialist in the NWP of SA, most of the adolescent learners admitted at public psychiatric hospitals with psychotic clinical diagnosis have a history of using illegal substances such as alcohol and marijuana.

In spite of the above information on adolescent learners' use of illegal substances in the NWP of SA, researchers indicate that the rates of illegal substance use among adolescent learners in the NWP of SA is lower as compared to other provinces in the country (Amoateng *et al.*, 2007:27; Peltzer *et al.*, 2010:8). Despite this, the researcher supports the submission by the United Nations Office for Drug Control and Crime (UNODC) (2002:21) that whoever said that prevention (in this case, prevention of illegal substance use among adolescent learners) is better than cure definitely got it right. As such, it is better to prevent adolescent learners from initiating illegal substance use in the first

place than intervening at a later stage when they will have already begun fighting substance related disorders. Another concern is that most of these adolescent learners in the NWP of SA start using illegal substances while in school. For example, Mohasoa (2010:34) mentions in her study also conducted in the NWP of SA that participants had started using illegal substances between the ages of 12 and 15 years while enrolled for Grades 7 to 9. Only one adolescent learner in her study reported that he had started using illegal substances in standard two (Today's Grade 4). Sehularo *et al.* (2010:37) also have similar findings in their study conducted in the NWP of SA. They found that most of the adolescent learners in the NWP of SA start using illegal substances around 12 years of age while they are still at school. It is against this background that the greater part of this research was conducted at public schools and psychiatric hospitals in the NWP of SA. In these public schools and psychiatric hospitals, stakeholders' perceptions were first explored on their resilience as a protective factor in illegal substance use prevention programme for adolescent learners in the NWP of SA. Secondly, their perceptions of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor in the NWP of SA were also explored. In line with Deverka *et al.* (2013:182), stakeholders in this context refer to groups of people who are in possession of the knowledge that should be taken into serious consideration, which will be important to the implementation of resulting policies, and/or have an interest in the research's outcomes, such as in prevention of illegal substance use among adolescent learners. In the present study, these stakeholders include adolescent learners, parents, teachers as well as the professional nurses who have an interest in participating in this study after signing the consent forms for their voluntary participation.

The above information, therefore, highlights the gap that the researcher identified in the light of the need to develop and validate illegal substance use prevention programme for adolescent learners in the NWP of SA. According to Schwartz *et al.* (2007:5), prevention of illegal substance use among adolescent learners may be achieved through prevention programmes which are aimed at enhancing protective factors, of which resilience is one. Protective factors can be seen as enhancing the resilience of an adolescent learner for coping with risk factors in their lives and protect them from illegal substance use (Dillon *et al.*, 2007:3; Fadardi *et al.*, 2010:1956). Protective factors that might lessen illegal substance use among adolescent learners include variables such as a stable family life, strong parent-child bond, consistent parental supervision, investment in academic

achievement, and a peer group who model prosocial family and school behaviours (Sadock *et al.*, 2015:1274). Knowledge of protective factors often aids the development of early intervention strategies aimed at preventing illegal substance use among adolescent learners, such as the scope of this present research. Early intervention programmes that successfully target a number of protective factors have the capacity to prevent multiple problems simultaneously, rather than just aiming at a single outcome (ANON, 2007:5). If an adolescent learner is nourished with these important protective factors, resilience is likely to result.

Historically speaking, illegal substance use prevention work in South Africa has witnessed different approaches or programmes such as the shock-horror programmes, the life-skills based programmes and the information-based programmes (UNODC, 2004:9). Other provinces such as the Western Cape have their own illegal substance use prevention programmes such as the Western Cape Provincial Blueprint – Workstream on the Prevention and Treatment of Harmful Alcohol and illegal drug (Prevention of alcohol and other drug use policy, 2013:12). According to available literature, it seems that there are no documented previous studies conducted on illegal substance use prevention programmes for adolescent learners in the NWP of SA. The need was then identified to develop and validate an illegal substance use prevention programme for adolescent learners specifically from a resilience perspective. Such a perspective may indeed take into consideration the strengths of adolescent learners and use these strengths to prevent substance use.

Focusing on the prevention of illegal substance use among adolescent learners, it seems that preventing adolescent learners from using illegal substances is a major challenge as many programmes have been found to be ineffective (Morojele *et al.*, 2009:2). Others have not been evaluated at all (Bandy & Moore, 2008:2), and others were based on opinion rather than evidence (UNODC, 2004:9). On the other hand, Faggiano *et al.* (2008:538) add that the empirical evidence supporting the effectiveness of prevention programs is still weak and is subject for debate. In South Africa, including the NWP, it is mentioned in the National Drug Master Plan (2013-2017:51) that in prevention programmes such as “*Ke moja*” (I’m fine with drugs); little or no attempt had been made

to measure success. According to the UNODC (2004:11), one prominent factor deemed to have reduced the impact of some prevention programmes is that they have been developed largely from an adult perspective. They have therefore failed to engage with the developmental stage of adolescent learners. It is thus vital that when developing or implementing prevention programmes, one attempts to place oneself in the mind set of an adolescent learner. What works for adults does not necessarily work for adolescent learners. Feldtmann (2010:4) confirms that prevention programmes have a high risk of failing if they are planned without thorough background information on the target groups, cultural and ethical issues, and the extent of the problem. In addition, consensus is that prevention and cessation based illegal substance use prevention programmes can work (Bandy & Moore, 2008:2). The purpose of a prevention programme is to prevent a person (in this case, adolescent learner) from using or continuing to use illegal substances that may lead to substance use disorders (SUD) (Prevention of and Treatment for Substance Abuse Bill, 2008:10). It is also important to understand what prevention approaches are effective as well as those that are not effective nationally and internationally in order to develop and validate an effective illegal substance use prevention programme for adolescent learners in the NWP of SA.

1.3 Overview on relevant literature

To further highlight the need for an illegal substance use prevention programme for adolescent learners, an overview of relevant and recent literature is presented. Literature on adolescent learners, illegal substance use among adolescent learners and resilience as a protective factor in preventing illegal substance use among adolescent learners is discussed.

Adolescent learners

Adolescent learners are too often left out from research (Battles, 2010:32) even though Epstein *et al.* (2007:701) state that they are an important group that ought to be included

in research because they are a unique population (Battles, 2010:32) in a unique developmental period (Visser & Routledge, 2007:265). On the other hand, De Milliano (2015:4) indicates that scholars stress the lack of knowledge on adolescent learners; hence it is important to study more about this population. Adolescent learners should be involved in research for them to be part of the solution to their own problems rather than being part of the problems (Visser & Routledge, 2007:595). De Milliano (2015:4) adds that it is difficult to define adolescent learners. However, he defines them as those aged between 10-19 years. According to De Milliano (2015:4), adolescent learners are perceived as social actors, which implies respecting them as having their own experiences and understandings and acknowledging that they act, take part in, change and become changed by the social and cultural world they live in.

Adolescence has been defined by different authors in a variety of ways. For example, Dorn *et al.* (2010:33) state that among the useful definitions of the concept of adolescence, they have a preference to define it as the intermission between youthful and the beginning of adult roles and responsibilities, a broad intermission of maturation that encompasses mental, physical and emotional development, as well as coincident cognitive changes and change in social roles. Brassai *et al.* (2010) add that adolescence is a time characterized by a strong desire for independence combined with an increased need for social support from peers, or a critical life period due to hormonal-behavioural and psychosocial changes, particularly changes in youth's lifestyle and their health behaviours. The period of adolescence lends itself to egocentrism and a sense of being invulnerable, encouraging adolescent learners to take risks (Visser & Routledge, 2007:611). As a result, risky behaviours including substance use during the adolescent learners' years are a major concern because they invariably manifest through increased risk for injury, interpersonal violence, crime, high-risk sexual behaviour, suicide, academic difficulties, and school drop-outs (Visser & Routledge, 2007:596).

From the above information, one can therefore see how being an adolescent learner, and especially being a male surrounded by societal stereotypes and pressures, contributes to psychological difficulties and risk-taking behaviour (Visser & Routledge, 2007:611). After perusing the literature, the importance of adolescence is illuminated in the fact that they are not included in research in most of the times, yet they are a vital health research population. Because of their age group which ranges between the age of 10 and 19, they

are at increased risk of using illegal substances. However, they should be involved in research in order to be part of the solution rather than being part of the problem.

Illegal substance use among adolescent learners

The timing of adolescent learners' substance use initiation is a major concern for mental health care practitioners, researchers and government policy-makers because early use of illegal substances places them at a greater jeopardy of future habitual use, and is more damaging than experimentation at a later age (Parsai *et al.*, 2008:3).

Illegal substance use among adolescent learners is a major concern for parents, behavioural health practitioners, researchers and government policymakers. The consequences of illegal substance use among adolescent learners include the risk of numerous legal, health, developmental, social and educational concerns (Parsai *et al.*, 2008:2). Other negative consequences associated with illegal substance use among adolescent learners include automobile accidents, earlier onset of sexual activity, and sexual risk-taking. Other problems include getting into fights and arguments, causing shame to someone, acting badly, missing school, passing out, driving under the influence of alcohol and neglecting responsibilities.

Adolescent learners' use of illegal substances has also been linked with suicide, depression and conduct disorders (Parsai *et al.*, 2008:4). The above information indicates that illegal substance use among adolescent learners continues to be a habit that generates world public health concern (Mudhovozi *et al.*, 2014:350). Data from around the world suggests that illegal substance use among adolescent learners often starts between the ages of 14 and 15 years (Visser & Routledge, 2007:596). Studies conducted in South Africa indicate that the average age of first time use of illegal substances is 12 years while the average age of initiation of substances in Zimbabwe is 13.2 years (Mudhovozi *et al.*, 2014:349). Similarly, in the NWP of SA, where this research was also conducted, Mohasoa and Fourie (2012:34) mention that adolescent learners start using substances between the ages 12 and 15 years while enrolled for Grades 7 to 9. Only one participant in their study reported that he had started using substances in Grade 4. However, it has also been confirmed by previous studies that the mean age for the onset

of adolescent learners' use of illegal substances is 12 years. These adolescent learners use illegal substances for various reasons. For example, Mohasoa and Fourie (2012:34) mention that the reasons for adolescent use of illegal substances include experimentation, depression, biological development, peer group pressure, availability, and a dysfunctional family structure. Empirical evidence suggests that illegal substance use among adolescent learners sequence typically starts with alcohol or cigarettes, followed by drunkenness, cannabis and other hard drugs (Mudhovozi *et al.*, 2014:350).

In spite of the above concerns, most adolescent learners with illegal substance use problems do not want or think they need help (NIDA, 2014:1). The above information only adds to the urgency of identifying and intervening in illegal substance use as early as possible even though this urgency is matched by the difficulty of reaching specific adolescent learners who need help (NIDA, 2014:1). Early identification and inspection of illegal substance use among adolescent learners may give researchers, mental health care practitioners and government policy-makers an insight into different pathways toward stemming substance use among adolescent learners. This knowledge may be applied in a variety of ways such as development and validation of illegal substance use prevention programmes (Parsai *et al.*, 2008:2).

It is clear from the above information that illegal substance use among adolescent learners is a major problem, as underscored by the facts in the discussed literature that they end up experiencing physical, mental, social, educational and legal problems. Their early use of illegal substances is also a problem for most people such as parents, researchers, policy makers as well as mental health care practitioners. From these concerns, it is clear that more research should be conducted on the topic of illegal substance use among adolescent learners and these adolescent learners should be included in that research to be part of the solution rather than part of the problem.

Resilience as a protective factor in preventing illegal substance use among adolescent learners

From the above discussion, it is clear that illegal substance use prevention work must start during the adolescent years (Parsai *et al.*, 2008:2). This indicates that adolescent

learners can still be controlled during this period taking into consideration that prevention is better than cure. Visser and Routledge (2007:612) add that the early initiation into illegal substance use particularly by the adolescent learners, as well as the increase in usage with age, suggests that prevention approaches should target adolescent learners at a very young age. As a result of the increased rate of illegal substance use among adolescent learners seen in the current times, the development of prevention programmes has dramatically increased (Greenberg, 2006:140).

Mohasoa and Fourie (2012:38) indicate that even all the participants in their study strongly highlighted that they wanted to stop using illegal substances such as dagga, heroin, glue and nyaope and, as such, need help such as availability of effective illegal substance use prevention programmes, such as the one proposed for the present study. Parsai *et al.* (2008:2) states that billions of dollars are spent annually in other countries on programmes aimed at preventing illegal substance use among adolescent learners. This means that prevention of illegal substance use among adolescent learners is very expensive. On the other hand, Alaska Division of Behavioral Health (2011:2) indicates that rather than just focusing on prevention of illegal substance use particularly among adolescent learners, there should also be adequate focus on increasing adolescent learners' resilience as a protective factor and helping them with strategies to refuse illegal substance use. Dillon *et al.* (2007:3) adds that resilience is understood as the behaviours that adolescent learners exhibit in making decisions not to use illegal substances and putting this into practice, despite having been exposed to the illegal substances and other risk factors. On the other hand, there are some authors who use the term resilience interchangeably with the term protective factor. These terms refer to a strengths-based approach of working with adolescent learners (Alaska Division of Behavioral Health, 2011:2). This suggests that adolescent learners' strength should be used to prevent illegal substance use.

The focus of this research is on developing and validating an illegal substance use prevention programme for adolescent learners in the NWP of SA. The researcher aims to use adolescent learners' strengths to prevent illegal substance use in the NWP of SA. From the above information, it is clear that illegal substance use among adolescent learners should be prevented, particularly before the problems arise. It is also clear from the above information that prevention efforts for illegal substance use among adolescent

learners should focus on resilience as a protective factor. This means that the effort should focus on using adolescent learners' personal strengths to prevent illegal substances such as marijuana, glue, *nyaope*, heroine and alcohol. The above literature on illegal substance use among adolescent learners led to the following problem statement.

1.4 Problem statement

Illegal substance use among adolescent learners is a severe problem according to researchers, mental health providers and practitioners as well as government and non-government policy-makers. This is because illegal substance use among adolescent learners constitutes a form of abuse (Visser & Routledge, 2007:596). The potentiation of illegal substance use among adolescent learners is threefold. First, adolescent learners are still immature during this period and therefore their nervous systems may be particularly vulnerable to the negative effects of illegal substances. Second, the use and abuse of alcohol and cigarettes is not legal for adolescent learners in South Africa. Lastly, illegal substance use and abuse in adolescent learners is associated with serious social challenges, high mortality and morbidity as well as behavioural challenges like high risk sexual behaviour, juvenile imprisonment and school dropouts (Richardson *et al.*, 2013:61). As such, this evidence illuminates the apparent gap, underscoring how prevention of illegal substance use is particularly important with adolescent learners, who often can be reached before problems become entrenched because the aim is to prevent problematic use before it begins. The researcher agrees with Dillon *et al.* (2007:3) that illegal substance use among adolescent learners can be prevented if attention is given to resilience as a protective factor. Protective factors relevant for prevention of illegal substance use among adolescent learners include personal, peer, family, school and community factors. From the above information, it is clear that there is a need to develop and validate an illegal substance use prevention programme for adolescent learners in the NWP of SA to counter this unabated challenge.

1.5 Research questions

The research questions for this research are:

- What current evidence exists on substance use prevention programmes for adolescents, with specific focus on resilience as a protective factor?
- How do stakeholders perceive resilience as a protective factor in illegal substance use prevention programme for adolescent learners and what are their perceptions on how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor in the NWP of SA?
- How should a conceptual framework for illegal substance use prevention programme for adolescent learners be deduced for NWP of SA?
- What should an illegal substance use prevention programme for adolescent learners in the NWP of SA entail?

1.6 Research purpose and objectives

The following research purpose and objectives are generated from the problem:

The purpose of this research was to develop and validate illegal substance use prevention programme for adolescent learners in the NWP of SA.

The objectives of research are to:

- Explore and describe current evidence on substance use prevention programmes among adolescents, specifically programmes focusing on resilience as a protective factor by means of a systematic review;
- Explore stakeholders' perceptions of resilience as a protective factor in illegal substance use prevention programme for adolescent learners and their perceptions of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor in the NWP of SA;
- Deduce a conceptual framework for illegal substance use prevention programme for adolescent learners in the NWP of SA;
- Develop and validate illegal substance use prevention programme for adolescent learners in the NWP of SA.

1.7 Significance of the research

The outcome of this research, namely illegal substance use prevention programme, will contribute to practice in preventing illegal substance use among adolescent learners in the NWP of SA. Furthermore, the potential results might provide policy makers and researchers with important information that may be used to develop effective policies that are aimed at preventing the complications of continuous illegal substance use such as increased readmissions, dual or triple diagnosis and improving quality of care, treatment and rehabilitation services. The findings of the research will also add important information to psychiatry and mental health curriculum that assist students in preventing illegal substance use among adolescent learners in the NWP of SA.

1.8 Paradigmatic perspective

The paradigmatic perspective of this research consists of meta-theoretical, theoretical and methodological assumptions discussed below:

1.8.1 Meta-theoretical assumptions

The meta-theoretical assumptions of this research are based on the researcher's own view of man and the world, as well as Florence Nightingale's philosophy of nursing practice (*in* Alligood & Toomey, 2010:98-99). The assumptions regarding nursing, person, health and environment are described as follows:

1.8.1.1 Nursing is viewed by Florence Nightingale's philosophy of nursing practice (*in* Alligood & Toomey, 2010:99), as a spiritual calling. Nurses assist nature in healing the patient. Nurses use common sense, observation and ingenuity to allow nature to effectively repair the patient. Using Florence Nightingale's philosophy in practice today fits well with the nursing process. For instance, the nurse assesses the patient's situation, identifies a need, plans the care and implements it, evaluates the situation, and finally changes the plan to better serve the patient. This is done as often as necessary until the main goal of nursing (improved health status) is achieved. In this research, nursing refers to a spiritual calling among professional nurses, enrolled nurses, and auxiliary nurses as well as the nursing students. The researcher of this study is a professional nurse; he assessed adolescent learners' situation while he was working directly with mental health care users in the NWP of SA. He then identified the need to develop and validate illegal substance use prevention programme for adolescent learners in the NWP of SA. Most of the adolescent learners in the researcher's Master's degree study stated that they wanted to stop using illegal substances such as marijuana and alcohol (Sehularo *et al.*, 2012:6). Therefore, the researcher is convinced that adolescent learners would cooperate with him when developing and validating illegal substance use prevention programme which

would be developed focusing on resilience as a protective factor in the NWP of SA. Professional nurses also participated in developing and validating illegal substance use prevention programme focusing on resilience as a protective factor for adolescent learners in the NWP of SA.

1.8.1.2 Person is viewed by Florence Nightingale's philosophy of nursing practice (*in* Alligood & Toomey, 2010:98), as a dynamic and complex being who is receiving care, treatment and rehabilitation services. Florence Nightingale envisioned the person as comprising of physical, intellectual, emotional, social and spiritual components. In this research, person is all stakeholders who participated in the development and validation of illegal substance use prevention programme for adolescent learners in the NWP of SA. That is, adolescent learners, parents, teachers, professional nurses and a mental health experts with intellectual, emotional, social, physical and spiritual components. These persons signed a consent form for their voluntary participation in this research which is aimed at preventing illegal substance use among adolescent learners in the NWP of SA. The researcher is convinced that everyone, including adolescent learners, is born with an innate capacity for resilience; hence the main purpose of this research was achieved through focusing on resilience as a protective factor.

1.8.1.3 Health is viewed by Florence Nightingale's philosophy of nursing practice (*in* Alligood & Toomey, 2010:98), as the ability to use every power we have in prevention of illnesses and promotion of health. In this research, the researcher used every power he has to assist adolescent learners by developing and validating illegal substance use prevention programme for adolescent learners in the NWP of SA. The main aim of illegal substance use prevention programme is to prevent conditions such as substance related disorders, dual or triple diagnosis among adolescent learners in the NWP of SA. Voluntary participation of the stakeholders that is, adolescent learners, parents, teachers and the professional nurses was aimed at preventing these diseases and promoting adolescent learners' mental health in the NWP of SA.

1.8.1.4 Environment is viewed by Florence Nightingale's philosophy of nursing practice (*in* Alligood & Toomey, 2010:98) as anything that can be employed to place a mental health care user in the best possible condition for nature to act. For the purpose of this research, environment mainly refers to the settings where illegal substance use prevention programme for adolescent learners was developed and validated in the NWP of SA.

1.8.2 Theoretical assumptions

Theoretical assumptions of this research include central theoretical argument as well as the conceptual definitions of the major concepts appropriate to this research.

1.8.2.1 Central theoretical argument

The exploration and description of current evidence on substance use prevention programmes among adolescents, specifically programmes focusing on resilience as a protective factor by means of a systematic review and the exploration of stakeholders' perceptions of resilience as a protective factor in illegal substance use prevention programme for adolescent learners and their perceptions of how illegal substance use can be prevented as well as the literature review of relevant literature led to the deducing of a conceptual framework for illegal substance use prevention programme for adolescent learners. The conceptual framework subsequently contributed to the development and validation of illegal substance use prevention programme for adolescent learners in the NWP of SA.

1.8.2.2 Definition of key concepts

The key concepts to be defined in this research are adolescence, adolescent learner, substance use, substance abuse, illegal substance use and prevention programmes. These key concepts are defined below.

Adolescence is a term that derived from the Latin word *adolescere*, which means to grow up or to grow into full maturity (Lerner & Steinberg, 2004:8). Adolescence refers to the period in human growth and development that occurs after childhood and before adulthood, from ages 10 to 19 years, in effect, those in the second decade of their lives (WHO; Arnett, 2012:17; United Nations Children's Fund, 2011:12). O'Donohue and Benuto-Lauren (2013:34) add that adolescence is clearly a time during which much change occurs. These changes occur on multiple developmental levels including changes that are emotional, social, and physical. Naturally these changes can carry an impact on adolescent health both psychologically and physically. Again adolescence can be referred to as the years that are a critical window for both illegal substance use and the development of substance use disorders because the brain is still developing and malleable (NIDA, 2014:1). In this research, adolescents refer to individuals aged between 10 and 19 years, still growing into maturity and, therefore, in a critical window definitely at risk of using illegal substances in the NWP of SA.

Adolescent learner means any person receiving education or obliged to receive education in terms of South African School's Act (84 of 1996) (South Africa, 1996). Adolescent learner refers to any person between the ages of 10 - 19 who may be seen as a child within the family as an economic unit, as well as within the classroom where he or she is still a learner receiving respectfully economic and emotional support and educational assistance (Leatham, 2005:9). Adolescent learner characteristics comprise the various attributes that shape the way individuals make meaning of their world (Seel, 2012:134). Hence an adolescent learner is defined in this research as a person receiving school education and still under guardian or parental care within a family unit.

Substance use refers to the taking of substances and may even refer to legal use of prescribed substances (Uys & Middleton, 2010:443). Substance use is also defined in the Mini Drug Master Plan (2011/12-2013/2014:11) as a recreational or occasional use of illegal substances such as dagga, heroin, cocaine and *nyaope* with no adverse health, legal, educational or social consequences. As illuminated in the introduction and problem statement above, in the RSA including the NWP of SA, substance use among adolescent learners constitutes a form of abuse (Visser & Routledge, 2007:596). In the National Drug Master Plan (2013-2017) it is indicated that substance use impacts negatively on the users, their families and communities (National Drug Master Plan, 2013-2017). The above information highlights the reason why the researcher aims at preventing illegal substance use among adolescent learners. Again, even though the rates of illegal substance use are lower in the NWP of SA, the researcher supports the proverb which says “prevention is better than cure,” meaning it is better to prevent illegal substance use among adolescent learners than to intervene at a later stage when they present with substance related problems such as dual or triple diagnosis.

Substance abuse is defined by Visser and Routledge (2007:596) as an excessive, improper, irresponsible, or self-damaging use of addictive substances (Visser & Routledge, 2007:596). The Diagnostic and Statistical Manual of Mental Disorders (DSM-5-TR) (APA, 2013) defines substance abuse as a maladaptive way of using substance resulting in a clinically substantial weakening or distress within 12 months as manifested recurrent substance use in conditions that cause physical danger to the user of that particular substance or in the face of obvious impairment in work or school situations, or despite resulting legal, social or interpersonal problems. This information indicates that the abuse of substances is dangerous for human beings, for adolescent learners, it is a severe case. Substance abuse in this research refers to the harmful or hazardous use of legal and illegal psychoactive substances such as alcohol, marijuana, *nyaope*, glue and cocaine by the adolescent learners in the NWP of SA. The focus of this research is to prevent illegal substance use among adolescent learners before problems arise.

Illegal substance use means the use of those substances whose purchase, use, abuse and possession are termed illegal, depending on the society’s definition (Omage & Omage,

2012:188). Montesh *et al.* (2015:102) define illegal substance use as the use of substances that are so injurious that countries in the whole world including South Africa, have decided to control them through several international laws, in the form of United Nations conventions. Mushayabasa and Tapedzesa (2015:3) define illegal substance use as the nonmedical use of a variety of substances that are prohibited by international law. These substances include amphetamine-type stimulants, cannabis, cocaine, heroin, and other opioids, and MDMA (ecstasy). According to Omaye and Omaye (2012:189), illegal substance use is injurious to both adolescent learners and the society in general and leading to crimes, spreading diseases like AIDS, killing our youths and future leaders. That means that these illegal or psychoactive substances have their effect directly on the mind. That is, they regulate the behaviour and mood of takers by elevating moods, depressing or creating a false boldness and even irresponsible behaviour. Each one of these substances manifests their own effect on the individual further producing serious side effects (Omaye & Omaye, 2012:195). Paone *et al.* (2010:1) adds that the use of these illegal substances increases the risk for many health problems, including injury, sexually transmitted diseases such as HIV, hepatitis B and C, liver disease, hypertension and depression, unintentional death by drug poisoning. Illegal substance use in this research refers to the use of those substances whose purchase, use and possession are termed illegal for adolescents in the NWP of SA. These illegal substances include alcohol, tobacco, marijuana, cocaine, glue, *nyaope* and heroin.

Prevention programmes refer to all activities that are aimed at strengthening schools or community norms against illegal substance use particularly among adolescent learners, support efforts to restrict adolescent learners' access, develop resistance skills, and involve all areas of an adolescent learner's life, from peers and family to school and the larger community (Owen, 2010:2). This research aims to utilise peer, parental, school, community and government protective factors to enhance adolescent learners' resilience to resist illegal substance use in the NWP of SA.

1.8.3 Methodological assumptions

The model of Botes (1995:6) was used in this research because it is specifically developed for nursing research, such as this present research on illegal substance use prevention programme for adolescent learners in the NWP of SA. The model consists of three levels of nursing activities. These three levels are discussed below.

The first level represents nursing practice. In this research, the researcher identified the research problem of illegal substance use among adolescent learners in the NWP of SA within the nursing practice while he was still a professional nurse rendering direct nursing care, treatment and rehabilitation services to adolescent learners who were diagnosed with substance use disorders (SUDs). Professional nurses who are in nursing practice working as part of the multi professional team (MPT) were included in this research as they are expected to use the proposed programme at their practices to prevent illegal substance use among adolescent learners in the NWP of SA. Different mental health practitioners in practice are also expected to empower adolescent learners to develop resilience in order to be able to resist pressures of using illegal substances in the NWP of SA.

The second level deals with nursing research. At this level, the researcher conducts this doctoral study with the aim of preventing illegal substance use among adolescent learners in the NWP of SA. Professional nurses and relevant stakeholders who are in practice are included in this nursing research to develop and validate illegal substance use prevention programme for adolescent learners in the NWP of SA. Intervention research design was used in this research as it is the relevant design for conceiving, designing, creating and assessing innovative human interventions applicable to real-world settings in order to solve and prevent problems and maintain quality of life (Strydom *et al.*, 2007:333). In line with De Vos *et al.* (2011:392), the other reason for using intervention research design was to make a contribution to the knowledge of human behaviour, specifically in the domain of psychiatry and mental health. The four phases of intervention research design followed in this research are problem analysis and

planning, information gathering and synthesis, design as well as early development and validation. The researcher is convinced that these steps are appropriate for developing and validating illegal substance use prevention programme for adolescent learners in the NWP of SA.

The third level covers the paradigmatic perspectives of the researcher. The paradigmatic perspectives of this research consist of meta-theoretical, theoretical and methodological assumptions, which aspects are discussed in detail under the heading 'paradigmatic perspective' above.

1.9 Research methodology

Intervention research design as explained by De Vos *et al.* (2011:392-407) was followed to develop and validate illegal substance use prevention programme for adolescent learners in the NWP of SA. The design comprises four phases, namely problem analysis and planning, information gathering and synthesis, design as well as early development and validation. These steps are discussed briefly below, and the detail of the method followed in each step is discussed in each manuscript in Section 2 of the thesis.

1.9.1 Phase one: Problem analysis and planning

This phase comprises section one which covered an overview of the research which consists of introduction, background, problem statement, research purpose and objectives, central theoretical argument, definition of key concepts as well as a description of the research methodology. As indicated in the background and problem statement of this research, the researcher's personal experience as a mental health nurse specialist is that illegal substance use among adolescent learners is a serious problem that needs more research. In provinces such as the NWP of SA, there are no documented

illegal substance use prevention programmes currently available for adolescent learners. As a result of this concern, the researcher identified the need to develop and validate illegal substance use prevention programme for adolescent learners in the NWP of SA.

1.9.2 Phase two: Information gathering and synthesis

This second phase of the present research involves two stages namely a systematic review and a qualitative, explorative, descriptive and contextual research. In stage one, a systematic review was done to explore and describe current evidence on substance use prevention programmes among adolescents, specifically programmes focusing on resilience as a protective factor (Sehularo *et al.*, 2016). A systematic review was done in this stage as De Vos *et al.* (2011:398) indicate that when planning an intervention research, it is essential to discover what others have done to understand and address the problem. The five steps of a systematic review which were followed in this stage are (1) formulating a clear review question, (2) gathering and classifying evidence, (3) performing critical appraisal, (4) summarising the evidence and (5) conclusions. A detailed explanation of this stage is in manuscript one.

In stage two, a qualitative, exploratory, descriptive and contextual research was done to explore the stakeholders' perceptions of resilience as a protective factor in illegal substance use prevention programme for adolescent learners (Sehularo *et al.*, 2015a, unpublished article) as well as their perceptions of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor (Sehularo *et al.*, 2015b, unpublished article). In this stage, the target population (stakeholders) were professional nurses in two public psychiatric hospitals, as well as the teachers, parents and adolescent learners in four public schools in the NWP of SA. A purposive or judgmental sampling technique was used to select all study participants. Focus group discussions were used to collect data. Tesch's method of qualitative data analysis was used to analyse data (*in* Creswell, 2009:186). A detailed explanation of this stage is in manuscript two and three.

1.9.3 Phase three: Design

This phase included the deducing of a conceptual framework for the programme (Sehularo *et al.*, 2015c, unpublished article). A conceptual framework was used in this phase to guide the researcher to link the results of phase two with phase three. The results of phase two were used to deduce a conceptual framework for the programme. The survey list of the Practice Oriented Theory of Dickoff *et al.* (1968:422) as well as Mouton and Marais' (1996:141) characteristics of precursive theoretical models were used as a guide for deducing the conceptual framework. A survey list includes the agent, recipient, context, dynamics, procedure and terminus was used for deducing a conceptual framework for the programme. A survey list was relevant in this research because it has six aspects that cannot be denied significance. The survey list is particularly significant for the development, refinement or validation of a programme. In line with De Vos *et al.* (2011:482), the survey list was explained in sufficient detail for it to be replicated by other researchers interested in conducting similar research on illegal substance use prevention programmes among adolescents. The survey list was also used to develop the programme, which is the final product of this research.

1.9.4 Phase four: Early development and validation

This last phase comprised of early development and validation of illegal substance use prevention programme for adolescent learners in the NWP of SA (Sehularo *et al.*, 2015d, unpublished article). In this phase, the researcher used the results of phases two and three, as well as literature control to develop illegal substance use prevention programme for adolescent learners in the NWU of SA (Sehularo *et al.*, 2015d, unpublished article). As indicated in phase three above, the researcher used the survey list of Dickoff *et al.* (1968:422) and Mouton and Marais' (1996:141) to develop the programme which is the final product of this research.

To validate the programme, the researcher presented the results of qualitative, exploratory, descriptive and contextual research at an international conference on Health Science Education, Leadership and Practice in April 2015. This was done to indicate to the conference delegates what an illegal substance use prevention programme for adolescent learners will entail. Two focus group discussions were furthermore used with adolescents who were selected from their schools to validate the programme. The population of focus group discussions consisted of adolescent learners aged between 10 and 19 years. A purposive sampling technique was used to select adolescent learners who met inclusion criteria of being between the ages of 10 and 19, being able to sign informed voluntary consent and being able to speak English or Setswana. These adolescent learners signed informed consent after a written consent from the school principal, parents or guardians for their voluntary participation in this research. The sample size of the first focus group discussion consisted of seven (7) adolescents, five males (5) and two (2) females. The other focus group discussion consisted of eight (8) adolescent learners, five (5) males and three (3) females. Chinn and Kramer's (2008) critical reflection questions, which answered questions on the programme's clarity, simplicity, generality, accessibility and importance, were used in focus group discussions with the adolescent learners during validation of the programme. After focus group discussions, the researcher and the co-coder followed Tesch's method of qualitative data analysis to analyse data (*in* Creswell, 2009:186). The programme was further validated by experts in mental health and substance use disorders. These experts included a psychiatrist, psychologist, community mental health nurse specialist as well as a professor who is also a mental health nurse specialist, educationist, researcher and community developer. These experts read the programme and narrated their feedback about the programme on a validation form (*see appendix O*). Their responses were analysed by the researcher and the co-coder following Tesch's method of qualitative data analysis (*in* Creswell, 2009:186).

1.10 Ethical considerations

Permission to embark on this research was granted by the School of Nursing Science, Faculty of Agriculture, Science and Technology as well as the Research Ethics Committee of the North-West University, North West Provincial Department of Health and of Education, District Offices, public psychiatric hospitals as well as public schools where data was collected (*see Appendix C for permission from various authorities to conduct this research*). All sources used in research were acknowledged in text and the reference lists of each of the different sections. A detailed description of ethical considerations is given in each of the different manuscripts in section two.

1.11 Trustworthiness

Trustworthiness was ensured by conducting this research under the supervision of experts in programme development and validation. The programme was developed through the use of data from different sources as well as literature control. The programme was validated by different stakeholders namely, adolescent learners, a psychiatrist, a psychologist and two mental health nurse specialists (*see Appendix P for brief curriculum vitae's of these experts*). The results of this research are congruent with those of past studies and literature control. This research is examined by three external examiners and published in the form of a thesis and articles in an accredited peer reviewed journal, *African Journal for Physical Activity and Health Sciences* (AJPHES) (*see Appendix A for Journal Guidelines*). The research methodology which was used to develop and validate the programme is described in detail so that the programme can be transferred or applied to other contexts or other provinces of SA. A detailed description of trustworthiness is given in each of the different manuscripts in section two.

1.12 Thesis layout

This thesis on **illegal substance use prevention programme for adolescent learners** is presented in article format. The PhD candidate, Mr. Leepile Alfred Sehularo, conducted the research and wrote the manuscripts. Prof. Mofatiki Eva Manyedi and Prof. Emmerentia du Plessis acted as promoters and critical reviewers in the research. Prof. Abel Jacobus Pienaar acted as expert consultant in the research. The thesis is presented in the following sequence:

Section One: Overview of the research

Section Two: Manuscripts

Manuscript One: Substance use prevention programmes among adolescents focusing on resilience as a protective factor: A systematic review (Published in *African Journal for Physical Activity and Health Sciences*)

Manuscript Two: Stakeholders' perceptions of resilience as a protective factor in illegal substance use prevention programme for adolescent learners (Submitted to *African Journal for Physical Activity and Health Sciences*)

Manuscript Three: Stakeholders' perceptions of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor (Submitted to *African Journal for Physical Activity and Health Sciences*)

Manuscript Four: Conceptual framework for illegal substance use prevention programme for adolescent learners (To be submitted to *African Journal for Physical Activity and Health Sciences*)

Manuscript Five: Illegal substance use prevention programme for adolescent learners (To be submitted to *African Journal for Physical Activity and Health Sciences*)

Section Three: Conclusions, Limitations and Recommendations

1.13 Conclusion

Section one comprised an overview of this research which includes the introduction, background and problem statement, research questions, aim and objectives, as well as a brief description of the research methodology. The thesis layout was outlined. The next section comprises the manuscripts.

1.14 References

- Alaska Division of Behavioural Health. 2011. *Risk and Protective Factors for Adolescent Substance Use (and other Problem Behaviour)*. Alaska Department of Health and Social Services.
- Alligood, M.R. & Toomey, A.M. 2010. *Nursing Theory: Utilization & Application*. 4th ed. Maryland Heights: Mosby Elsevier.
- American Psychiatric Association. 2013. *Diagnostic and Statistical Manual of Mental Disorders*. 5th ed, Text Revision. Washington: DC: American Psychiatric Association.
- Amoateng, A., Kalule-Sabiti, I. & Narayanan, P. 2007. Substance use and sexual behaviour among African adolescents in the North-West Province of South Africa. *African Journal of Drug and Alcohol Studies*, 6(1), 27-38.
- ANON. 2007. Risk, protection and resilience in children and families. http://www.community.nsw.gov.au/data/asset/pdf_file/0018/321633/research_notes_resilience.pdf. Accessed: August 2015.
- Arnett, J.J. 2012. Adolescent psychology around the world. Psychology Press: New York.
- Bandy, T. & Moore, K.A. 2008. What Works for Preventing and Stopping Substance Use in Adolescents: Lessons from Experimental Evaluations of Programmes and Interventions. Fact Sheet. http://www.childtrends.org/wp-content/uploads/2013/03/Child_Trends-2008_05_20_FS_WhatWorksSub.pdf. Accessed: July 2015.
- Battles, H. 2010. Exploring ethical and methodological issues in internet-based research with adolescents. *International Journal of Qualitative Methods*, 9(1), 27-39.
- Botes, A. 1995. *A model for research in nursing*. Johannesburg: Rand Afrikaans University.

Brassai, L., Piko, B.F. & Steger, M.F. 2010. Meaning in life: Is it a protective factor for adolescents' psychological health? *International Journal of Behavioural Medicine*, 18(1), 44-51.

Creswell, J. 2009. *Research design: Qualitative, quantitative, and mixed methods approaches*. SAGE Publications, Incorporated.

De Milliano, C.W.J. 2015. Luctor ET Emergo Exploring context specific characteristics of factors that enable adolescent resilience to flooding. *International Journal of Disaster Risk Reduction*, 14(1), 168–178.

De Vos, A., Strydom, H., Fouché, C. & Delport, C. 2011. Research at grass roots for the social sciences and human service professions, Pretoria: Van Schaik. EISA. *Electoral Institute for Sustainable Democracy in Africa. Programmes. Our Work*. Available: <http://content.eisa.org.za/old-page/our-work-2> [2014, April 28].

Deverka, P.A., Lavalley, D.C., Desai, P.J., Esmail, L.C., Ramsey, S.D., Veenstra, D.L. & Tunis, S.R. 2013. Stakeholder participation in comparative effectiveness research: defining a framework for effective engagement. *Journal of Comparative Effectiveness Research*, 1(2), 181-194.

Dickoff, J., James, P. & Wiedenbach, E. 1968. Theory in a practice discipline: Part I. Practice Oriented Theory. *Nursing research*, 17(5), 415-434.

Dillon, L., Chivite-Matthews, N., Grewal, I., Brown, R., Webster, S., Weddell, E., Brown, G. & Smith, N. 2007. *Risk, protective factors and resilience to drug use: identifying resilient young people and learning from their experiences*. Home Office.

Dorn, L.D., Dahl, R.E., Woodward, H.R. & Biro, F. 2010. Defining the boundaries of early adolescence: A user's guide to assessing pubertal status and pubertal timing in research with adolescents. *Applied Developmental Science*, 10(1), 30-56.

Epstein, J.A., Bang, H. & Botvin, G.J. 2007. Which psychosocial factors moderate or directly affect substance use among inner-city adolescents? *Addictive Behaviours*, 32(4), 700-713.

Fadardi, J.S., Azad, H. & Nemati, A. 2010. The relationship between resilience, motivational structure, and substance use. *Procedia-Social and Behavioural Sciences*, 5(1), 1956-1960.

Faggiano, F., Galanti, M.R., Bohrn, K., Burkhart, G., Vigna-Taglianti, F., Cuomo, L., Fabiani, L., Panella, M., Perez, T. & Siliquini, R. 2008. The effectiveness of a school-based substance abuse prevention program: EU-Dap cluster randomised controlled trial. *Preventive Medicine*, 47(5), 537-543.

Feldtmann, G.W. 2010. *A social work analysis of the substance abuse problem in secondary schools in Mpumalanga*. Potchefstroom: NWU. (Dissertation – MA).

French, M.T., Zavala, S.K., McCollister, K.E., Waldron, H.B., Turner, C.W. & Ozechowski, T.J. 2008. Cost-effectiveness analysis of four interventions for adolescents with a substance use disorder. *Journal of Substance Abuse Treatment*, 34(3), 272-281.

Greenberg, M.T. 2006. Promoting resilience in children and youth. *Annals of the New York Academy of Sciences*, 1094(1), 139-150.

Leatham, C.P. 2005. *The lives experiences of adolescent learners from child-headed families in the Northern Free State*. Johannesburg: RAU. (Dissertation – MEd).

Lerner, R.M. & Steinberg, L., 2004. Handbook of adolescent psychology. 2nd edition. John Wiley & Sons: Canada.

Matheson, J. & McGrath J, R. 2012. Adolescent Alcohol and Other Drug Abuse. *Journal of Consulting and Clinical Psychology*, 77(1), 12-25.

Mini Drug Master Plan *see* South Africa.

Mohasoa, I.P. & Fourie, E. 2012. Substance abuse amongst adolescents: a case study of Zeerust, North-West Province, South Africa. *New Voices in Psychology*, 8(1), 30-43.

Mohasoa, I.P. 2010. Substance abuse among male adolescents. Pretoria: UNISA. (Dissertation - MA).

Montesh, M., Sibanda, O.S., Basdeo, O.S. & Lekubu, B.K. 2015. Illicit drug use in selected high schools in Mamelodi Township. *Acta Criminologica: Southern African Journal of Criminology*, 3(1), 96-113.

Morojele, N.K., Parry, C.D.H & Brook, J.S. 2009. Substance abuse and the young: Taking action. *Research Brief*. Cape Town: Medical Research Council.

Mouton, J. & Marais, H.C. 1996. *Basic concepts in the methodology of the social sciences. Revised edition – fifth impression*. Pretoria: HSRC.

Mudhovozi, P., Maunganidze, L., Maseko, M., Ngwenya, F. & Netshikweta, L. 2014. Patterns of substance abuse among high school students. *African Journal for Physical Health Education, Recreation and Dance*, 1(20), 348-358.

National Drug Master Plan *see* South Africa.

National Institute on Drug Abuse (NIDA). 2014. *Principles of Adolescent Substance Use Disorder Treatment: A Research-Based Guide*. United States of America.

O'Donohue, W.T. & Benuto-Lauren, L.T. 2013. *Handbook of Adolescent Health Psychology*. New York Heidelberg Dordrecht London.

Omage, E.I. & Omage, M.I. 2012. Illicit drugs use and dependency among teenagers and young adults in Oredo Local Government area, Benin City, Nigeria. *European Scientific Journal*, 8(20), 187-210.

Owen, P., 2010. *Preventing adolescent substance abuse*. Butler Centre for Research.

Parsai, M., Voisine, S., Marsiglia, F.F., Kulis, S. & Nieri, T. 2008. The protective and risk effects of parents and peers on substance use, attitudes, and behaviours of Mexican and Mexican American female and male adolescents. *Youth & Society*, 1(40), 353-376.

Peltzer, K., Ramlagan, S., Johnson, B.D. & Phaswana-Mafuya, N. 2010. Illicit drug use and treatment in South Africa: A review. *Substance Use & Misuse*, 45(13), 2221-2243.

Prevention and Treatment for Substance Abuse Bill *see* South Africa.

Prevention of Alcohol and other Drug Use Policy *see* South Africa.

Richardson, C.G., Kwon, J. & Ratner, P.A. 2013. Self-esteem and the initiation of substance use among adolescents. *Canadian Journal of Public Health*, 104(1), 60-63.

Sadock, B.J., Sadock, V.A. & Ruiz, P. 2015. *Kaplan and Sadock's Synopsis of psychiatry* (11th Ed). Philadelphia: Lippincott, Williams & Wilkins.

Schwartz, C., Garland, O., Harrison, E. & Waddell, C. 2007. Treating concurrent substance use and mental disorders in children and youth. *Mental Health Research Quarterly*, 1(4), 1-16.

Seel, N.M. 2012. *Encyclopedia of the sciences of learning*. Springer Science: New York.

Sehularo, L.A., du Plessis, E. & Scrooby, B. 2012. Exploring the perceptions of psychiatric patients regarding marijuana use. *Health SA Gesondheid*, 17(1), 1-8.

Sehularo, L.A., du Plessis, E., & Scrooby, B. 2010. *Exploring the perceptions of psychiatric patients regarding marijuana use*. Potchefstroom: NWU. (Dissertation – MCur).

Sehularo, L.A., Manyedi, M.E., du Plessis, E. & Pienaar, A.J. 2015a. *Stakeholders' perceptions of resilience as a protective factor in illegal substance use prevention programme for adolescent learners*. Unpublished article.

Sehularo, L.A., Manyedi, M.E., du Plessis, E. & Pienaar, A.J. 2015b. *Stakeholders' perceptions of how substance use can be prevented among adolescent learners by focusing on resilience as a protective factor*. Unpublished article.

Sehularo, L.A., Manyedi, M.E. & du Plessis, E. & Pienaar, A.J. 2015c. Conceptual framework for illegal substance use prevention programme for adolescent learners. Unpublished article.

Sehularo, L.A., Manyedi, M.E. du Plessis, E. & Pienaar, A.J. 2015d. *Illegal substance use prevention programme for adolescent learners*. Unpublished article.

Sehularo, L.A., Manyedi, M.E. & du Plessis, E. 2016. Substance use prevention programmes among adolescents focusing on resilience as a protective factor: A

systematic review. *African Journal for Physical Activity and Health Sciences*, 22(1:2), 227-241.

South Africa. 1996. *South African School's Act 84 of 1996*. Pretoria: Government Printers.

South Africa. 2008. *Prevention of and treatment for substance abuse bill of 2008*. Pretoria: Government Printers.

South Africa. 2011/12 – 2013/2014. *Mini Drug Master Plan*. Pretoria: Government Printers.

South Africa. 2013 – 2017. *National Drug Master Plan*. Pretoria: Government Printers.

South Africa. 2013. *Prevention of Alcohol and other Drug Use Policy 2013*. Cape Town: South Africa.

South African School's Act *see* South Africa

Strydom, H., Steyn, M. & Strydom, C. 2007. An adapted intervention research model: Suggestions for research and practice. *Social Work-Stellenbosch*, 43(4), 329.

United Nations Children's Fund (UNICEF). 2011. *The State of the World's Children 2011-Executive Summary: Adolescence an Age of Opportunity*. New York, NY: USA.

United Nations Office for Drug Control and Crime Prevention. 2002. *A participatory handbook for youth drug abuse prevention programmes: A guide for development and improvement*. United Nations: New York.

United Nations Office on Drugs and Crime. 2004. Conducting effective substance abuse prevention work among youth in South Africa. Pretoria: South Africa.

Uys, L. & Middleton, L. 2010. *Mental Health Nursing: A South African Perspective*. Juta and Company Ltd.

Visser, M. & Routledge, L. 2007. Substance abuse and psychological well-being of South African adolescents. *South African Journal of Psychology*, 37(3), 595-615.

Weich, E. 2006. Substance use disorders: main article. *CME: Your SA Journal of CPD: Mental Health in the Community*, 24(8), 436-440.

WHO. http://www.who.int/maternal_child_adolescent/topics/adolescence/dev/en/. Accessed 26 April 2016.

WHO. http://www.who.int/topics/substance_abuse/en/. Accessed 02/05/2016.

Section Two: Manuscripts

Appendix A: Journal Guidelines for Manuscripts

GUIDELINES FOR AUTHORS

The African Journal for Physical Activity and Health Sciences (AJPHEs) is a peer-reviewed journal established to:

- i) Provide a forum for physical specialists, researchers in physical activity, professionals in human movement studies as well as other sport-related professionals in Africa, the opportunity to report their research findings based on African settings and experiences, and also to exchange ideas among themselves. Research-related contributions by specialists in physical activity and health sciences from other continents are also welcome.
- ii) Afford the professionals and other interested individuals in these disciplines the opportunity to learn more about the practice of the disciplines in different parts of the continent.
- iii) Create awareness in the rest of the world about the professional practice in the disciplines in Africa.

GENERAL POLICY

AJPHEs publishes research papers that contribute to knowledge and practice, and also develops theory either as new information, reviews, confirmation of previous findings, application of new teaching/coaching techniques and research notes. Letters to the editor relating to the materials previously published in AJPHEs could be submitted within 3 months after publication of the article in question. Such letter will be referred to the corresponding author and both the letter and response will be published concurrently in a subsequent issue of the journal.

Manuscripts are considered for publication in AJPHEs based on the understanding that they have not been published or submitted for publication in any other journal. In submitting papers for publication, corresponding authors should make such declarations. Where part of a paper has been published or presented at congresses, seminars or

symposia, reference to that publication should be made in the acknowledgement section of the manuscript.

AJPHEs is published quarterly, i.e. in March, June, September and December. Supplements/Special editions are also published periodically.

SUBMISSION OF MANUSCRIPT

Original manuscript and all correspondence should be addressed to the Editor-in-Chief:

Professor L. O. Amusa	Tel:	+27	15
9628076/+27729883817			
Centre for Biokinetics, Recreation	Fax:	+27 15 9628861	
and Sport Science, University of Venda,		amusalbw@yahoo.com	
P. Bag X0950			
Republic of South Africa			

Articles should be submitted electronically, i.e. via e-mail attachment. However, the corresponding author should ensure that such articles are virus free. AJPHEs reviewing process normally takes 4-6 weeks and authors will be advised about the decision on submitted manuscripts within 60 days. In order to ensure anonymity during the reviewing process authors are requested to avoid self-referencing or keep it to the barest minimum.

PREPARATION OF MANUSCRIPT

Manuscripts should be type written in fluent English (using 12-point Times New Roman font and 1½ line-spacing) on one side of white A4-sized paper justified fully with 3cm margin on all sides. In preparing manuscripts, MS-Word, Office 2007 for Windows should be used. Length of manuscripts should not normally exceed 12 printed pages (including tables, figures, references, etc.). For articles exceeding 10 typed pages US\$ 10.00 is charged per every extra page. Authors will be requested to pay a publication charge of US\$ 350.00 to defray the very high cost of publication. The pages of manuscripts must be numbered sequentially beginning with the title page. The

presentation format should be consistent with the guidelines in the publication format of the American Psychological Association (APA) (6th edition).

Title page:

The title page of the manuscript should contain the following information:

Concise and informative title.

Author(s') name(s) with first and middle initials. Authors' highest qualifications and main area of research specialisation should be provided.

Author(s') institutional addresses, including telephone and fax numbers.

Corresponding author's contact details, including e-mail address.

A short running title of not more than 6 words.

Abstract

An abstract of 200-250 words is required with up to a maximum of 5 words provided below the abstract. Abstract must be typed on a separate page using single line spacing, with the purpose of the study, methods, major results and conclusions concisely presented. Abbreviations should either be defined or excluded.

Text

Text should carry the following designated headings also using single line spacing: Introduction, materials and methods, results, discussion, acknowledgement, references and appendices (if appropriate).

Introduction

The introduction should start on a new page and in addition to comprehensively giving the background of the study should clearly state the problem and purpose of the study.

Authors should cite relevant references to support the basis of the study. A concise but informative and critical literature review is required.

Methodology

This section should provide sufficient and relevant information regarding study participants, ethics/informed consent, instrumentation, research design, validity and reliability estimates, data collection procedures, statistical methods and data analysis techniques used. Qualitative research techniques are also acceptable.

Results

Findings should be presented precisely and clearly. Tables and figures must be presented separately or at the end of the manuscript and their appropriate locations in the text indicated. The results section should not contain materials that are appropriate for presentation under the discussion section. Formulas, units and quantities should be expressed in the *Système Internationale (SI)* units. Colour printing of figures and tables is expensive and could be done upon request authors' expense.

Discussion

The discussion section should reflect only important aspects of the study and its major conclusions. Information presented in the results section should not be repeated under the discussion. Relevant references should be cited in order to justify the findings of the study. Overall, the discussion should be critical and tactfully written.

References

The American Psychological Association (APA) format should be used for referencing. Only references cited in the text should be alphabetically listed in the reference section at the end of the article. References should not be numbered either in the text or in the reference list.

Authors are advised to consider the following examples in referencing:

Examples of citations in body of the text:-

For one or two authors; Kruger (2003) and Travill and Lloyd (1998). These references should be cited as follows when indicated at the end of a statement: (Kruger, 2003); (Travill & Lloyd, 1998).

For three or more authors cited for the first time in the text; Monyeki, Brits, Mantsena and Toriola (2002) or when cited at the end of a statement as in the preceding example; (Monyeki, Brits, Mantsena & Toriola, 2002). For subsequent citations of the same reference it suffices to cite this particular reference as: Monyeki et al. (2002). Multiple references when cited in the body of the text should be listed chronologically in ascending order, i.e. starting with the oldest reference. These should be separated with semi colons. For example, (Tom, 1982; McDaniels & Jooste, 1990; van Heerden, 2001; de Ridder et al., 2003).

References

In compiling the reference list at the end of the text the following examples for journal references, chapter from a book, book publication and electronic citations should be considered:

Examples of journal references:

Journal references should include the surname and initials of the author(s), year of publication, title of paper, name of the journal in which the paper has been published, volume and number of journal issue and page numbers.

For one author: McDonald, A.K. (1999). Youth sports in Africa: A review of programmes in selected countries. *International Journal of Youth Sports*, 1(4), 102-117.

For two authors: Johnson, A.G. & O’Keefe, L.M. (2003). Analysis of performance factors in provincial table tennis players. *Journal of Sport Performance*, 2(3), 12-31.

For multiple authors: Kemper, G.A., McPherson, A.B., Toledo, I. & Abdullah, I.I. (1996). Kinematic analysis of forehand smash in badminton. *Science of Racket Sports*, 24(2), 99-112.

Examples of book references:

Book references should specify the surname and initials of the author(s), year of publication of the book, title, edition, page numbers written in brackets, city where book was published and name of publishers. Chapter references should include the name(s) of the editor(s) and other specific information provided in the third example below:

For authored references: Amusa, L.O. & Toriola, A.L. (2003). *Foundations of Sport Science* (1st Ed.) (pp. 39-45). Mokopane, South Africa: Dynasty Printers.

For edited references: Amusa, L.O. and Toriola, A.L. (Eds.) (2003). *Contemporary Issues in Physical Education and Sports* (2nd Ed.) (pp. 20-24). Mokopane, South Africa: Dynasty Printers.

For chapter references in a book: Adams, L.L. & Neveling, I.A. (2004). Body fat characteristics of sumo wrestlers. In J.K. Manny and F.O. Boyd (Eds.), *Advances in Kinanthropometry* (pp. 21-29). Johannesburg, South Africa: The Publishers Company Ltd.

Example of electronic references:

Electronic sources should be easily accessible. Details of Internet website links should also be provided fully. Consider the following example:

Wilson, G.A. (1997). Does sport sponsorship have a direct effect on product sales? *The Cyber-Journal of Sport Marketing (online)*, October, 1(4), at <http://www.cad.gu.au/cjasm/wilson.html>. February 1997.

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Manuscript One: Substance use prevention programmes among adolescents focusing on resilience as a protective factor: A systematic review (Published in *African Journal for Physical Activity and Health Sciences*)

Substance use prevention programmes among adolescents focusing on resilience as a protective factor: A systematic review

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Abstract

Substance use among adolescents is a major problem facing the world today. However, there are challenges on prevention of substance use among this population. The purpose of this systematic review was to explore and describe current evidence on substance use prevention programmes among adolescents focusing on resilience as a protective factor. Systematic review materials and methods were followed to answer the review question “What current evidence exists on substance use prevention programmes among adolescents focusing on resilience as a protective factor?” EbscoHost, PubMed, Emerald, Web of Science, JSTOR and the Manual databases were searched using variations of the following keywords: adolescent*, substance use, prevent* program*, resilient* and protect* factor*. A total of 3701 studies were obtained during literature search and only 7 studies met the inclusion criteria of this systematic review. Two themes were identified from the results of this systematic review namely, features of a prevention programme as well as protective factors relevant to a prevention programme. From the findings of this systematic review, it is concluded that substance use among adolescents can be prevented if intervention programmes focus on resilience as a protective factor.

Keywords: Adolescents, prevention programme, protective factors, resilience, substance use.

How to cite this article:

Sehularo, L.A., Manyedi, M.E. & du Plessis, E. (2016). Substance use prevention programmes among adolescents focusing on resilience as a protective factor: A systematic review. *African Journal for Physical Activity and Health Sciences*, 22(1:2), 227-241.

Introduction

Substance use among adolescents is a major problem facing the whole world today (Mohasoa & Fourie, 2012). Visser and Routledge (2007) state that substance use among adolescents has been linked to serious behavioural problems such as truancy, school drop-out, delinquent activities, and precocious sexual activities. These problems add to the urgency of identifying and intervening in adolescents substance use as early as possible (NIDA, 2014). There are challenges on preventing substance use among this population. For

instance, Morojele, Parry and Brook (2009) indicated that to prevent adolescents from using substances is a major challenge as many prevention programmes have been found to be ineffective. Others have not been evaluated at all (Bandy & Moore, 2008), and others were based on opinion rather than evidence (UNODC, 2004). On the other hand, Faggiano et al. (2008) add that empirical evidence supporting the effectiveness of prevention programmes is still weak and is being debated. In South Africa, it is indicated in the National Drug Master Plan (2013-2017) that in prevention programmes such as “*Ke moja*” (meaning I am fine with drugs), little or no attempt had been made to measure success. According to the UNODC (2004), one prominent factor deemed to have reduced the impact of some prevention programmes is that they have been developed largely from an adult perspective. They therefore failed to engage with adolescents. It is important that when developing or implementing prevention programmes, one has to place oneself in the mind-set of an adolescent. What works for adults may not necessarily work for adolescents. Feldtmann (2010) confirms that prevention programmes have a high risk of failing if they are planned without thorough background information on the target groups, cultural and ethical issues, and the extent of the problem. However, consensus is that prevention and cessation based substance use programmes can work (Bandy & Moore, 2008). According to Schwartz, Harrison, Garland and Waddell (2007), prevention of substance use among adolescents may be achieved through programmes aimed at enhancing protective factors, of which resilience is one; or mitigating risk factor to reduce the number of adolescents who experience substance use problems. Protective factors enhance resilience of an adolescent to cope with risk factors in their lives and protect them from substance use (Dillon, Chivite-Matthews, Grewal, Brown, Webster, Weddell, Brown & Smith, 2007; Fadardi, Azad & Nemati, 2010). Protective factors that might mitigate substance use among adolescents include variables such as a stable family life, strong parent-child bond, consistent parental supervision, investment in academic achievement, and a peer group who model prosocial family and school behaviours (Sadock, Sadock & Ruiz, 2015). If an adolescent is nourished with these important protective factors, resilience is likely to result. The purpose of this systematic review was to explore and describe current evidence on substance use prevention programmes among adolescents focusing on resilience as a protective factor.

Methodology

A systematic review was conducted to explore and describe current evidence on substance use prevention programmes among adolescents focusing on resilience as a protective factor. Five steps of a systematic review were followed in this study. They are (1) formulating a clear review question, (2) gathering and classifying evidence, (3) performing critical appraisal, (4) summarising the evidence and (5) conclusions (Centre for Reviews and Dissemination (CRD),

2009). An explanation of these steps of a systematic review is provided in the following sub-paragraphs:

Step 1: Formulating a clear focused review question

A well formulated review question for this systematic review followed the acronym of the PICO format (ADA, 2008) as follows: (P) Population of interest – adolescents, (I) Intervention of interest – prevention programmes focusing on resilience as a protective factor, (C) Comparison intervention – no comparison, (O) Outcome of interest – positive client outcomes which include preventing substance use among adolescents such as alcohol, marijuana, heroin and cocaine. A clear focused review question for this systematic review was thus “What current evidence exists on adolescents’ substance use prevention programmes focusing on resilience as a protective factor?”

Step 2: Gathering and classifying evidence

This second step of the systematic review involved developing a search plan with inclusion and exclusion criteria, conducting the search using various sources. The goal was to find the best available research articles that answer the focused review question mentioned above.

Search protocol

The goal of developing the search protocol was to allow formulation of the focused review question and methods of the review before retrieving the literature. A reasoned protocol and well-formulated focused review question increased the efficiency of the review by limiting the time and cost of identifying and obtaining relevant literature. The methods of literature search, screening, data extraction and analysis were contained in a written document to minimise bias before starting the literature search (Simons, 2011).

Literature search and strategy

Together with the librarians from the North-West University, a search strategy was created. Collaboratively the researcher and the librarians created a search strategy which was designed to identify studies relevant to the review question of this systematic review. The inclusion criteria captured all studies of interest in this research. In this systematic review, EbscoHost, PubMed, Emerald, Web of Science, JSTOR and the Manual databases were searched using variations of the following keywords: adolescent*, substance use, prevent* programme, resilient* and protect* factor*. These databases contain relevant search. Manual searches of journals that are specifically related to the topic or those that are likely to cover the topic were also performed. To ensure the most recent, relevant and

scientific information was retrieved, the inclusion and exclusion criteria were as follows:

1. Inclusion criteria:

- Studies focusing on adolescents substance use prevention programmes focusing on resilience as a protective factor
- Studies on adolescents between 10 and 19 years of age
- Studies on adolescents of all cultures, social status, race and language groups
- Studies published between 2004 and 2014, in order to get recent evidence on proposed prevention programmes
- Qualitative and quantitative studies
- Studies limited to articles published in English

2. Exclusion criteria:

- Studies focusing on substance abuse and or dependence
- Studies focusing on adults
- Conference abstracts
- Newspaper articles
- Duplicate studies

After developing the review question and search protocol, a literature search commenced. Before finalising the search, the researcher removed all duplicate studies. The researcher performed the first stage by screening of titles and abstracts based on the review question and its study design, population, intervention and outcome. Based on the initial screening, selected full text articles were obtained for second-stage screening.

Documentation of the search

The search process was documented in full so that it could be re-run at a later stage (See literature search above and Figure 1: Preferred Reporting Items for Systematic Reviews and Meta-analysis (PRISMA) flow diagram of search results). Providing the full detail of the search helps future researchers to re-run or update the searches and it enables readers to evaluate the thoroughness of the initial search (Centre for Reviews and Dissemination, 2009). All searches, including internet searches and hand searches were documented. The write up of the search includes information about the databases and interfaces searched, full detailed search strategies (including any justifications for date or language restrictions) and the number of records retrieved. The PRISMA flow diagram was used to demonstrate how relevant studies were identified (see Figure 1: PRISMA flow diagram of search results).

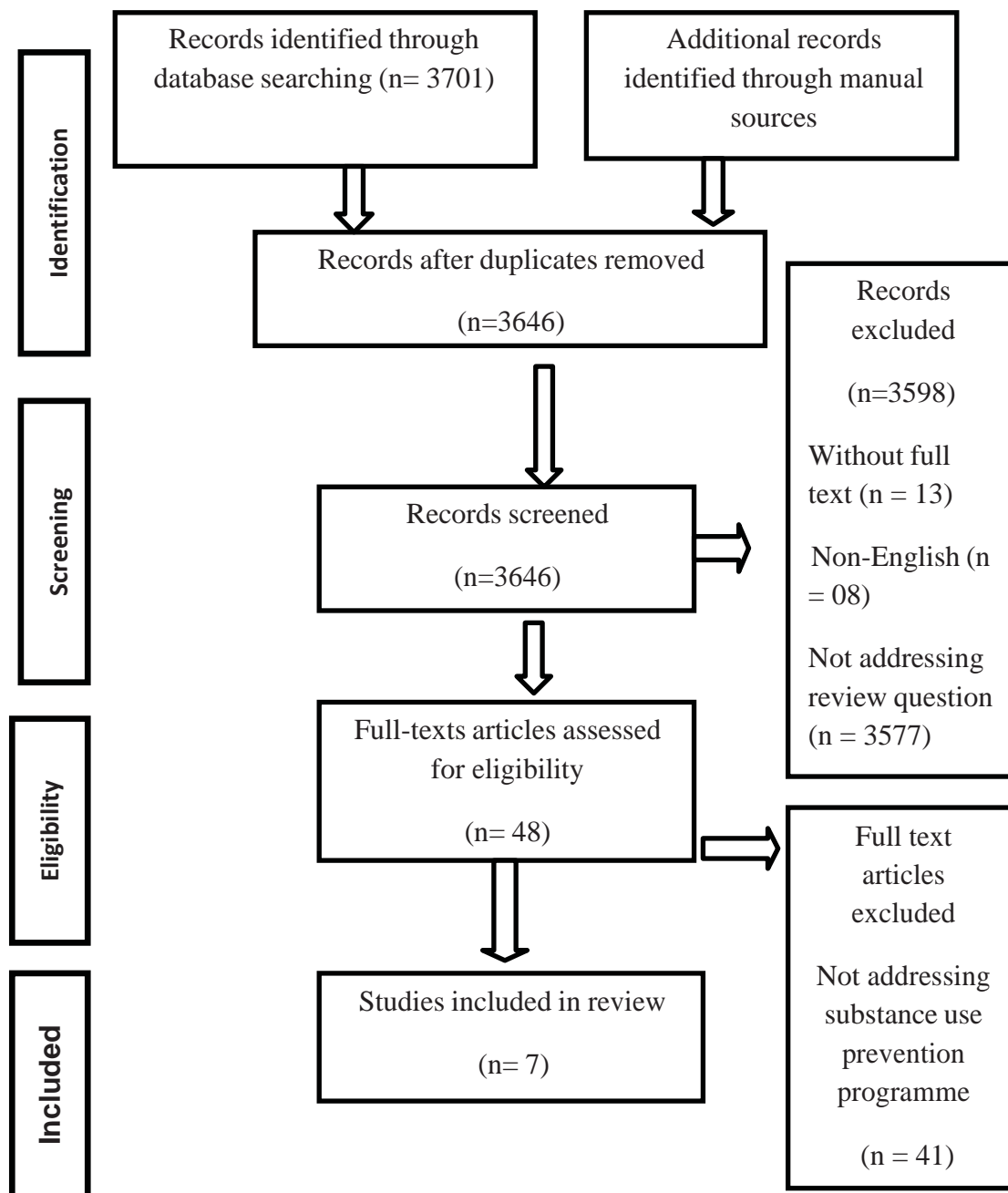


Figure 1: PRISMA flow diagram of search results

Source: Moher, D., Liberati, A., Tetzlaff, J., Altman D.G. and The PRISMA Group (2009).

Step 3: Performing critical appraisal

The third step in conducting a systematic review is performing critical appraisal. The purpose of the critical appraisal of sources found in this systematic review was to determine validity, to interpret results and to evaluate applicability in

nursing practice and/or in conducting future studies. Johns Hopkins Nursing Evidence-Based Practice Research Evidence Appraisal Checklist was used within critical appraisal process to assess the applicability, reliability and validity of published studies (Newhouse, Dearholt, Poe, Pugh & White, 2007). In this step, the researcher and independent reviewer critically appraised all the relevant studies. The task of an independent reviewer was to assist the researcher with assessing the methodological quality, inclusion or exclusion of studies and grading the strength of evidence. There were similarities and differences between the findings of the researcher and the independent reviewer. Differences in this step were reconciled by critical discussion and mutual agreement.

Step 4: Summarising the evidence

This fourth step of a systematic review contains the process of data extraction and data analysis from the selected studies. In this step, the researcher combined all relevant and scientifically valid information for this systematic review into a brief, coherent, and easy-to-read summary (Table 1). Strength of evidence was graded according to Johns Hopkins Nursing Evidence-Based Practice Research Evidence Appraisal (Newhouse, Dearholt, Poe, Pugh & White, 2007).

Table 1: Description of reviewed studies

Reference	Design and Sample	Findings	Rigor
Fang and Schinke (2013) Two-year outcomes of a randomized, family-based substance use prevention trial for Asian American adolescent girls	Longitudinal design N = 108	The study found that a culturally generic, family-based prevention program is effective in enhancing parent-child relationships, improving girls' resiliency, and preventing substance use behaviours	Quantitative methodology was appropriate. Study applied to the population targeted by the review question. Data collection and analysis methods were clearly stated. Study was approved by the Columbia University Morningside Institutional Review Board. Results are clearly presented. Conclusion was based on clearly presented results. Limitations were discussed. Study was conducted and reported well. Instrument used: JHNEBP Strength of Evidence: Level II Quality of Evidence: Good quality
Fagan et al. (2007) Using community and family risk and protective factors for community-	Survey N = 85 810	The study showed that a significantly higher resilience and protective factors scores, and significantly lower prevalence of substance use are evident at follow up	Clearly focused research questions were asked. The aim of the research was clear and understandable. Survey was appropriately administered to all eligible students. Researchers reported how they guarded against bias. Students who were not honest in the survey were excluded from

Reference	Design and Sample	Findings	Rigor
based prevention planning			analysis. Results are clearly reported. Limitations are discussed. Instrument used: JHNEBP Strength of Evidence: Level III Quality of Evidence: Good quality
Fallu et al. (2010) Preventing disruptive boys from becoming heavy substance users during adolescence: A longitudinal study of familial and peer-related protective factors	Longitudinal design N = 1037	The study indicated that parental monitoring, family attachment, and peer conventionality are factors representing a promising targets for future substance use prevention strategies.	Appropriate methodology was followed. Aims and objectives were clear and understandable. A sample size of 1037 was adequate. Data collection and analysis methods were clearly described. Results were clearly presented and supported with literature. Conclusions were based on clearly presented results. Limitations of the study were clearly identified and discussed. Instrument used: JHNEBP Strength of Evidence: Level III Quality of Evidence: Good quality
Fang et al. (2011) Substance use among Asian American adolescents: perceptions of use and preferences for prevention programming	Exploratory design N = 31	This study discussed preferred prevention program content, delivery settings, and recruitment and retention strategies.	Study applies to the population targeted by the review question. Ethical issues were adhered to. The study was approved by the university institutional review board. Focus groups as a data collection methods were appropriate and the sample size was adequate. A clear research question was asked. Limitations were identified and discussed. The study was well conducted and reported. Instrument used: JHNEBP Strength of Evidence: Level III Quality of Evidence: Good quality
Piko & Kovacs (2010) Do parents and school matter? Protective factors for adolescent substance use	Cross sectional design N=881	The study found that parental monitoring is a universal protective factor for adolescents. Acceptance and respect of parents' values may also serve as a protection against binge drinking among adolescents	Sample size of 881 was adequate. Self-administered questionnaire and multiple regression analysis were appropriate. Data collection and analysis method were adequately described. The study applies to the population targeted by the review question. Clearly focused research questions were asked. Results were clearly presented and supported with literature. Conclusions were based

Reference	Design and Sample	Findings	Rigor
Schinke et al. (2008) Substance use among early adolescents girls: Risk and protective factors	Survey N = 781	Girls whose families had strict rules against substance use are less likely to drink alcohol and use inhalants.	<p>on clearly presented results. Limitations were also clearly identified and discussed. All in all, the study was well conducted and reported.</p> <p>Instrument used: JHNEBP Strength of Evidence: Level III Quality of Evidence: Good quality Sample size of 78 was adequate. Survey and multivariate logistic regression were appropriate employed. Results were clearly presented and there was enough discussion of the results.</p> <p>Conclusions were based on clearly presented results. Major limitations of the study were clearly identified and discussed. Overall, the study was well planned and reported and contributes important information to the present study.</p> <p>Instrument used: JHNEBP Strength of Evidence: Level III Quality of Evidence: Good quality</p>
Sigfúsdóttir et al. (2008) Substance use prevention for adolescents: The Icelandic Model	Survey N = 7000	The study demonstrated that adolescent substance use prevention approach successfully strengthened a broad range of parental, school and community protective factors	<p>applies to the population targeted by the review question. Clearly focused research questions were asked. Sample size of 7000 was appropriate. Data collection and analysis methods are relevant. The study was approved by an Icelandic central human subjects review committee. Results were clearly presented and supported with literature. Generally, the study was well planned and reported.</p> <p>Instrument used: JHNEBP Strength of Evidence: Level III Quality of Evidence: Good quality</p>

Data extraction

Data extraction of this systematic review allowed the researcher to determine which data was most important in answering the review question. A pilot extraction of two studies was performed by both the researcher and an independent reviewer and consensus was reached to continue abstracting other studies. Data extraction completed by the researcher and an independent reviewer were compared and discrepancies were resolved through discussion

until consensus was achieved. At the completion of data extraction, all extracted data were manually re-checked against the original source by reviewers, working independently.

Data analysis

Data analysis or synthesis involves the process of gathering, combining and summarising the findings of individual studies included in the systematic review (CRD, 2009). Data analysis in this systematic review was done in a narrative and informative manner so that they can be easily understandable.

Ethical considerations

The researcher has conducted this study under the supervision of experts in systematic review. Data were extracted independently by the researcher and independent reviewer, discrepancies were resolved, and decisions on which data to include were reached between the researcher and independent reviewer. Hence, the researcher was unbiased in reporting final results. To avoid plagiarism, all sources and references used in this systematic review have been acknowledged in the text and the list of references following journal guidelines. The researcher has acknowledged all those who worked on this systematic review in the author list and acknowledgements.

Results

The results of this systematic review on adolescent substance use prevention programmes focusing on resilience as a protective factor are reported in a narrative and informative manner. Johns Hopkins Nursing Evidence-Based Practice Research Evidence Appraisal Checklist was used within a critical appraisal process to assess the applicability, reliability and validity of published studies (Newhouse, Dearholt, Poe, Pugh & White, 2007). Strength and quality of evidence were also graded according to Johns Hopkins Nursing Evidence-Based Practice Research Evidence Appraisal (Newhouse, Dearholt, Poe, Pugh & White, 2007).

Description of included studies

Studies included in this systematic review were identified primarily through systematic searches of electronic databases and no studies were found by manual search. In order to strengthen the findings of this systematic review by reducing the chances of excluding important information, an attempt was made to conduct an exhaustive literature search. Data bases for this exhaustive literature search were obtained from EbscoHost (n = 3560), PubMed (n = 3), Manual search (n =

0), Emerald (n = 42), Web of science (n = 16) as well as JSTOR (n = 80). A total of 3701 studies were obtained during literature search. After removal of 55 duplicate records, the search produced a total of 3646 of which titles and abstracts were screened. From these records, 3598 studies were excluded because there was no full text (13 studies), others were written in non-English language (8 studies), and others were not addressing the review question (3577 studies). After the excluded studies, 48 studies were eligible for inclusion in this systematic review. After the screening of 48 titles and abstracts of the eligible studies for inclusion in this systematic review, 41 studies were excluded because they were not addressing or discussing substance use prevention programmes focusing on resilience as a protective factor. Seven studies were finally included in this systematic review. Six of the included studies followed quantitative research methodology, which are longitudinal (n=2), survey (n=3) and cross-sectional designs (n=1) while only one study followed qualitative research methodology. All studies were written by more than one author ranging from 1 to 6 authors. The sample size for each of the included studies ranged between 31 and 85 810 adolescents. Table 1 gives the summary of the reviewed studies. *See Figure 1 for PRISMA flow diagram of search results.* The results of this systematic review are discussed below under two themes: features of a prevention programme as well as protective factors relevant to a prevention programme.

Theme 1: Features of a prevention programme

Only one out of the seven studies included in this systematic review emphasized the features of a prevention programme (Fang, Barnes-Ceeney, Lee & Tao, 2011). This qualitative study was conducted on substance use among Asian American adolescents: perceptions of use and preferences for prevention programming. The study indicated that effective prevention programmes should be brief and attractive and to the point; that such a programme should include interactive activities and be delivered in an engaging and interesting fashion. Ideas for programme activities should include: “pictures,” “videos,” “comic strips,” or “cartoon shows” that depict games that are “challenging” and “competitive”; facts and statistics that are related to a variety of substances such as cannabis, heroin and cocaine; anecdotal materials from people who have experience in using substances; and “scare tactics” that “shock you and make you afraid of (being) them because you don’t want that to happen to you.” There should also be ideas of online personal blogs where “adolescents can put on their own blogs or their own pictures,” and “a comment box where adolescents can write their opinions or thoughts on it and everyone could respond.” The programme could also include a specific theme in a series of sessions, covering a variety of issues such as smoking, drinking, safe sex, and HIV/AIDS. Given that some programme recipients such as parents or newly arrived immigrants may prefer their native ethnic language, the programme should be delivered in

multiple languages to reach a broader audience. The programme could be advertised by school or community organisations, online, or in subway trains and buses. The most frequently mentioned location to promote the prevention was at school where adolescents received most of their health education. Community organisations such as youth centres or community health centres were also considered an appropriate place to reach out adolescents and their parents. Participants also favoured advertisements on the social networking sites such as Facebook. Other media outlets such as television and newspapers were also mentioned (Fang et al., 2011).

Theme 2: Protective factors relevant to a prevention programme

The studies that were included in this systematic review satisfied the set inclusion criteria mainly because they focused on how substance use can be prevented among adolescents by focusing on resilience as a protective factor. The interventions in these studies included substance use prevention programme delivered entirely online, community based prevention planning, familial and peer related protective factors, prevention programming, as well as parental and school related protective factors. Two of the included studies focused specifically on substance use among adolescent girls while 5 other studies did not consider gender. The seven studies included in this systematic review identified peer, parental, family, community and school related protective factors for preventing substance use among adolescents. Parental monitoring was mentioned in most studies as a universal protective factor for adolescents substance use. For example, a study by Schinke, Fang and Cole (2008) indicated that mothers' knowledge of their daughters' whereabouts was linked to girls' reduced use of alcohol. Similarly, mothers' knowledge of their daughters' companions predicted girls' reduced alcohol and prescription substance use. Girls' ability to always contact their mothers was associated with girls' reduced drinking, illicit use of prescription substances, and inhalant use. Girls whose families had rules against substance use were less likely to drink and use inhalants. On the other hand, it was mentioned in another study that acceptance and respect of parents' values may serve as a protection against binge drinking among adolescents (Piko & Kovács, 2010). Similarly, strict parental rules reduce the likelihood of using substances among adolescent girls (Fang & Schinke, 2013). Girls whose parents encouraged their children to abstain from substance use reported commensurately lower rates of alcohol and inhalant use (Schinke et al., 2008). Similarly, it was mentioned in another quantitative cross sectional study that 49% of the 10th graders in 1997 reported that their parents monitored with whom they were spending their time in the evenings. Thus, both time spent with parents and parental monitoring increased substantially during the 10-year period of the study (Sigfúsdóttir et al., 2008). Additionally, perceived social support from father, having dinner together with the family, and parental monitoring variables, that is, when parents set a restriction and they knew when

their children were can prevent substance use (Piko & Kovács, 2010). It was also mentioned in another study that there is a need to engage parents in a prevention programme and valued the idea of family based programmes. The study also indicated that parents should talk to their adolescents about substances, regardless of how old the child is (Fang et al., 2011). One study indicated that parental monitoring, family attachment, and peer conventionality reduce the relationship between childhood disruptiveness and adolescent heavy substance use (Falluet al., 2010). Additionally, another study support community-level prevention planning that uses epidemiological information on levels of community and family risk and protective factors to identify areas of elevated risk and low protection to be targeted for community based preventive interventions (Fang, Schinke & Cole, 2007).

Discussion

The main goal of this systematic review was to explore and describe current evidence on substance use prevention programmes among adolescents focusing on resilience as a protective factor. This study provides a comprehensive summary of evidence on adolescent substance use prevention programmes. The results of this systematic review are in concord with previous research results indicating that substance use among adolescents can be prevented by focusing on resilience as a protective factor. Studies showed different prevention programmes such as substance abuse prevention programme delivered entirely online, community based prevention planning, familial and peer related prevention programming can prevent substance use among adolescents. Across these studies, results of this systematic review suggested that substance use among adolescents can be prevented if tackled appropriately, using effective and different methods. For example, it was suggested that prevention programmes should be made specific to the target population such as adolescents, rather than using adults' programmes on the adolescents. It was also indicated that for a prevention programme to be effective, it should have a theme, be brief and straight to the point and also interesting to the adolescents such as having pictures and videos. These studies indicate that a prevention programme should be written or delivered in a language that adolescents understand better such as their home language (Fang et al., 2011). A prevention programme should also include information on different substances such as alcohol, marijuana, heroin, and cocaine depending on the most common substances used in the area of concern. For prevention programmes to be known or reached by the adolescents, they should be advertised in public places such as schools, churches and communities where most of the adolescents can see it and probably implement the recommendations offered (Fang et al., 2011).

Studies indicate that substance use can be prevented among adolescents if prevention programmes focus on resilience as a protective factor. A study

indicated that protective factors decrease the likelihood of later substance use (Fagan et al., 2007). Again, protective factors can be seen as enhancing resilience of an adolescent for coping with risk factors in their lives and protect them from substance use (Dillon et al., 2007; Fadardi et al., 2010). Studies showed different protective factors such as peers, parents, families, communities and schools that may act as protection against substance use among adolescents (Piko & Kovács; 2010; Fagan et al., 2007; Fallu et al., 2010; Fang et al., 2011; Sigfúsdóttir et al., 2008; Fang & Schinke, 2013; Schinke et al. 2008). If an adolescent is nourished with these important protective factors, resilience is likely to result. Studies also indicated that parent child communication on substance use are critical and can assist adolescents to stay away from using substances, although interestingly, some studies show that some parents rarely speak to the adolescents about substance use. This finding indicates a gap that more research is needed to strengthen parent child communication in order to use this protective factor to prevent substance use among adolescents.

While the findings of this systematic review shed some light on substance use prevention programmes among adolescents focusing on resilience as a protective factor, there are some limitations which are discussed under conclusions. From this systematic review, the researcher is convinced that these results draw attention to the importance of searching for current evidence on adolescent substance use prevention programmes focusing on resilience as a protective factor. The present study suggests that a prevention programme focusing on resilience as a protective factor has the potential to prevent substance use among adolescents. From this systematic review, it is also clear that there is a need to develop and validate a substance use prevention programme focusing on resilience as a protective factor for adolescents.

Conclusions

Little is known about substance use prevention programmes among adolescents specifically programmes focusing on resilience as a protective factor. This is due to insufficient literature as evidenced by merely seven studies included in this systematic review. From the seven articles that were critically appraised, it is concluded that substance use can be prevented among adolescents if resilience as a protective factor is utilised effectively.

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References

- American Dietetic Association (ADA) (2008). *Evidence Analysis Manual: Steps In The ADA Evidence Analysis Process*. Chicago: Scientific Affairs and Research, American Dietetic Association.
- Bandy, T. & Moore, K. A. (2008). *What works for preventing and stopping substance use in adolescents: lessons from experimental evaluations of programs and interventions*. Washington, D.C.: Child Trends. http://www.childtrends.org/wpcontent/uploads/2008/05/Child_Trends_2008_05_20_FS_WhatWorksSub.pdf. September 2015.
- Centre for Reviews and Dissemination (CRD) (2009). *Systematic Reviews: CRD's Guidance for Undertaking Reviews in Health Care*. York: Centre for Reviews and Dissemination.
- Dillon, L., Chivite-Matthews, N., Grewal, I., Brown, R., Webster, S., Weddell, E., Brown, G. & Smith, N. (2007). *Risk, Protective Factors and Resilience to Drug Use: Identifying Resilient Young People and Learning from their Experience*. London: Home Office.
- Fadardi, J. S., Azad, H. & Nemati, A. (2010). The relationship between resilience, motivational structure, and substance use. *Procedia-Social and Behavioural Sciences*, 5, 1956-1960.
- Faggiano, F., Vigna-Taglianti, F., Burkhart, G., Bohrn, K., Cuomo, L., Gregori, D. & Varona, L. (2008). The effectiveness of a school-based substance abuse prevention program: 18-month follow-up of the EU-dap cluster randomized controlled trial. *Drug and Alcohol Dependence*, 108(1), 56-64.
- Fallu, J., Janosz, M., Brière, F., Descheneaux, A., Vitaro, F. & Tremblay, R. (2010). Preventing disruptive boys from becoming heavy substance users during adolescence: A longitudinal study of familial and peer-related protective factors. *Addictive Behaviours*, 35(12), 1074-1082.
- Fang, L., Schinke, S.P. & Cole, K.C.A. (2007). Preventing substance use among early Asian-American adolescent girls: Initial evaluation of a web-based, mother-daughter program. *Journal of Adolescent Health*, 47(5), 529-532.
- Fang, L., Barnes-Ceeney, K., Lee, R. A. & Tao, J. (2011). Substance use among Asian-American adolescents: Perceptions of use and preferences for prevention programming. *Social Work in Health Care*, 50(8), 606-624.
- Fang, L. & Schinke, S. P. (2013). Two-year outcomes of a randomized, family-based substance use prevention trial for Asian American adolescent girls. *Psychology of Addictive Behaviours*, 27(3), 788.
- Feldtmann, G. W. (2010). *A Social Work Analysis of the Substance Abuse Problem in Secondary Schools in Mpumalanga*. Potchefstroom: North West University.
- Mohasoa, I. P. & Fourie, E. (2012). Substance abuse amongst adolescents: A case study of Zeerust, North-West Province, South Africa. *New Voices in Psychology*, 8(1), 30-43.
- Moher, D., Liberati, A., Tetzlaff, J., Altman D.G. & The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. *Annals of Internal Medicine*, 6(6) 264-269.

Morojele N. K., Parry, C. D. & Brook, J. S. (2009). Substance abuse and the young: TAKING ACTION. *MRC Research brief*. <http://www.mrc.ac.za/policybriefs/substance2009.pdf>. October 2015.

National Drug Master Plan *see* South Africa.

Newhouse, R.P., Dearholt, S.L., Poe, S.S., Pugh, L.C. & White, K.M. (2007). *John Hopkins Evidence-based Model and Guidelines*. Indianapolis: Sigma Theta Tau International.

National Institute on Drug Abuse (NIDA) (2014). *Principles of Adolescent Substance Use Disorder Treatment: A Research-Based Guide*. NIH Pub. No. 14-7953. <http://www.drugabuse.gov/publications/science-addiction>. July 2015.

Piko, B. F. & Kovács, E. (2010). Do parents and school matter? Protective factors for adolescent substance use. *Addictive Behaviours*, 35(1), 53-56.

Prevention of and treatment for substance abuse bill (*see* South Africa).

Sadock, B.J., Sadock, V.A. & Ruiz, P. (2015). *Kaplan and Sadock's Synopsis of Psychiatry* (11thed.) (pp. 1273-1274). Philadelphia: Lippincott, Williams & Wilkins.

Schinke, S. P., Fang, L. & Cole, K. C. (2008). Substance use among early adolescent girls: Risk and protective factors. *Journal of Adolescent Health*, 43(2), 191-194.

Schwartz, C. A., Harrison, E., Garland, O. & Waddell, C. (2007). *Preventing Substance Use Disorders in Children and Youth*. Children's Health Policy Centre: Simon Fraser University.

Sigfúsdóttir, I. D., Thorlindsson, T., Kristjansson, A. L., Roe, K. M. & Allegrante, J. P. (2008). Substance use prevention for adolescents: The Icelandic model. *Health Promotion International*, 24(1), 16-25.

Simons, M. (2011). *Guidelines for writing systematic reviews*. <http://www.library.mq.edu.au/libguides/Guidelines%20for%20writing%20systematic%20reviews.pdf>. August 2015. South

Africa (2013 – 2017). *National Drug Master Plan*. Pretoria: Government Printers.

United Nations Office on Drugs and Crime (UNODC) (2004). *Conducting Effective Substance Abuse Prevention Work among Youth in South Africa*. Pretoria: South Africa.

Visser, M. & Routledge, L. (2007). Substance abuse and psychological well-being of South African adolescents. *South African Journal of Psychology*, 37(3), 595-615.

Manuscript Two: Stakeholders' perceptions of resilience as a protective factor in illegal substance use prevention programme for adolescent learners (Submitted to *African Journal for Physical Activity and Health Sciences*)

Stakeholders' perceptions of resilience as a protective factor in illegal substance use prevention programme for adolescent learners

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Abstract

This study forms part of a research project on illegal substance use prevention programme for adolescent learners. The aim of the present study was to explore stakeholders' perceptions of resilience as a protective factor in illegal substance use prevention programme for adolescent learners. A qualitative, explorative, descriptive and contextual approach was followed to explore stakeholders' perceptions of resilience as a protective factor in illegal substance use prevention programme for adolescent learners. Purposive sampling technique was utilised to select study participants who met the set sampling criteria. Focus group discussions as well as field notes were used to collect data. The central question that was asked in all focus group discussions was "How do stakeholders perceive resilience as a protective factor in illegal substance use prevention programme for adolescent learners?" Tesch's method of qualitative data analysis was utilised to analyse data. Credibility, dependability, confirmability and transferability were maintained to ensure trustworthiness. Stakeholders' perceptions of resilience as a protective factor in illegal substance use prevention programme for adolescent learners revealed two themes, that is, the characteristics of resilient individuals as well as the competencies of resilient individuals. It is hoped that these results will inform the development of a conceptual framework as well as an illegal substance use prevention programme for adolescent learners in the North West Province of South Africa.

Keywords: stakeholders, perceptions, resilience, protective factor

Introduction

This study forms part of a research project on illegal substance use prevention programme for adolescent learners. The concept of “*resilience*” started from the 1800s and continues to the present time (Jackson, Firtko & Edenborough, 2007). This concept of resilience later extended to include protective factors such as effective communities, schools and relationships with supportive adults or guardians (Campbell-Sills, Cohan & Stein, 2006). On the other hand, Collishaw, Pickles, Messer, Rutter, Shearer and Maughan (2007) indicate that it is important to test whether specific protective factors predict resilience. This information therefore highlights the gap that there is still a need to conduct more research, particularly research on whether or not protective factors promote resilience.

Literature reveals that there are a lot of debates and criticisms around the concept of resilience. For example, Collishaw et al. (2007) observes that there has been considerable debate on how best to define and study the concept of resilience. Devydney, Stewart, Ritchie, and Chaudieu (2010) add that the concept of resilience, derived from both the health and social sciences has often been criticized due to uncertainties in both the definitions and terminology, heterogeneity in the level and type of risk or stress experienced for someone to be termed ‘resilient’ and in the competence required by the individuals in order to be qualified as such. Hjemdal, Friborg, Stiles, Martinussen and Rosenvinge (2006) add that although various definitions of resilience have been proposed, many are not theoretically founded, and most are linked to a collection of empirical findings, resulting in new definitions to account for the empirical findings. These definitions all convey aspects of resilience. Some definitions focus on personal or family characteristics, whereas others focus on processes and mechanisms involved in resilience. On the other hand, Sameroff and Rosenblum (2006) indicate that there has been sharp criticism concerning the construct of resilience and the methods used by resilience researchers. Resilience has been defined by different authors in different ways. As an example, Smith, Dalen, Wiggins, Tooley, Christopher and Bernard (2008) defines resilience as the ability to bounce back or recover from stress, to adapt to stressful circumstances, not to become ill despite significant adversity, and to function above the norm in spite of stress or adversity.

According to Lansford, Malone, Stevens, Dodge, Bates and Pettit (2006), much of the research on resilience has centred on identifying and understanding the interplay of protective

factors. Campbell-Sills et al. (2006) add that resilience and protective factors are the positive counterparts to both vulnerability, which denotes an individual's susceptibility to a disorder, and risk factors, which are biological or psychological hazards that increase the likelihood of a negative developmental outcome in a group of people. Exposure to multiple protective or resilience factors can increase one's chance of competent social adjustment because it indirectly moderates the effects of risk exposure (LaFromboise, Hoyt, Oliver, & Whitbeck, 2006).

Additionally, Campbell-Sills et al. (2006) as well as Perez, Espinoza, Ramos, Coronado and Cortes (2007) state that resilience theory recommends a focus on strengths that allow individuals to survive and grow even in the face of adversity. Jackson et al. (2007) adds that individuals can develop and strengthen personal resilience through developing strategies for reducing their own vulnerability, and the personal impact of adversity. Morrison, Brown, D'Incau, O'Farrell and Furlong (2006) indicate that utilising strengths as a basis to intervene for adolescent learners problem behaviours may enhance the chance that they will experience "turning points" or make a change in their developmental trajectory. The findings of the current study on the stakeholders' perceptions on resilience as a protective factor in illegal substance use prevention programme for adolescent learners may assist the researcher to develop a conceptual framework and illegal substance use prevention programme for adolescent learners in the NWP of SA. More specifically, the researcher intends to use adolescent learners' strengths to prevent illegal substance use in the NWP of SA.

Stakeholders refer to groups of people who possess the knowledge that should be taken into consideration, which will be essential to the implementation of resulting policies, and/or have an interest in research outcomes (Deverka, Lavalley, Desai, Esmail, Ramsey, Veenstra & Tunis, 2013), such as illegal substance use prevention programme for adolescent learners. Stakeholders in this study refer to the adolescent learners, parents, teachers as well as the professional nurses who have an interest in participating in this study after signing the consent forms for their voluntary participation. For adolescent learners, written voluntary consent will also be obtained from their parents or guardians for their participation in this research which is aimed at preventing illegal substance use among adolescent learners in the NWP of SA. A comprehensive understanding of the stakeholders' perceptions of resilience as a protective factor in illegal substance use prevention programme for adolescent learners may serve to inform the development and validation of illegal substance use prevention

programme for adolescent learners in the NWP of SA. Thus, the understanding of resilience is important as a means of developing interventions to prevent and/or treat common mental disorders (Devydoy et al., 2010), such as substance related disorders and dual or triple diagnosis. In the North West Province (NWP) of South Africa (SA), there are currently no documented previous studies on the stakeholders' perceptions of resilience as a protective factor in illegal substance use prevention programme for adolescent learners. In view of the above discussion, the question which needs to be answered is: "How do stakeholders' perceive resilience as a protective factor in illegal substance use prevention programme for adolescent learners in the NWP of SA?" The aim of the current study was to explore stakeholders' perceptions of resilience as a protective factor in illegal substance use prevention programme for adolescent learners in the NWP of SA.

Methodology

The methodology followed to obtain the stakeholders' perceptions of resilience as a protective factor in illegal substance use prevention programme among adolescent learners is given below:

Research approach

A qualitative, exploratory, descriptive and contextual approach was utilised to explore stakeholders' perceptions of resilience as a protective factor in illegal substance use prevention programme for adolescent learners in the NWP of SA. The decision to use this approach was informed by Grove, Burns and Gray (2013) that qualitative researchers have conducted studies with the purpose of exploring a topic of interest in a specific context, such as in the present study. The approach was appropriate to gain access to the study population, comply with ethical concerns, collect, analyse and interpret the data (Brink, van der Walt & van Rensburg, 2012). The approach focuses on the qualitative aspects of meaning, experience and understanding, and it is used to study human experiences from the viewpoint of the study participants in the context in which the action takes place (Brink, van der Walt &

van Rensburg, 2012). Again, this approach was chosen as Brink, van der Walt & van Rensburg (2012) suggest that in order to answer some research questions ‘we need to dig deeper’, such as in this present study, because it seems little is known about stakeholders’ perceptions of resilience as a protective factor in illegal substance use prevention programme for adolescent learners. The rationale of this manuscript is not to generalise the results to the broader population, but to understand them in the context of NWP of SA. The context of this study was four public schools and two public psychiatric hospitals in the NWP of SA. There are only two public psychiatric hospitals in the NWP of SA, one in Mafikeng and the other one in Potchefstroom. Thus both of them were included in the study. For selection of public schools, the NWP of SA has four districts, namely, Dr Ruth Segomotsi Mompati, Ngaka Modiri Molema, Dr Kenneth Kaunda as well as Bojanala districts. The district directors chose one school from each district of the NWP of SA to participate in this study. According to the district directors, they chose schools which are known with illegal substance use problems among adolescent learners. Another reason was that they wanted adolescent learners who use illegal substances to be part of the research, but this happened after obtaining informed voluntary consent from all adolescent learners.

Population and sampling

The population in this study included professional nurses from two public psychiatric hospitals and teachers, parents and adolescent learners from four public high schools who met the set selection criteria in the NWP of SA. Purposive sampling technique was utilised for selecting participants for inclusion in the study. The researcher recruited all professional nurses through the help of nurse managers. Recruitment of teachers, parents and adolescent learners was achieved through the help of school principals. For the professional nurses to be included in this study they were required to be registered with the South African Nursing Council (SANC), providing mental health care, treatment and rehabilitation services in the NWP of SA.

Parents were required to have children or adolescent learners attending school in the NWP of SA while teachers were required to be working in the NWP of SA. Adolescent learners were required to be attending school in the NWP of SA. All stakeholders who participated in this

study signed consent forms for their voluntary participation. They met the inclusion criteria of being knowledgeable about resilience as a protective factor, illegal substance use and adolescent learners and staying in the NWP of SA. For the researcher to determine that participants were knowledgeable about resilience as a protective factor, he spent enough time with all participants before, during and after data collection. The aim of this prolonged engagement was to clarify concepts, title and aim of the study and what was expected from them. Some of the focus group interviews were conducted in Setswana. This was done to simplify to participants what resilience as a protective factor is.

Data collection

Focus group discussions with participants were in groups of five to twelve people whose perceptions were investigated simultaneously to collect data. Same groups of participants were grouped together. That is, adolescent learners were grouped together, professional nurses were grouped together, teachers were grouped together and parents were grouped together. With this method of data collection, the researcher allowed participants to share their thoughts freely about resilience as a protective factor in illegal substance use prevention programme for adolescent learners in the NWP of SA. All focus group discussions occurred at times that were convenient for both the researcher and all stakeholders. Field notes were also recorded as data during and after focus group discussions. An audio tape recorder was also used to record participants' verbal responses and this was later transcribed for purposes of establishing emerging themes and trends. The central question that was asked in all focus group discussions was "How do you perceive resilience as a protective factor in illegal substance use prevention programme for adolescent learners in the NWP of SA?"

Data analysis

After data collection, the researcher transcribed all focus group discussions of different stakeholders. Data from the same groups of participants was grouped together. Thereafter, data from all groups of participants was converged with references made to specific topics

mentioned by specific groups. Tesch's method of qualitative data analysis was used to analyse data from all groups of participants (in Creswell, 2014). The process involved reading all focus group discussions sensibly in order to understand all of them. The researcher picked one shortest interesting focus group discussion which was one on top of the pile. Similar topics were clustered together as major topics, unique topics and leftover topics. Reducing the topics into codes and writing codes next to the appropriate segments of the text was done. The most descriptive wording for the topics was found and turned into categories. Final decisions on the abbreviations for each category and alphabetising these codes were made, as well as assembling the data material belonging to each category. Preliminary data analysis and recoding of existing data was performed.

Ethical considerations

Ethical approval to embark on the present study was obtained from the School of Nursing Science, Faculty of Agriculture, Science and Technology (FAST), Research Ethics Committee of the North West University (Ethics number NWU-00037-14-A9). Another approval to conduct the research was also obtained from the North West Province Departments of Health and of Education. Approval was also obtained from the managers of the two public psychiatric hospitals, District Directors of Department of Education, as well as school principals of the four public schools in the NWP of SA (*see Annexure C for permission from various authorities*). Verbal and written informed voluntary consent was obtained from all participants before participating in this study (*see Appendix E for informed by stakeholders to participate in this study*). For adolescent learners, informed voluntary consent was first obtained from their parents or guardians before they could give their own consent because they were still minors (*see Appendix D for informed consent by parents/guardians*).

Trustworthiness

Lincoln and Guba's framework (in Holloway & Wheeler, 2010) was followed to ensure trustworthiness of the study. The four criteria that were maintained to ensure trustworthiness of the study are credibility, dependability, confirmability and transferability. Credibility was

ensured by spending more time with participants; this was done to build rapport and ensure a trust relationship and to make participants relax during data collection. To spend more time during data collection, the length of focus group discussions was determined by data saturation which was between one and two hours. An audio tape recorder and field notes were used to ensure that the data captured the information given by all groups of participants; this was done to ensure confirmability. Dependability was ensured through a detailed description of the research methodology, triangulation and peer examination. The results of the study were analysed independently by both the researcher and the independent co-coder. Purposive sampling technique was utilised to select all study participants as a way of ensuring transferability. Methodology is thoroughly explained in this manuscript so that researchers interested in conducting similar study are duly informed for purposes of replication.

Results and discussion

The results and discussion of the study on the stakeholders' perceptions of resilience as a protective factor in illegal substance use prevention programme for adolescent learners in the NWP of SA are given below:

Demographic information

This study had 109 participants (stakeholders) consisting of 32 adolescent learners, 21 parents, 34 teachers and 22 professional nurses. All participants were Africans. Majority of the participants were males, with the distribution being 62 males and 47 females. Adolescent learners were between the ages of 10-19, parents were between the ages of 42-58, teachers were between the ages of 29-44 and the professional nurses were between the ages of 26-52. Adolescent learners were between grade eight and 12. A total of 13 of the parents were unemployed and eight parents were employed in positions ranging from low, middle, to senior levels of employment. Educational level of parents range between grade nine up to an honours degree. The educational levels of teachers range between a diploma and a Master's

degree. The educational levels of professional nurses range between diploma and Bachelor's degree.

The results of this manuscript on the stakeholders' perceptions of resilience as a protective factor in illegal substance use prevention programme for adolescent learners are presented according to different stakeholders then converged. The sub-themes and literature control to support the findings of this study are given in sub-paragraphs following Table 1. Table 1 below represents the separate and converged themes and sub-themes that emerged from the results of the study.

Table 1: Stakeholders' perceptions of resilience as a protective factor in illegal substance use prevention programme for adolescent learners

Separate results on the stakeholders' perceptions of resilience as a protective factor for illegal substance use prevention programme for adolescent learners							
Adolescent learners results		Parents results		Teachers results		Professional nurses results	
Theme 1:	Theme 2:	Theme 1:	Theme 2:	Theme 1:	Theme 2:	Theme 1:	Theme 2:
Characteristics of resilient individuals	Competencies of resilient individuals	Characteristics of resilient individuals	Competencies of resilient individuals	Characteristics of resilient individuals	Competencies of resilient individuals	Characteristics of resilient individuals	Competencies of resilient individuals
Sub-themes	Sub-themes	Sub-themes	Sub-themes	Sub-themes	Sub-themes	Sub-themes	Sub-themes
<ul style="list-style-type: none"> - Goal directedness - Assertiveness - Increased knowledge of what is wrong or right 	<ul style="list-style-type: none"> - Ability to bounce back - Ability to resist pressure - Ability to make informed decisions 	<ul style="list-style-type: none"> - Assertiveness - Self-awareness - Self-discipline 	<ul style="list-style-type: none"> - Ability to bounce back 	<ul style="list-style-type: none"> - Goal directedness - Assertiveness - self-awareness - Self-discipline - Knowledge of what is right or wrong 	<ul style="list-style-type: none"> - Ability to bounce back from life challenges - Ability to make informed independent decisions 	<ul style="list-style-type: none"> - Assertiveness - Self-aware - Disciplined - Ability to differentiate write from wrong 	<ul style="list-style-type: none"> - Ability to bounce back

Table 2: Converged results on the stakeholders' perceptions of resilience as a protective factor for illegal substance use prevention programme for adolescent learners	
Themes	Sub-themes
Theme 1: Characteristics of resilient individuals	<ul style="list-style-type: none"> - Knowledgeable to discern right and wrong - Self-awareness - Goal directedness - Assertiveness - Self-discipline
Theme 2: Competencies of resilient individuals	<ul style="list-style-type: none"> - Ability to bounce back from life challenges - Capacity to resist pressure and destructive influences - Ability to make informed independent decisions

The results of this study as well as literature control are given under the following paragraphs.

Theme 1: Characteristics of resilient individuals

Sub-themes that emerged from the characteristics of resilient individuals include goal directedness, assertiveness, self-awareness, self-discipline as well as the knowledge of what is right and wrong. These sub-themes and literature control are discussed below.

Sub-themes

Sub-themes that emerged from characteristics of resilient individuals are described below:

Goal directedness was a characteristic that was emphasised by adolescent learners and the teachers during focus group discussions. Participants added that when resilient individuals show goal directedness, they know what they want or what they want to achieve in their lives. During a focus group discussion, teachers said that *“these people know what they want in life...they know what they want to achieve in life.”* During a focus group discussion adolescent learners stated that *“when we become resilient, we have goals, we have visions.”* According to Mikami and Hinshaw (2006), an adolescent learner’s engagement in goal-directed activities when alone may also promote resilience. Goal-directed activities when alone, compared to unoccupied behaviour, may serve as a protective factor, particularly for peer-rejected adolescent learners who spend considerable time alone. Resilient adolescent learners have vision and goals. They are dreamers. They are “focused on the future and are goal-directed” And they have “daydreams of how their lives will become.”

Assertiveness was indicated in all focus group discussions as a characteristic that resilient individuals demonstrate. Stakeholders agree that resilient individuals are in a position to resist illegal substance use because they know how to say ‘no’ to illegal substance use. To confirm this result, in a focus group discussion parents said *“...when people are resilient, they are obviously assertive because they are able to say no to illegal substances around them”*. In a focus group professional nurses agreed that *“we need people who are assertive or*

resilient, who can stand tall and say no to the illegal substances without feeling any how... ” In a focus group teachers indicated that *“resilience in a substance use goes hand in hand with assertiveness, these people know what to do and where to do it”* In a focus group with parents, this was emphasized: *“when they are able to say no to substances, it means they are assertive or resilient”* Agbakwuru and Stella (2012) add that assertiveness and resilience are traits that are linked. They are interrelated and interconnected. Being assertive makes one more confident and thereby improves one’s resilience as a protective factor. On the other hand, when one is very confident he or she can withstand adversities from life’s tasks and therefore become more resilient. The need for assertiveness training is very urgent in adolescent learners’ improvement of resilience.

Self-awareness was a characteristic emphasised by the professional nurses, teachers and the parents as a characteristic displayed by resilient individuals as compared to non-resilient individuals. To confirm this result, professional nurses agreed that *“resilient adolescents are self-aware...they are aware of what they want and don’t want in life.”* In a focus group discussion with parents, participants stated *“...our children need to be self-aware; otherwise they won’t be able to resist substances around them.”* During a focus group discussion, teachers said that *“these kids needs to be self-aware otherwise they won’t be able to say no to the substances.”* Lees (2009) confirms this result that resilient people have an awareness and tolerance of feelings, both their own and of others, and they have a strong belief in the future.

Self-discipline was emphasised in focus group interviews with professional nurses, teachers as well as parents that resilient individuals are self-disciplined. Participants concurred that these people are always trying to do the correct things at the correct time. This finding is confirmed by the following direct quotation from a focus group with the parents *“...resilient people are self-disciplined because they always try to do the correct things...”* In another focus group discussion with professional nurses, participants mentioned that *“for our children to be resilient they need discipline, self-discipline.”* Teachers said, *“self-discipline is the first step to be able to say no to the substances around you.”* Ludman, Strandberg, Eisemann, Gustafson and Brulin (2006) support this finding that resilient people have been described as having many personal resources, possessing self-esteem, self-confidence and self-discipline. Therefore, parents should nurture this self-discipline and self-confidence among adolescent learners.

Knowledge to discern right and wrong was stated in focus group discussions with adolescent learners, teachers and the professional nurses that resilient individuals are more knowledgeable of life in general than non-resilient individuals. Participants also indicated that when you are resilient, you are also able to differentiate between what is right from what is wrong. The following direct quotation indicates what a group of adolescent learners said “...ability to know a good thing and a bad thing and stick to what you want...” In another focus group discussion, a professional nurse said “you can’t compare resilient and non-resilient people, resilient ones are knowledgeable about a lot of things.” Teachers said that “our kids need to be able to differentiate between what is right and wrong, otherwise they won’t be able to say no to the drugs, I’m telling you” International Federation of Red Cross and Red Crescent Societies (2012) support this finding that resilient individuals, particularly adolescent learners are knowledgeable and healthy. They know what to do and when to do it. They have the ability to assess, manage and monitor their risks. Resilient people are knowledgeable of what is right in their lives, they also show acceptance of what is happening. They show ability to carry on - accept and carry on and they also have good communication skills which include being both approachable and open (Theron, Theron & Malindi, 2012).

In summary, from the results and the literature control, it can be concluded that the results of this study are consistent with available literature on the characteristics of resilient individuals. The second theme and sub-themes which emerged from the results of this study, that is, competencies of resilient individuals, are discussed in the following sub-paragraphs and are supported with available literature.

Theme 2: Competencies of resilient individuals

Sub-themes that emerged from the competencies of resilient individuals include ability to bounce back from life challenges or difficulties, ability to resist pressure and bad influences and the ability to make informed independent decisions. These sub-themes and literature control are discussed below.

Sub-themes

Sub-themes that emerged from competencies of resilient individuals as well as literature control are described below:

Ability to bounce back from life challenges or difficulties is the capacity of resilient individuals to re-focus and start anew as indicated by all stakeholders who participated in this study. In a focus group discussion with teachers, participants made an example that *“when resilient individuals fall, they are able to stand up and become strong again as if nothing ever happened”*. Parents added that *“Resilience is the ability to bounce back from life challenges or difficulties...”* In another focus group discussion professional nurses emphasised that *“when people are resilient, they are able to fight life challenges, they don’t run away, they face life challenges.”* Adolescent learners concur that *“the definition that we know about resilience is that one is able to bounce back from challenges of life”* According to Epstein and Krasner (2013), resilient individuals “bounce back” after challenges while also growing stronger. Hurlington (2010) also supports this result that resilience allows individuals to manage difficult episodes or chronic challenges or risks in their lives.

Ability to resist pressure and bad influences is the competence of resilient individuals to stand their ground and shy away from pressures induced by peers or groups that often lure them to succumb to illegal substances. Adolescent learners repeatedly emphasised that resilient individuals are able to resist pressure and bad influences. Adolescent learners offered examples that there is already enough information about illegal substances use out there. These adolescent learners said, you go to school, they talk about illegal substances, you go home or just in the community, you still hear a lot about illegal substances. So, non-resilient individuals just need to be able to resist the pressure to use illegal substances, knowing what the illegal substances will do to them. Adolescent learners said in a focus group discussion: *“...Adolescent learners who are not resilient just need to be able to resist the pressure of using illegal substances.”* Other adolescent learners in a different focus group discussion concurred: *“Resilience is an ability to resist bad influences.”* Alaska Division of Behavioral Health (2011) adds that resilient adolescent learners have abilities that equip them to make positive choices, maintain healthy relationships, and succeed in life because of their capacity to resist negative peer pressures and thereby avoid possible dangerous situations.

Ability to make informed independent decisions was singled out as an enviable trait by teachers and adolescent learners in different focus group discussions. These participants' perceptions of resilience as a protective factor in illegal substance use prevention programme for adolescent learners is that resilient individuals are able to make independent decisions without being influenced by anyone, and stick to those independent decisions. Teachers said: *"You have all the powers to make independent decisions without being influenced by anyone..."* This is what adolescent learners said *"As resilient people we have the right to make our own decisions, we don't owe anyone anything, we don't have a contract with anyone, like using illegal substances, no one should take a decision for us on whether to use illegal substances or not."* These results are similar to the definition of resilience by Dillon, Chivite-Matthews, Grewal, Brown, Webster, Weddell, Brown and Smith (2007) that resilience is understood as the behaviours that adolescent learners show in making decisions not to use substances and putting this into practice, despite having been exposed to illegal substances and other risk factors. On the other hand, Steyn (2006) concurs with these results but emphasises that resilient individuals have the ability to consider the consequences of their decisions. Morel, Amalberti and Chauvin (2015) add to the findings of this study that resilience is related to the capacity for recognising the problem and making a safe independent decision in adverse conditions, possibly giving up the potential benefits.

In summary, from the results and literature control, it can be concluded that the results of this study are consistent with available literature on the competencies inherent and often nascent in resilient individuals. The results of this study lead to the conclusion, limitations and recommendations discussed in the following sub-paragraphs.

Conclusion

The focus of this study was on exploring stakeholders' perceptions of resilience as a protective factor in illegal substance use prevention programme for adolescent learners. Two main themes were extracted from the results of the study and they included features as well as competencies of resilient individuals. The results of this qualitative study add important information to the body of knowledge in psychiatry and mental health which might not have been achieved if other approaches had been used. The results of this manuscript are used to

develop a conceptual framework and illegal substance use prevention programme for adolescent learners in the NWP of SA.

Limitations of the study

This qualitative study was conducted in the NWP of SA. Therefore, the findings cannot be generalised, but they can be applied in similar settings such as in other provinces in the country. The research methodology followed in this study is also discussed in detail so that researchers interested in conducting similar studies are perceptively informed.

Recommendations

Stakeholders such as psychiatric professional nurses, psychologists, teachers, social workers and parents should use the results of this study to improve adolescent learners' resilience, particularly when aiming at preventing illegal substance use among adolescent learners. More research should also be conducted by various mental health practitioners such as psychiatric professional nurses, psychologists, social workers and occupational therapists on the level of resilience among adolescent learners by following different research approaches such as quantitative, mixed methods or systematic reviews. School health nurses and life orientation teachers in different schools should use the results of this study to educate adolescent learners about how to strengthen their resilience.

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Competing interests

The authors of this manuscript, that is, Mr Leepile Alfred Sehularo, Dr Eva Manyedi, Prof Emmerentia du Plessis and Prof Abel Jacobus Pienaar declare that they have no competing financial or personal relationship(s) which may have influenced them inappropriately in writing this manuscript.

References

- Agbakwuru, C. & Stella, U. (2012). Effect of assertiveness training on resilience among early-adolescents. *European Scientific Journal*, 8(10), 1 – 10.
- Alaska Division of Behavioural Health. (2011). *Risk and Protective Factors for Adolescent Substance Use (and other Problem Behaviour)*. Alaska Department of Health and Social Services.
- Brink, H., Van der Walt, C., & Van Rensburg, G. (2012). *Fundamentals of research methodology for health care professionals*. Cape Town: Juta and Company.
- Campbell-Sills, L., Cohan, S. L., & Stein, M. B. (2006). Relationship of resilience to personality, coping, and psychiatric symptoms in young adults. *Behaviour Research and Therapy*, 44(4), 585-599.
- Collishaw, S., Pickles, A., Messer, J., Rutter, M., Shearer, C., & Maughan, B. (2007). Resilience to adult psychopathology following childhood maltreatment: Evidence from a community sample. *Child Abuse & Neglect*, 31(3), 211-229.
- Creswell, J. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*. SAGE Publications.
- Deverka, P. A., Lavalley, D. C., Desai, P. J., Esmail, L. C., Ramsey, S. D., Veenstra, D. L., & Tunis, S. R. (2013). Stakeholder participation in comparative effectiveness research: Defining a framework for effective engagement. *Journal of Comparative Effectiveness Research*, 1(2), 181-194.
- Devydov, D. M., Stewart, R., Ritchie, K., & Chaudieu, I. (2010). Resilience and mental health. *Clinical Psychology Review*, 30(5), 479-495.
- Dillon, L., Chivite-Matthews, N., Grewal, I., Brown, R., Webster, S., Weddell, E., Smith, N. (2007). *Risk, protective factors and resilience to drug use: Identifying resilient young people and learning from their experiences*. Home Office.
- Epstein, R.M. & Krasner, M.S. (2013). Physician Resilience: What It Means, Why It Matters, and How to Promote It. *Academic Medicine*, 88(3), 301-303.

Gove S.K., Burns, N. & Gray, J. R. (2013). *The practice of nursing research: Appraisal, synthesis, and generation of evidence*. Elsevier Health Sciences.

Hjemdal, O., Friborg, O., Stiles, T. C., Martinussen, M., & Rosenvinge, J. H. (2006). A new scale for adolescent resilience: Grasping the central protective resources behind healthy development. *Measurement and Evaluation in Counselling and Development*, 39(2) 84-96.

Holloway, I., & Wheeler, S. (2010). *Qualitative research in nursing and healthcare*. Chicago: John Wiley & Sons.

Hurlington, K. (2010). What works? Research into practice. http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/WW_bolstering_students.pdf Accessed: 10 November 2016.

International Federation of Red Cross and Red Crescent Societies. (2012). *Understanding community resilience and program factors that strengthen them: A comprehensive study of Red Cross red crescent societies tsunami operation*. (No.1). Geneva.

Jackson, D., Firtko, A., & Edenborough, M. (2007). Personal resilience as a strategy for surviving and thriving in the face of workplace adversity: A literature review. *Journal of Advanced Nursing*, 60(1), 1-9.

LaFromboise, T. D., Hoyt, D. R., Oliver, L., & Whitbeck, L. B. (2006). Family, community, and school influences on resilience among American Indian adolescents in the upper Midwest. *Journal of Community Psychology*, 34(2), 193-209.

Lansford, J. E., Malone, P. S., Stevens, K. I., Dodge, K. A., Bates, J. E., & Pettit, G. S. (2006). Developmental trajectories of externalizing and internalizing behaviours: Factors underlying resilience in physically abused children. *Development and Psychopathology*, 18(01), 35-55.

Lees, N. (2009). *The ability to bounce back: The relationship between resilience, coping, and positive outcomes*. Unpublished Master's Thesis, Massey University, Auckland.

- Ludman, B., Strandberg, G., Eisemann, M., Gustafson, Y. & Brulin, C. (2006). Psychometric properties of the Swedish version of the Resilience Scale. *Scand J Caring Sci*; 20(21), 229–237.
- Mikami, A.Y. & Hinshaw, S.P. (2006). Resilient Adolescent Adjustment among Girls: Buffers of Childhood Peer Rejection and Attention-Deficit/Hyperactivity Disorder. *J Abnorm Child Psychol*, 34(6): 825–839.
- Morel, G., Amalberti, R. & Chauvin, C. (2015). Articulating the Differences between Safety and Resilience: The Decision-Making Process of Professional Sea-Fishing Skippers. *Human Factors*, 50(1), 1–16.
- Morrison, G. M., Brown, M., D'Incau, B., O'Farrell, S. L., & Furlong, M. J. (2006). Understanding resilience in educational trajectories: Implications for protective possibilities. *Psychology in the Schools*, 43(1), 19-31.
- Perez, W., Espinoza, R., Ramos, K., Coronado, H. M., & Cortes, R. (2007). Academic resilience among undocumented Latino students. *Hispanic Journal of Behavioural Sciences*, 31(2), 149-181.
- Sameroff, A. J., & Rosenblum, K. L. (2006). Psychosocial constraints on the development of resilience. *Annals of the New York Academy of Sciences*, 1094(1), 116-124.
- Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: Assessing the ability to bounce back. *International Journal of Behavioural Medicine*, 15(3), 194-200.
- Steyn, S. T. (2006). *Resilience in Adolescents: A Psycho-Educational Perspective*. Pretoria: UNISA. (Dissertation - MEd.).
- Theron, L.C., Theron, A.M.C. & Malindi, M.J. (2012). Toward an African Definition of Resilience: A Rural South African Community's View of Resilient Basotho Youth. *Journal of Black Psychology*, 39(1), 63-87.

Manuscript Three: Stakeholders' perceptions of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor
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Stakeholders' perceptions of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor

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Abstract

Illegal substance use among adolescent learners is a major concern global problem for researchers, government policymakers and mental health care practitioners. This is due numerous health, legal, and developmental problems among adolescent learners. The study seeks to explore stakeholders' perceptions of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor. A qualitative, explorative, descriptive and contextual approach was followed. The population consisted of groups of professional nurses, teachers, parents and adolescent learners. A purposive sampling technique was utilised to select all groups of participants. Data collection occurred concurrently with data analysis using focus group discussions. Tech's method was used to analyse data. Trustworthiness was ensured by using the criteria of credibility, dependability, confirmability and transferability. The findings indicate that illegal substance use among adolescent learners can be prevented by focusing on protective factors such as peer-related activities, family-related activities, school-related activities, community-related activities and government-related activities. It can be concluded that these protective factors can be seen as enhancing resilience of adolescent learners and protecting them from illegal substance use. Recommendations were made for practice, education and research.

Keywords: adolescent learner, prevention, protective factor, resilience, stakeholders, substance use

Introduction

This study forms part of a research project on illegal substance use prevention programme for adolescent learners. Illegal substance use among adolescent learners is a pertinent global concern for health practitioners, researchers and government policymakers because of numerous health, legal and developmental problems (Parsai, Voisine, Marsiglia, Kulis & Nieri, 2009). The researcher established similar findings in another study also conducted in the North West Province of South Africa (NWP of SA) (Sehularo, du Plessis & Scrooby, 2010). The findings of that study indicated that adolescent learners start using illegal substances such as marijuana and alcohol at the age of 13 or 14 while they are still at school. These adolescent learners end up experiencing physical, educational, social, legal and mental health problems (Sehularo et al., 2010). This information indicates that prevention of illegal substance use should begin during adolescence (Parsai et al., 2009), hence this study focuses on adolescent learners aged between 10 and 19 years of age. Amoateng, Kalule-Sabiti and Narayanan (2007) as well as Peltzer, Ramlagan, Johnson and Phaswana-Mafuya (2010) mention that the rates of adolescent learners' use of illegal substances in the NWP of SA are lower when compared to other provinces in the country. However, the researcher supports the proverb which says "prevention is better than cure" meaning, it is better to prevent illegal substance use among adolescent learners than to intervene at a later stage when they present with substance use related problems.

In addition, the researcher's experience as a psychiatric nurse in the NWP of SA is that illegal substance use among adolescent learners is a serious problem that calls for more research. The researcher has also realised that preventing illegal substance use among adolescent learners is a serious challenge. However, Schwartz, Garland, Harrison and Waddell (2007) emphasise that prevention of illegal substance use among adolescent learners may be achieved through programmes aimed at strengthening or promoting protective factors, of which resilience is one. Prevention programmes that focus on resilience translate research into programmes that help to strengthen individuals and adolescent learners to overcome adversity (Zimmerman, Stoddard, Eisman, Caldwell, Aiyer & Miller, 2013). In line with Jamieson (2010), the researcher believes that all people, including adolescent learners, have

strengths that are sometimes untapped or unrecognised. Hence the researcher's intention is to use adolescent learners' strengths to prevent illegal substance use in the NWP of SA.

Some of the protective factors against risks of illegal substance use among adolescent learners are associated with individuals, peers, family, school as well as the community (Fergus & Zimmerman, 2005). Each of these protective factors plays an important role in the preparation of an environment that fosters the development of resilience (Hurlington, 2010). According to LaFromboise, Hoyt, Oliver and Whitbeck (2006), exposure to multiple protective factors can enhance the adolescent learners' opportunities to competent social adjustment because it indirectly moderates the effects of risk exposure. Dillon, Chivite-Matthews, Grewal, Brown, Webster, Weddell, Brown and Smith (2007) add that protective factors can be seen as enhancing resilience of an individual for coping with risk factors in their lives and protecting them from illegal substance use.

Looking at documented literature, no previous studies could be found on stakeholders' perceptions of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor in the NWP of SA. Such perceptions may take into consideration the strengths of adolescent learners and use these strengths to prevent illegal substance use in the NWP of SA. Stakeholders in this study refer to the parents, teachers, professional nurses as well as adolescent learners who participated in the study after signing an informed voluntary consent. This information indicates that various stakeholders should be involved at the forefront in the fight against illegal substance use by adolescent learners. The present study addresses this gap. The above information highlights the need to answer the research question: "What are the stakeholders' perceptions of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor in the NWP of SA?" The purpose of the present study was therefore to explore stakeholders' perceptions of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor in the NWP of SA.

Methodology

The methodology followed to obtain the stakeholders' perceptions of how substance use can be prevented among adolescent learners is given below:

Research approach

A qualitative, exploratory, descriptive and contextual approach was followed to explore the stakeholders' perceptions of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor. Grove, Burns and Gray (2013) state that qualitative nurse researchers conduct studies with the purpose of exploring a topic of interest, such as in the present study. This study is aimed at addressing an issue of illegal substance use among adolescent learners. The researcher identified that there is a lack of knowledge of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor in the NWP of SA. The researcher then decided to include the people who are mostly affected by illegal substance use among adolescent learners such as the professional nurses, teachers, parents and the adolescent learners themselves. The context of this study was two public psychiatric hospitals and four public schools in the NWP of SA. There are only two public psychiatric hospitals in the NWP of SA, one in Mafikeng and another one in Potchefstroom, thus both of them were included in the study. Professional nurses working at these hospitals were invited to participate. For selection of public schools, the NWP of SA has four districts namely Dr Kenneth Kaunda, Bojanala, Ngaka Modiri Molema as well as Dr Ruth Segomotsi Mompati. The district directors chose one school from each district of the NWP of SA. According to district directors, they chose those schools which are known with illegal substance use among adolescent learners. Another reason was that they wanted adolescent learners who use illegal substances to be part of the research, but this happened after obtaining informed voluntary consent from all adolescent learners.

Population and sampling

Population is defined by Grove, Burns and Gray (2013) as a particular group of people who are the focus of a research. The target population in this study consisted of four different groups of participants. These were two groups of professional nurses, four groups of teachers, four groups of parents and four groups of adolescent learners who meet the sampling criteria of being knowledgeable about illegal substance use among adolescent learners and are able to give verbal or written informed consent. The participants were able to communicate in English or Setswana. These participants agreed to participate after signing consent forms. A purposive sampling technique was utilised for selection of all groups of participants. The researcher consciously selected information-rich cases that shared perceptions on how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor, which is the central focus or purpose of the study.

Data collection

Focus group discussions were utilised to collect data from all groups of participants. In line with Grove, Burns and Gray (2013), focus group discussions were used to obtain participants' perceptions in a focused area in a setting that was collegial and nonthreatening for all participants, such as public schools and public psychiatric hospitals in the NWP of SA. Interactions among participants helped them to feel relaxed and simplify their perceptions in a manner that was less likely to happen in individual interviews. All participants were free and relaxed during focus group discussions. The venues for all focus group discussions were carefully selected by the school principals and the nurse managers to ensure privacy, comfort and safety of all participants. Each focus group discussion consisted of five to twelve. Same groups of participants were grouped together. That is, adolescent learners were grouped together, professional nurses were grouped together, teachers were grouped together and parents were grouped together. Participants were informed about the use of an audio tape recorder before data collection. All focus group discussions were prompted by the same question: "What are your perceptions of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor in the NWP of SA?"

Data analysis

Data from the same groups of participants was grouped together and analysed independently by the researcher and the co-coder using Tesch's method of data analysis (in Creswell, 2014). Data from all groups of participants was combined with references made to specific topics mentioned by specific groups. The process of data analysis involved reading all focus group discussions, picking one shortest focus group discussion which was most interesting to the researcher and the one on top of the pile. The researcher clustered same topics together as major topics, unique topics and leftover topics. Emerging trends were clustered into themes and topics as codes and writing codes next to the appropriate segments of the text. The most descriptive wording was established for the topics and turning them into categories. A final decision was made on the abbreviations for each category and alphabetising these codes.

Ethical considerations

Approval to embark on the present study was granted by the School of Nursing Science, Faculty of Agriculture, Science and Technology (FAST), Research Ethics Committee of the North-West University (Ethics number NWU-00037-14-A9). Approval to conduct research was also obtained from the North West Province Departments of Health and of Education. Approval was also obtained from the managers of the two public psychiatric hospitals, District Directors of Department of Education, as well as school principals of the four public schools in the NWP of SA. Verbal and written informed voluntary consent was obtained from all different groups of participants before participating in this study. For adolescent learners, informed voluntary consent was first obtained from their parents before they can give their own consent because they were still minors.

Trustworthiness

Trustworthiness was ensured by following Lincoln and Guba's framework (in Holloway & Wheeler, 2010). The criteria for ensuring trustworthiness included credibility, dependability, confirmability and transferability. Credibility was ensured by spending more time with the participants as a way of prolonged engagement. Dependability was ensured by a detailed description of the methodology (*See methodology section*), code-recode process during data analysis as well as peer review before publication of this article. Confirmability was ensured by a detailed description of the research process as well as the use of audiotape during data collection. Transferability was ensured by detailed description of the research methodology (*See methodology section*), results and literature control (*See results and discussion below*).

Results and discussion

The results and discussion of this study on the stakeholders' perceptions how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor are given in the following paragraphs:

Demographic information

This study had 109 participants (stakeholders) consisting of 32 adolescent learners, 21 parents, 34 teachers and 22 professional nurses. All participants were Africans. Majority of the participants were males, with the distribution being 62 males and 47 females. Adolescent learners were between the ages of 10-19, parents were between the ages of 42-58, teachers were between the ages of 29-44 and the professional nurses were between the ages of 26-52. Adolescent learners were between grade eight and 12. A total of 13 of the parents were unemployed and eight parents were employed in positions ranging from low, middle, to senior levels of employment. Educational level of parents range between grade nine up to an honours degree. Educational level of teachers range between a diploma and a Master's

degree. Educational level of professional nurses' range between diploma and Bachelor's degree.

The results of this study are reported separately in Table 1 – 4 below and converged in Table 5. The results of all stakeholders revealed five main themes on the stakeholders' perceptions of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor in the NWP of SA. The themes are peer-related activities, parent-related activities, school-related activities, community-related activities as well as government-related activities. The following Tables below represent the findings of the study on the stakeholders' perceptions of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor in the NWP of SA.

Table 1: Adolescent learners’ perceptions of how illegal substance use can be prevented by focusing on resilience as a protective factor in the NWP of SA.

Theme 1: Peer-related activities	Theme 2: Parent-related activities	Theme 3: School-related activities	Theme 4: Community-related activities	Theme 5: Government-related activities
Sub-themes	Sub-themes	Sub-themes	Sub-themes	Sub-themes
<ul style="list-style-type: none"> - Constructive peer relationships - Peer education - Joining support groups 	<ul style="list-style-type: none"> - Parental supervision - Parental support - Parents as role models - Positive communication with parents 	<ul style="list-style-type: none"> - Offering Facebook platforms to communicate illegal substance use education 	<ul style="list-style-type: none"> - Respect for elders 	<ul style="list-style-type: none"> - Increase age of accessing alcohol - Banning alcohol advertisements - Collaboration among stakeholder (social workers, counselors, police, teachers, community members)

Table 2: Parents’ perceptions of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor in the NWP of SA.

Theme 1: Peer-related activities	Theme 2: Parent-related activities	Theme 3: School-related activities	Theme 4: Community-related activities	Theme 5: Government-related activities
Sub-themes	Sub-themes	Sub-themes	Sub-themes	Sub-themes
<ul style="list-style-type: none"> - Positive peer relationships - Forming support groups 	<ul style="list-style-type: none"> - Parental education - Parental supervision and monitoring - Support from parents - Acting as adolescent learners’ role models - Constructive communication with adolescent learners 	<ul style="list-style-type: none"> - continuous searching of adolescent learners by the teachers - Need for stricter laws at schools 	<ul style="list-style-type: none"> - Participation in productive activities - Regular meetings in the communities - Involvement of all community members - Community prayers 	<ul style="list-style-type: none"> - Raise age of buying and drinking alcohol - Banning of alcohol advertisements - Stringent penalties on foreigners - Collaboration among relevant stakeholders (nurses, police, social workers, government, friends, police forums)

Table 3: Teachers' perceptions of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor in the NWP of SA.

Theme 1: Peer-related activities	Theme 2: Parent-related activities	Theme 3: School-related activities	Theme 4: Community-related activities	Theme 5: Government-related activities
Sub-themes	Sub-themes	Sub-themes	Sub-themes	Sub-themes
<ul style="list-style-type: none"> - Constructive peer relationships - Peer education - Establishment of support groups 	<ul style="list-style-type: none"> - Parental support - Parental education - Parental monitoring - Parental supervision 	<ul style="list-style-type: none"> - Continuous conduction of awareness campaigns - Continuous random body searches of adolescent learners by the police and teachers - Arranging rehabilitation center visits for adolescent learners 	<ul style="list-style-type: none"> - Participation in constructive activities - Involvement of all community members - Continuous prayers by community members 	<ul style="list-style-type: none"> - Increase age of accessing alcohol - Banning of all alcohol advertisements - Tough penalties on foreigners - Collaboration among stakeholders (parents, former substance users, adolescents friends, police, school health nurses, social workers)

Table 4: Professional nurses' perceptions of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor in the NWP of SA.

Theme 1: Peer-related activities	Theme 2: Parent-related activities	Theme 3: School-related activities	Theme 4: Community-related activities	Theme 5: Government-related activities
Sub-themes	Sub-themes	Sub-themes	Sub-themes	Sub-themes
<ul style="list-style-type: none"> - Positive peer relationships - Peer education 	<ul style="list-style-type: none"> - Parental education and support - Parental supervision - Role modeling by the parents 	<ul style="list-style-type: none"> - Conduction of awareness campaigns - Stricter laws at schools - Continuous random body search - Arranging rehabilitation center visits for adolescent learners 	<ul style="list-style-type: none"> - Participation in constructive activities - conduction of community meetings - Increased community involvement 	<ul style="list-style-type: none"> - Rigorous penalties on foreigners - Banning of alcohol advertisements - Raising age of accessing alcohol - Collaboration among stakeholders (mental health nurses, school health nurses, counselors, life orientation teachers, former substance users and government)

Table 5: Converged results on the stakeholders' perceptions of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor in the NWP of SA

Theme 1:	Theme 2:	Theme 3:	Theme 4:	Theme 5:
Peer-related activities	Parent-related activities	School-related activities	Community-related activities	Government-related activities
Subthemes	Subthemes	Subthemes	Subthemes	Subthemes
<ul style="list-style-type: none"> - Positive peer relationships - Peer education - Forming or joining support groups 	<ul style="list-style-type: none"> - Parental education - Parental supervision - Parental monitoring - Parental support - Parents as role models - Constructive communication with parents 	<ul style="list-style-type: none"> - Conducting awareness campaigns - Continuous random body searches of learners by the police and teachers - Offering Facebook platforms to communicate illegal substance use education - Arranging rehabilitation center visits for adolescents - Stricter laws at schools 	<ul style="list-style-type: none"> - Participating in constructive activities - Community meetings - Community involvement - Respecting others - Community prayers 	<ul style="list-style-type: none"> - Raise age of accessing alcohol - Ban alcohol advertisements - Stringent penalties on foreigners - Collaboration among stakeholders (school health nurses, mental health nurses, social workers and registered counselors, police officers, life orientation teachers, pastors, community policing forums, community members, former substance users, parents, adolescents, friends and government)

The findings of this study as well as literature control are discussed under the following paragraphs. The findings of this study are consistent with national and international literature.

Theme 1: Peer-related activities

The sub-themes that emerged from peer-related activities include constructive peer relationship, peer education as well as forming or joining support groups. These sub-themes and literature control are given below.

Constructive peer relationships – All groups of stakeholders agree that some of the adolescent learners use illegal substances because of peer pressure. They said that they have to choose good friends who do not lead them into using illegal substances. Adolescent learners emphasised that *“we have to choose good friends and talk about illegal substances with those friends at all the times.”* Parents confirmed that: *“It is all about who do you socialise with, if you don’t go with people who use illegal substances, chances are very minimal for you to use illegal substances.”* Teachers said *“when they go with people who use illegal substances what do you expect”* A professional nurse added that *“if my daughter’s friends use illegal substances, I always tell her that there is no way she can lie to me that she does not use it, birds of the same feathers flock together”* This finding is supported by Mohasoa and Fourie (2012), Eitle (2005) as well as Durat (2006) who indicate that having friends who use illegal substances is a risk factor for illegal substance among adolescent learners. Amico (2006) adds that in fact, recent studies have shown that peers may play a more important role than parents in contributing to initiation and escalation of illegal substance use among adolescent learners. Therefore, adolescent learners should choose friends who are like themselves (Parsai, et al. 2009), who do not use or abuse illegal substances.

Peer education – Participants emphasised that peers are better people to prevent adolescent learners’ use of illegal substances because they are together most of the times, talking about everything including illegal substances. Adolescent learners emphasised that *“...our peers are the ones who can educate us better because we spend most of the time together, we share*

everything.” Professional nurses said *“peer education is another thing that can assist our children to say no to the illegal substances, I think they are better than us in education about illegal substances.”* Teachers added that *“peer education is the solution to adolescent learners substance use, their good friends who do not use illegal substances can educate them better than us”* Visser and Routledge (2007) confirms this result that peer education can be especially effective among adolescent learners because those friends are considered to be their main sources of information, and their (friends) influence often motivates their behaviour. Adolescent learners are more likely to discuss their issues openly with their peers than with adults whom they regard as authority figures. Adolescent learners may benefit a lot from peer education, companionship, emotional and motivational support, role modelling, and a sense of belonging (Everall, 2006).

Forming or joining support groups – Participants emphasised that for adolescent learners to prevent illegal substance use they need support groups. These support groups would consist of both substance and non-substance users. Participants mentioned that in those support groups they talk about illegal substances and other adolescent learner-related problems. They said that illegal substance users talk about negative effects of illegal substance use while non-users talk about what they are doing to resist pressure of using illegal substances. Adolescent learners mentioned that: *“Yes in those support groups we are going to try to talk to those who are using illegal substances, showing them that it’s not the right thing to do and that they should try to stop those practices completely.”* Parents emphasised that: *“They need to form smaller groups where they can assist each other on how to say no to illegal substances.”* Teachers mentioned that *“they need something like support groups, however, these groups should be lead by someone older than them”* NIDA (2011) supports this finding that adolescent learners can prevent illegal substance use when they utilise interactive interesting techniques such as peer discussion groups that allow for active involvement in learning about illegal substances and reinforcing important skills such as communication and resistance skills.

Theme 2: Parent-related activities

Sub-themes that emerged from parent-related activities include parental education, parental supervision, parental monitoring, parental support, parents as role models as well as constructive communication with parents. These sub-themes and literature control are given below.

Parental education – Participants agree that prevention of illegal substance use should start at home. Participants mentioned that the parents should educate adolescent learners about illegal substance use. Participants added that parents should also stop using any substance in front of adolescent learners because that is a risk factor for adolescent learners' illegal substance use. They said they should use legal substances such alcohol outside home because adolescent learners have a tendency of copying some behaviors from their parents. To confirm this finding, teachers said: *"You have to teach your child how to resist pressure."* Parents emphasised that *"they need to be taught at home about illegal substances."* Professional nurses mentioned that: *"We should also stop this thing of using substances like alcohol in front of kids, that is actually dangerous, it makes them think alcohol is a good thing to use."* Lasser and Schmidt (2009) bring another point in this regard, that many parents feel unprepared to educate adolescent learners about substance use concerns. This information indicates the gap that more research is needed on how to motivate parents to feel free or prepared to talk or educate adolescent learners about substance related issues.

Parental supervision – All stakeholders agree that parental supervision can prevent illegal substance use among adolescent learners in the NWP of SA. Adolescent learners said that they always think about illegal substances when there is no parental supervision. In the focus group discussion with adolescent learners, this was said: *"...you start thinking negatively about illegal substances because they don't supervise you."* In another focus group with parents this was mentioned: *"As parents we should also take our full responsibility of supervising our children even 24/7 is fine, we should always know where they are, and what they are doing."* Professional nurses also emphasised that *"if you do not supervise your own children, who do you think will do the work for you, we must also take our own responsibility of supervising our own children, especially for the illegal substances and other dangerous"*

behaviours.” Teachers added that: “*the supervision of adolescent learners should start here at school, unlike some irresponsible teachers who use those dangerous staff with adolescent learners*” Clark, Kirisci, Mezzich and Chung (2008) confirm this result that the more the parents supervise adolescent learners, the less likely they will be involved in alcohol and other illegal substances such as dagga and other dangerous substances. The supervision that occurs during adolescence involves on-going communication between parents and adolescent learners about the adolescent learners’ whereabouts, peers present, their schedule to return home, and contact information enabling parents to directly communicate with adolescent learners. Supervision of adolescent learners, by this definition, has been found to comprise unidimensional construct that correlates with communication and emotional support and predicts substance use disorders (Clark, Kirisci, Mezzich & Chung, 2008).

Parental monitoring – Parents and the teachers agree that parents should monitor adolescent learners and teach them about the negative effects of illegal substance use. They added that supervision and monitoring goes together. In the focus group discussion with parents, this was offered: “*We should monitor adolescent learners, we should teach them; we should tell them that illegal substances are not good for their lives.*” In a focus group discussion with the teachers, this was emphasised: “*Monitoring and supervision goes hand in glove and that is exactly what we have to do as parents, even here in school, we should do that.*” Piko and Kovács (2010) confirm this finding that parental monitoring is a strong protective factor against illegal substance use among adolescent learners.

Parental support – All stakeholders concur that when parents are less strict and more supportive, adolescent learners share everything with them. In the focus group with adolescent learners, this was submitted: “*I think our parents should just be less strict and support us, so that we can also be able to share everything with them.*” In another focus group with the parents, they emphasised that “*we should always try to support our own children, these kids are under a lot of pressure, so we have to support them as parents at all the times.*” Professional nurses said: *parental support is an important weapon when coming to the issue of illegal substances among adolescents*” Teachers added that: “*let’s support our kids, let’s show them that kind of love, rather than always punishing*” Sigfúsdóttir, Thorlindsson, Kristjánsson, Roe and Allegrante (2008) add that parental support not only directly decreases the likelihood of illegal substance use among adolescent learners; they also

affect friendship choices. Branstetter, Low and Furman (2011) add that when parents support adolescent learners, they should praise and encourage them. Active parental support provides “experiences of love and care” that are described as crucial to adolescent learner’s resilience (Theron, Theron & Malindi, 2012).

Parents as role models – Stakeholders agree that parents should be adolescent learners’ role models in the NWP of SA. Stakeholders stated that there are adolescent learners who use either legal or illegal substances because they copied those behaviours from their parents. Adolescent learners emphasized that *“Parents should also be our role models because if I see my father smoking a cigarette or drinking alcohol and then...”* In a focus group discussion with the professional nurses, this was emphasised *“chances are very high for my child to drink alcohol when I drink it in front of him, so I must be my own child’s role model, charity begins at home.”* One of the parents said: *“I just wish that old people who drink alcohol with our kids can rot in jail because they are the ones who encourage them to go for other dangerous illegal substances”* Everall et al. (2006) mentions that adolescent learners may learn what not to do by observing the consequences of parents’ negative behaviours. Shih, Miles, Tucker, Zhou and D’Amico (2010) indicate that family factors such as substance use by parents may also play a role in adolescent learner’s use of illegal substances. For example, when adolescent learners live with adults and siblings who smoke cigarettes, those adolescent learners are more likely to report lifetime cigarette, alcohol, and marijuana use.

Constructive communication with parents – Participants indicated that parents should have constructive communication with adolescent learners if they want to stop problems associated with illegal substance use in the NWP of SA. They added that it is better for all parents or elderly people to talk or educate their own children about the use of illegal substance than for adolescent learners to hear about illegal substances from their peers. Adolescent learners indicated that when the parents talk to them politely, they get the message clearer. In the focus group discussion with adolescent learners this was offered as an observation: *“Parents should try to talk to us politely and not to shout at us and that will make their message clear and loud to us.”* Parents added that *“the more we talk to them about illegal substances the better, because their peers will make the situation worse.”* This finding is confirmed by Fang, Barnes-Ceeney, Lee and Tao (2011) who observe that parent-adolescent learner fruitful communication on illegal substance use is critical and helps adolescent learner stay away

from using illegal substances. This information indicates how effective constructive communication between parents and adolescent learners is.

Theme 3: School-related activities

Sub-themes that emerged from the school-related activities include conducting awareness campaigns, continuous random body searches of adolescent learners by the teachers or police, offering Facebook platforms to communicate illegal substance use education, arranging rehabilitation center visits for adolescent learners as well as stricter laws at schools. These sub-themes and literature control are given below.

Conducting awareness campaigns – Teachers and the professional nurses agree that awareness campaigns in schools can prevent illegal substance use among adolescent learners. They said that the more adolescent learners hear about the dangers of illegal substances through awareness campaigns the more they see that everybody wants them to stop illegal substances. In the focus group discussion with teachers, this was emphasised: *“Awareness campaigns should be conducted in our schools just to make adolescent learners aware of the dangers of illegal substance use.”* Professional nurses said *“Department of health should employ people who are trained to conduct awareness campaigns, it’s not everybody who can do awareness campaign about illegal substance use, we need professional people do that.”* This result is supported by the UNODC (2004) that once adolescent learners are provided with relevant current information through awareness campaigns they will refrain from using illegal substances. People conducting or leading those awareness campaigns should also receive appropriate training and education in order for those awareness campaigns to be effective. Awareness campaigns should be conducted at various settings such as at schools, clinics, health centers and communities.

Continuous random body searches of adolescent learners by the police and teachers – Parents, teachers and professional nurses agree that there should be continuous body searches in schools in order to prevent illegal substance use completely. Participants mentioned that adolescent learners take illegal substances to schools while others obtain them from the school, hence it is important for the adolescent learners to be continuously searched at school

by the teachers and the police. In the focus group discussion with parents, this was emphasised *“I think the police should do continuous search in all schools maybe four times a year.”* In a focus group with professional nurses this was mentioned: *“The police, the teachers, and everybody must search these adolescent learners because some of them sell these illegal substances at school.”* Teachers added that: *“these kids should always searched and the searching should be unannounced, otherwise we will not find anything”* This finding is confirmed by Jobert, Sughrue and Alexander (2013) who recognise that the school principal, deputy principal, head of department or any delegated staff member may, at random, meaning unannounced, search any group of adolescent learners or the property of a group of adolescent learners, for illegal substances, if a fair and “reasonable suspicion” has been established. However, continuous random searching of those suspected adolescent learners should be done considering their constitutional rights relating to dignity, privacy, bodily integrity according to school policy and ethical guidelines. School principals or his delegate should also guard against inappropriate touching of the adolescent learners by the staff members.

Offering Facebook platforms to communicate illegal substance use education – Only one participant in a focus group discussion with adolescent learners stated that Facebook platforms should be used to communicate illegal substance use education. Participant added that their school is already using Facebook platforms to communicate school related activities. During a focus group discussion with adolescent learners, they mentioned that *“In our school there is also a Facebook page where we post and educate each other about the dangers of illegal substances.”* To confirm the findings of this study, participants in a study conducted by Fang et al., (2011) also preferred advertisements of illegal substance use prevention programmes on the social networking sites such as Facebook.

Arranging rehabilitation center visits for adolescent learners – Professional nurses and the teachers agree that there is a need for all schools to arrange rehabilitation center visits for adolescent learners. Participants stated that school principals should arrange a visit for adolescent learners to go and see people who are treated for problems associated with illegal substance use in those rehabilitation centers. In the focus group discussion with professional nurses, this was said: *“Adolescent learners should be taken to rehabilitation centres just to see how bad or what illegal substances can do to you, just to see how terrible those people’s*

conditions are.” During a focus group with the teachers, participants agreed that *“It is important for these children to see patient treated for illegal substance use at rehabilitation centres, maybe they will learn a thing or two.”* This finding seems like a unique finding as nothing related to it was found on literature. It is, therefore, recommended that more studies be conducted to find out whether visits at the rehabilitation centres can prevent illegal substance use among adolescent learners.

Stricter laws at schools – Professional nurses and the parents stated that school principals should have stricter laws if they want to prevent illegal substance use in their schools. In the focus group discussion with professional nurses, this was mentioned: *“The school principals of all schools should be strict about illegal substance use in their schools, and they should discipline those adolescent learners that use illegal substances at their schools.”* Participants in a focus group discussion with the parents said, *“School principals and teachers should be very strict, they should not play with adolescent learners especially when coming to the issue of illegal substances, some of the adolescent learners obtain those illegal substances from schools.”* This result is supported by the UNODC (2004) that the possession, use or distribution of illegal substances such as dagga, heroin and cocaine, and the inappropriate possession, use or distribution of illegal substances is not acceptable in all South African schools. Therefore, school principals should discipline adolescent learners who possess, use or distribute illegal substances in their schools, particularly in the NWP of SA.

Theme 4: Community-related activities

Sub-themes that emerged from the community-related activities include participation in constructive activities, community meetings, community involvement, respecting others as well as community prayers. These sub-themes and literature control are given below.

Participation in constructive activities - Stakeholders agree that adolescent learners’ participation in constructive activities will shift their minds away from the illegal substances. Stakeholders said that these activities should be done seven days a week if possible. Stakeholders indicated that adolescent learners should participate in those constructive activities under the supervision of teachers or parents. In the focus group discussion with

parents, this was said: “... if they can join some activities or sports or meeting weekends and doing most of good things together rather than using illegal substances...” Professional nurses indicated that: “These adolescent learners should be kept busy at all times and they should do those activities under the supervision of a parent, teacher or anyone who does not use illegal substances or who will not lead them to use illegal substances.” Teachers added that: “They should do something like sports, choirs etcetera etcetera, they should just do something rather than thinking of illegal substances all the time” This finding is confirmed by Sigfúsdóttir et al. (2008) that participation in supervised adolescent learners works and sports prevent illegal substance use among adolescent learners. Participation in these activities provides opportunities through which adolescent learners can be reached, influenced and supported in positive ways.

Community meetings – Parents and the professional nurses mentioned that there is a need for community meetings where they can be able to share information on all issues related to illegal substance use. Participants also indicated that people who have more information on substance related issues should be called to share illegal substance use information in those community meetings. This was said in a focus group discussion with parents: “We need things like community meetings where we are going to share information about the use of illegal substances by our own children.” In a focus group discussion with professional nurses this was mentioned: “We need to meet regularly as different communities to discuss problems of our own communities such as use of illegal substances.” Resource Guide for Planning Effective Drug Prevention (2009) brings another point in this regard that depending on local main concerns it can be very challenging in some communities particularly in rural areas to get more people to attend a meeting focusing on topics such as community illegal substance use prevention programmes. Therefore, this indicates that community members should consider inviting well known people to the meeting to talk about illegal substance use among adolescent learners.

Community involvement – Parents, teachers and professional nurses concur that it is important for community members to be involved in preventing illegal substance use among adolescent learners. They mentioned that there are communities where everybody is actively involved. Participants made examples that in other communities, at times the whole community is going out to search for people who use or sell substances to their children. Participants added that at times those people who are selling illegal substances are even killed

for their bad actions. In the focus group discussion with parents, this was emphasised: *“We need community members who can be able to say no to illegal substance use by any adolescent learner in this community.”* During a focus group discussion with the teachers this was mentioned: *“Community members need to work together to fight illegal substance use in their communities, they know people who use substances or who bring them to the communities.”* Professional nurses added that: *“all community members should work together if they want to eradicate illegal substance use in their different communities”* Adolescent learners are the community’s collective responsibility, particularly because so many adolescent learners do not have parents or are living with elderly extended family members (Theron, et al., 2012). Therefore, all community members including lay men on the streets should be actively involved in preventing illegal substance use among adolescent learners.

Respecting others – Only one adolescent learner in the whole study stated that illegal substance use can be prevented by adolescent learners respecting their communities, societies and do something better than using illegal substances. He added that some adolescent learners are very disrespectful, they are not even afraid to use illegal substances in front of the adults or at times they use substances like alcohol with them. Adolescent learner said: *“As adolescent learners we can respect our communities or societies or try to come up with something that will benefit us.”* According to Theron et al. (2012), resilient adolescent learners are value driven, and these values influence their behaviour positively. For example, they cannot use illegal substances in front of the elderly people, they will always show respect. This means living positively, as defined by the communities concerned, and showing respect to all as defined by different cultures. In essence, this means deep respect for the community as a collective whole (those living as well as those who have passed on) and deep respect for God, as taught by family and community members. In other words, “value driven” suggests that adolescent learners have learned to think and behave in culturally appropriate ways.

Community prayers – Parents and the teachers stated that community should pray for the adolescent learners. Parents indicated that community prayers strengthen their hope that adolescent learners will stop using illegal substances. They also indicated that even though there are different beliefs in different communities, once or twice a month, there should be community prayers where they pray for only one thing, that is illegal substance use among adolescent learners. Parents said: *“the very important last thing that we can do as parents, is*

to pray for our adolescent learners” During a focus group discussion with teachers, this was emphasised: *“...we have to advise adolescent learners to attend church regularly and participate actively, rather than just going to church and do nothing there...”* Kliewer and Murrelle (2007) add that a personal belief in God (in contrast to mere religious attendance, or more general spirituality) and parent religiosity are most consistently related to lower lifetime use of illegal substances.

Theme 5: Government-related activities

Sub-themes that emerged from government-related activities include raising the age of accessing alcohol, banning of alcohol advertisements, stringent penalties on foreigners as well as collaboration among stakeholders. These sub-themes and literature control are given below.

Raise age of accessing alcohol – All participants concur that government needs to raise the age of acquiring alcohol because the current age restriction of 18 years is very low. In a focus group discussion with teachers, this was emphasised: *“Our government needs to do something particularly about alcohol, maybe to increase the age that is there for getting alcohol, 18 years is very little at least 21 or 25 is something.”* During a focus group with adolescent learners this was emphasised: *“the legal age of drinking alcohol should be increased... some of people are still very stupid or irresponsible even if they are above 18, so legal age should be increased.”* One parent said that: *“I will never allow anyone below the age of 25 to use substances in my house, they should do that at their own houses, they are young”* Professional nurses added that: *“the government should strengthen their rules and speed up the process of raising the age of buying or drinking alcohol to 21 or even 30”* This result is confirmed by the South African Minister of Health, who wishes to raise the age of legal alcohol consumption from the present 18 to 21 (Seggie, 2012).

Ban alcohol advertisements – All stakeholders agree that alcohol advertisements should be banned or limited to prevent illegal substance use among adolescent learners. Stakeholders state that most of people particularly adolescent learners use illegal substances like alcohol

and cigarettes because they saw them on television. Professional nurses emphasised: “...at least if we talk about banning of alcohol advertisements because that’s when some adolescent learners experiment it because they saw it on TV.” During a focus group discussion with parents this was said to confirm this finding “*alcohol advertisements should be banned, and I mean in all TV stations, adolescent learners should use illegal substances because they want to use them, not because they saw them on TV.*” Teachers said: *TV is boring now a days, after every five minutes you see alcohol advertisement, that’s just nonsense*” One of the adolescent learners said: “*Some people drink because they see alcohol on TV especially if it’s a new cider or beer, everyone want to taste it*” This finding is confirmed by Jones and Gordon (2013) that alcohol advertisements contain imagery and messages that adolescent learners interpret as suggesting that alcohol consumption will have positive psychological and social outcomes. However, more research is still needed to find out whether advertisements of substances such as alcohol particularly on television, contributes to illegal substance use among adolescent learners.

Stringent penalties on foreigners – Parents, teachers and the professional nurses indicated that government should come up with stricter penalties on foreigners because they are the ones who are bringing illegal substances in to the country. Participants said before 1994, there were no complaints about illegal substance use among adolescent learners. To confirm this finding, participants in a focus group discussion with parents said: “*The government is supposed to search the houses of these foreigners for illegal substances, and lock them up if they find something...*” In a focus group with professional nurses this was emphasised: “*The penalties should be severe when they (foreigners) are caught here with illegal substances; punishment must be very harsh just like in other countries.*” In a focus group discussion with teachers this was emphasised: “*You know illegal substance use has never been a problem in our country before 1994, but since 1994 when all people were allowed to come into the country the way they like, [the] situation got out of hands.*” This result seems to be a new result as nothing related to it was found from the searched literature. Therefore more research will be needed to confirm whether foreigners are the ones who bring illegal substances into the country and whether they have a role on illegal substance use among adolescents in NWP and SA as a whole.

Collaboration among stakeholders – All stakeholders concur that to prevent illegal substance use among adolescent learners, collaboration of all stakeholders is needed including the government and non-governmental organisations. Professional nurses said: *“...the government, the different departments, the parents, the teachers, and actually all departments including lay men on the streets, all of us actually need to be involved in the fight against illegal substance use among adolescent learners, these are our children, we need to protect them.”* Teachers emphasised: *“A fight against illegal substance use among adolescent learners can only be won if we work together; people should not say my child does not have illegal substance use problem, we must all work together for the future of our own children.”* Parents said: *We all need to work together, whether your child use substance or not, whether you are in government or not, these are the future of tomorrow, let’s all join hands to help them please.”* An adolescent learner added: *All people must come together and come up with a constructive decision that will build us, they must work together and all people must cooperate, illegal substance use is not a child’s play, it need more people”* Canadian Centre on Substance Abuse (2013) confirms this finding that collaboration among stakeholders, both within and across service sectors, has been established as a best practice to address a variety of health issues such as illegal substance use among adolescent learners more effectively. This fact is also true for illegal substances and mental health services where the co-occurrence of illegal substances, mental health problems and physical co-morbidity are very common and particularly challenging to address.

Conclusion

The main aim of this study has been met, which was to explore the stakeholders’ perceptions of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor in the NWP of SA. All stakeholders were free to share their perceptions of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor. The results included peer, parental, school, community and government-related activities. In different focus group discussions, adolescent learners emphasised peer and parental factors. Most adolescent learners indicated that a majority of adolescent learners use illegal substances because of peer and parental factors. Professional nurses and most of the teachers emphasised school related factors. Most teachers agreed that awareness campaigns for illegal substance use are needed in all schools

in the province. Professional nurses emphasised collaboration of different stakeholders including governmental and non-governmental organisations. Parents emphasised community related factors and they mentioned issues like community involvement, meetings and prayers. Finally it can be concluded that this study add important literature to the body of knowledge in psychiatry and mental health. The results of this study add important literature that can be used to deduce a conceptual framework and to develop and validate illegal substance use prevention programmes for adolescent learners in the NWP of SA.

Limitations of the study

Some of the adolescent learners did not show up on the day scheduled for focus group discussions, probably because data was collected during 2014 final examinations time. Some school principals struggled to recruit parents for focus group discussions. The findings of this qualitative study cannot be generalised, but can be used in other similar contexts or settings such as other provinces of South Africa.

Recommendations

There is still a need to conduct more research, particularly which is aiming at using protective factors discussed under results and discussion to develop and validate illegal substance use prevention programmes for adolescent learners, particularly in the NWP of SA. Mental health care practitioners such as psychiatrists, psychologists, psychiatric nurses, occupational therapists and social workers should use protective factors mentioned in this study to prevent illegal substance use among adolescent learners in the NWP of SA. There is also a need to educate adolescent learners to adopt the protective factors that already exist to prevent illegal substance use.

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References

- Amoateng, A., Kalule-Sabiti, I., & Narayanan, P. (2007). Substance use and sexual behaviour among African adolescents in the North-West province of South Africa. *African Journal of Drug and Alcohol Studies*, 6(1), 27-38.
- Branstetter, S.A., Low, S. & Furman, W. (2011). The influence of parents and friends on adolescent substance use: A multidimensional approach. *J Subst Use*, 16(2), 150-160.
- Canadian Centre on Substance Abuse. (2013). *Collaboration for addiction and mental health care: Best Advice*. Ottawa, ON: Canadian Centre on Substance Abuse.
- Clark, D. B., Kirisci, L., Mezzich, A., & Chung, T. (2008). Parental supervision and alcohol use in adolescents: Developmentally specific interactions. *Journal of Developmental and Behavioral Pediatrics: JDBP*, 29(4), 285-292.
- Creswell, J. 2014. *Research design: Qualitative, quantitative, and mixed methods approaches*. SAGE Publications, Incorporated.
- Dillon, L., Chivite-Matthews, N., Grewal, I., Brown, R., Webster, S., Weddell, E., Smith, N. (2007). *Risk, protective factors and resilience to drug use: Identifying resilient young people and learning from their experiences*. Home Office.
- Eitle, D. (2005). The moderating effects of peer substance use on the family structure-adolescent substance use association: Quantity versus quality of parenting. *Addictive Behaviour*, 30(1), 963-980.
- Everall, R.D., Altrows, K.J. & Paulson, B.L. (2006). Creating a future: A study of resilience in suicidal female adolescents. *Journal of Counseling & Development*, 84, 461-470.
- Fang, L., Barnes-Ceeney, K., Lee, R. A., & Tao, J. (2011). Substance use among Asian-American adolescents: Perceptions of use and preferences for prevention programming. *Social Work in Health Care*, 50(8), 606-624.
- Fergus, S., & Zimmerman, M. A. (2005). Adolescent resilience: A framework for understanding healthy development in the face of risk. *Annu.Rev.Public Health*, 26(1), 399-419.

Grove, S. K., & Burns, N., & Gray, J.R. (2013). *The practice of nursing research: Appraisal, synthesis, and generation of evidence*. Elsevier Health Sciences.

Holloway, I., & Wheeler, S. (2010). *Qualitative research in nursing and healthcare*. John Wiley & Sons.

Hurlington, K. 2010. What Works? Research into Practice. http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/WW_bolstering_students.pdf. Accessed: May 2015.

Jamieson, A. 2010. Resiliency and Protective Factors. www.positivehumandevelopment.com/uploads/1/0/0/4/1004952/resiliency_and_protective_factors.pdf. Accessed: February 2016.

Jones, S. C., & Gordon, R. (2013). *Regulation of alcohol advertising: Policy options for Australia*. University of Wollongong: Australia.

Jobert, R., Sughrue, J., & Alexander, D. M. (2013). Search and seizure of learners in schools in a constitutional democracy: A comparative analysis between South Africa and the united states. *De Jure*, 46(1), 114-133.

Kliwer, W., & Murrelle, L. (2007). Risk and protective factors for adolescent substance use: Findings from a study in selected Central American Countries. *Journal of Adolescent Health*, 40(5), 448-455.

LaFromboise, T. D., Hoyt, D. R., Oliver, L., & Whitbeck, L. B. (2006). Family, community, and school influences on resilience among American Indian adolescents in the upper Midwest. *Journal of Community Psychology*, 34(2), 193-209.

Lasser, J., & Schmidt, E. (2009). Substance use, abuse, and dependency in adolescence. *Principal Leadership*, 9(5), 12-16.

Mohasoa, I.P. & Fourie, E. 2012. Substance abuse amongst adolescents: a case study of Zeerust, North-West Province, South Africa. *New Voices in Psychology*, 8(1), 30-43.

NIDA. National Institute on Drug Abuse. (2011). *National Institutes of Health-U.S. Department of Health and Social Services*. USA.

Parsai, M., Voisine, S., Marsiglia, F. F., Kulis, S., & Nieri, T. (2009). The protective and risk effects of parents and peers on substance use, attitudes, and behaviors of Mexican and Mexican American female and male adolescents. *Youth & Society*, 1(40), 353-376.

Peltzer, K., Ramlagan, S., Johnson, B. D., & Phaswana-Mafuya, N. (2010). Illicit drug use and treatment in South Africa: A review. *Substance use & Misuse*, 45(13), 2221-2243.

Piko, B. F., & Kovács, E. (2010). Do parents and school matter? protective factors for adolescent substance use. *Addictive Behaviors*, 35(1), 53-56.

Resource Guide for Planning Effective Drug Prevention. (2009). *Victorian Government Department of Human Services*: Melbourne, Victoria.

Schwartz, C., Garland, O., Harrison, E. & Waddell, C. (2007). Treating concurrent substance use and mental disorders in children and youth. *Mental Health Research Quarterly*, 1(4), 1-16.

Seggie, J. (2012). Alcohol and South Africa's Youth. *SAMJ: South African Medical Journal*, 102(7), 587-587.

Sehularo, L.A. (2010). *Exploring the perceptions of psychiatric patients regarding marijuana use*. Masters mini-dissertation, NWU: South Africa.

Shih, R. A., Miles, J. N., Tucker, J. S., Zhou, A. J., & D'Amico, E. J. (2010). Racial/ethnic differences in adolescent substance use: Mediation by individual, family, and school factors. *Journal of Studies on Alcohol and Drugs*, 71(5), 640-651.

Sigfúsdóttir, I. D., Thorlindsson, T., Kristjansson, A. L., Roe, K. M., & Allegrante, J. P. (2008). Substance use prevention for adolescents: The icelandic model. *Health Promotion International*, 24(1), 16-25.

Theron, L.C., Theron, A.M.C. & Malindi, M.J. (2012). Toward an African Definition of Resilience: A Rural South African Community's View of Resilient Basotho Youth. *Journal of Black Psychology*, 39(1), 63-87.

UNODC. (2004). *Conducting effective substance abuse prevention work among youth in South Africa*. Pretoria: South Africa.

Visser, M. & Routledge, L. 2007. Substance abuse and psychological well-being of South African adolescents. *South African Journal of Psychology*, 37(3), 595-615.

Zimmerman, M. A., Stoddard, S. A., Eisman, A. B., Caldwell, C. H., Aiyer, S. M., & Miller, A. (2013). Adolescent resilience: Promotive factors that inform prevention. *Child Development Perspectives*, 7(4), 215-220.

Manuscript Four: Conceptual framework for illegal substance use prevention programme for adolescent learners

Conceptual framework for illegal substance use prevention programme for adolescent learners

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Abstract

This study focuses on a conceptual framework for illegal substance use prevention programme for adolescent learners. Leading from the previous sections of the main research project, this conceptual framework is needed to enrich, strengthen and keep the projects on track. The aim of this manuscript was to deduce a conceptual framework for the development of illegal substance use prevention programme for adolescent learners. An intervention research design was utilised to deduce a conceptual framework. The design involved problem analysis and planning, information gathering and synthesis, design as well as early development and validation. The survey list of the Practice Oriented Theory of Dickoff, James and Wiedenbach as well as Mouton and Marais' characteristics of precursive theoretical models were used as a guide for deducing the conceptual framework. This conceptual framework is recommended as the basis for illegal substance use prevention programme for adolescent learners.

Keywords: Adolescent learner, conceptual framework, prevention programme, illegal substance use

Introduction

This study forms part of a major research project on illegal substance use prevention programme for adolescent learners. Illegal substance use among adolescent learners has become a serious public health issue in most countries (Gau, Chong, Yang, Yeng, Yeelang & Cheng, 2007; Page, Dennis, Lindsay & Merrill, 2011; Brook, Pahl, Morojele & Brook, 2006), including the North West Province of South Africa. As a result, illegal substance use among adolescent learners has been the topic of extensive research activity over many decades (Hagell, 2013). Jules-Macquet (2015) as well as Visser and Routledge (2007) state that South Africa faces an on-going challenge with the definitions of substance use, abuse and addiction. These concepts are clarified in this manuscript. Substance use is defined in the Mini Drug Master Plan (2011/12-2013/2014) as a recreational or occasional use of legal or illegal substances such as alcohol and dagga with no adverse health, legal, educational or social consequences. Visser and Routledge (2007) define substance abuse as an excessive, irresponsible, improper or self-damaging use of addictive substances such as alcohol, marijuana and *nyaope*. Addiction is defined by Ukachi (2013) as a difficult illness categorized by compulsive, and at times, overwhelming craving of a substance, looking for, and use of legal or illegal substances that continue even in the face of extreme negative effects. As an example, after losing a job as a result of drunkenness and losing one eye in a physical fight. The present manuscript focuses on illegal substance use among adolescent learners such as, but not limited to marijuana, alcohol, *nyaope*, glue and cocaine. In spite of the above definitions, among adolescent learners, all substance use is legally defined as substance abuse in the RSA (Visser & Routledge, 2007).

From the above discussion, it is clear that early onset of illegal substance use among adolescent learners is a concern. This is a concern because the early onset of illegal substance use among adolescent learners increases the threat for future mortality and morbidity. This includes depression and other problems such as school dropout, delinquent behaviour, legal problems and social impairment (Richardson, Kwon & Ratner, 2013). Therefore, early intervention makes sense, preferably before the adolescent learner starts experimenting with illegal substances such as marijuana, alcohol, glue, *nyaope*, heroin or cocaine. Therefore, it is far better to discourage adolescent learners from beginning to use illegal substances than attempting to address illegal substance use at a later stage trying to get them to give up substances (UNODC, 2004).

An important goal of prevention of illegal substance use among adolescent learners is to reduce risk and to increase resilience as a protective factor (Stagman, Schwartz & Powers, 2011). Using a risk and protective factor approach is one way of increasing awareness of the need for preventive efforts targeting adolescent learners. It provides public health planners with information about which aspects of adolescent learners to target with preventive efforts (Branstrom, Sjostrom & Andreasson, 2007). Therefore, there is a need to develop and validate illegal substance use prevention programme for adolescent learners, which is built on a conceptual framework. Green (2014) state that a conceptual framework helps frames the research questions, design and outcomes. Conceptual framework should be deduced to assist researchers and other important stakeholders in ensuring that their studies are coherent and to focus their minds on what the research endeavours to accomplish. Conceptual framework is therefore needed to enrich, strengthen and keep research projects on track (Akpabio & Uyanah, 2015) such as in this present study. Sinclair (2007) adds that a conceptual framework can be thought of as a map or travel plan. From the above introduction, it is clear that the purpose of the study was to deduce a conceptual framework for the development of illegal substance use prevention programme for adolescent learners.

Methodology

The methodology followed to deduce a conceptual framework for illegal substance use prevention programme for adolescent learners is described below:

Research design

Intervention research design was followed to deduce a conceptual framework for illegal substance use prevention programme for adolescent learners. In accordance with De Vos et al. (2011), intervention research design was relevant for this manuscript as it was followed for the purpose of conceiving, creating and to preventing problem such as illegal substance use among adolescent learners or to maintaining high quality of life. Intervention research

design involved four phases, namely (1) problem analysis and planning, (2) information gathering and synthesis, (3) design as well as (4) early development and validation. The survey list of the Practice Oriented Theory of Dickoff, James and Wiedenbach (1968) as well as Mouton and Marais' (1996) characteristics of precursive theoretical models were utilized to deduce a conceptual framework for illegal substance use prevention programme for adolescent learners.

Research setting

A conceptual framework for illegal substance use prevention programme for adolescent learners is deduced for the NWP of SA. The province lies in the North of South Africa on the Botswana border. The capital city of the NWP is Mahikeng. There are four district municipalities in the NWP of SA namely, Ngaka Modiri Molema, Dr Ruth Segomotsi Mompati, Bojanala Platinum and Dr Kenneth Kaunda. All four districts of the NWP of SA were included in the conceptual framework for illegal substance use prevention programme for adolescent learners.

Data collection

A systematic review, focus group discussions as well as literature control were used to collect data for the conceptual framework for illegal substance use prevention programme for adolescent learners. A systematic review was done to explore and describe current evidence on substance use prevention programmes among adolescent learners, specifically programmes focusing on resilience as a protective factor (Sehularo, Manyedi & du Plessis, 2016). Focus group discussions were conducted to explore stakeholders' perceptions of resilience as a protective factor in illegal substance use prevention programme for adolescent learners in the NWP of SA (Sehularo, Manyedi, du Plessis & Pienaar, 2015a, unpublished article) and their perceptions of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor in the NWP of SA (Sehularo, Manyedi, du Plessis & Pienaar, 2015b, unpublished article). In this manuscript, stakeholders

refer to the teachers, parents, professional nurses as well as adolescent learners who participated in the qualitative study. Literature control was done to confirm the results of focus group discussions.

Data analysis

Data from a systematic review and focus group discussions was analysed for a conceptual framework for illegal substance use prevention programme for adolescent learners. Data analysis in a systematic review was done in a narrative and informative manner so that it can be easily understandable. Tesch's (in Creswell, 2014) method of qualitative data analysis was used to analyse data for focus group discussions.

Ethical considerations

In accordance with Brink, Van der Walt and Van Rensburg (2012), the researcher conducted this study in an ethical manner from conceptualisation and planning phases, through deducing of this conceptual framework, to the publication of this manuscript. Permission to deduce the conceptual framework for illegal substance use prevention programme for adolescent learners was granted by the School of Nursing Science, Faculty of Agriculture, Science and Technology, North-West University, Departments of Education and of Health. All sources and references used in this conceptual framework for illegal substance use prevention programme for adolescent learners have been acknowledged in the text and the list of references following journal guidelines (*AJPHEs*).

Trustworthiness

Trustworthiness in the present study was ensured by applying the criteria of credibility, transferability, dependability, confirmability (Holloway & Wheeler, 2010). Credibility was

ensured through the triangulation of data collection methods. The researcher employed more than one data collection methods by using a systematic review, fourteen focus group discussions as well as literature control to deduce the conceptual framework for illegal substance use prevention programme for adolescent learners. To ensure transferability of the study, a thick description of the research methodology is given. This manuscript will be published in *AJPHEs* so that other researchers interested in this conceptual framework can apply it in their contexts. Dependability and confirmability were ensured by triangulation during collection and analysis of the data. A systematic review, focus group discussions as well as literature control were conducted for a conceptual framework. Researcher, independent reviewer as well as co-coder analysed data independently for the conceptual framework for illegal substance use prevention programme for adolescent learners. This was done to guard against researcher's biasness (Brink et al., 2012).

Results and Discussion

The results of a systematic review and focus group discussions used for the conceptual framework for illegal substance use prevention programme for adolescent learners are given in Table 1 - 3 from the next page:

Table 1: Results of systematic review on current evidence on substance use prevention programmes among adolescents focusing on resilience as a protective factor.

Themes	Sub-themes
Theme 1: Features of a prevention programme	<ul style="list-style-type: none"> • Prevention programme should be brief and attractive and to the point • Programme activities should include pictures, videos, comic strips • Programme could also include specific theme in each session • Programme should be delivered in multiple languages • Programme could be advertised in different contexts
Theme 2: Protective factors relevant to a prevention programme	<ul style="list-style-type: none"> • Peer-related protective factors • Parent-related protective factors • Family-related protective factors • Community-related protective factors • School-related protective factors

Table 2: Results of stakeholders' perceptions of resilience as a protective factor in illegal substance use prevention programme for adolescent learners

Converged results on the stakeholders' perceptions of resilience as a protective factor for illegal substance use prevention programme for adolescent learners	
Themes	Sub-themes
Theme 1: Characteristics of resilient individuals	<ul style="list-style-type: none"> - Knowledgeable to discern right and wrong - Self-awareness - Goal directedness - Assertiveness - Self-discipline
Theme 2: Competencies of resilient individuals	<ul style="list-style-type: none"> - Ability to bounce back from life challenges - Capacity to resist pressure and destructive influences - Ability to make informed independent decisions

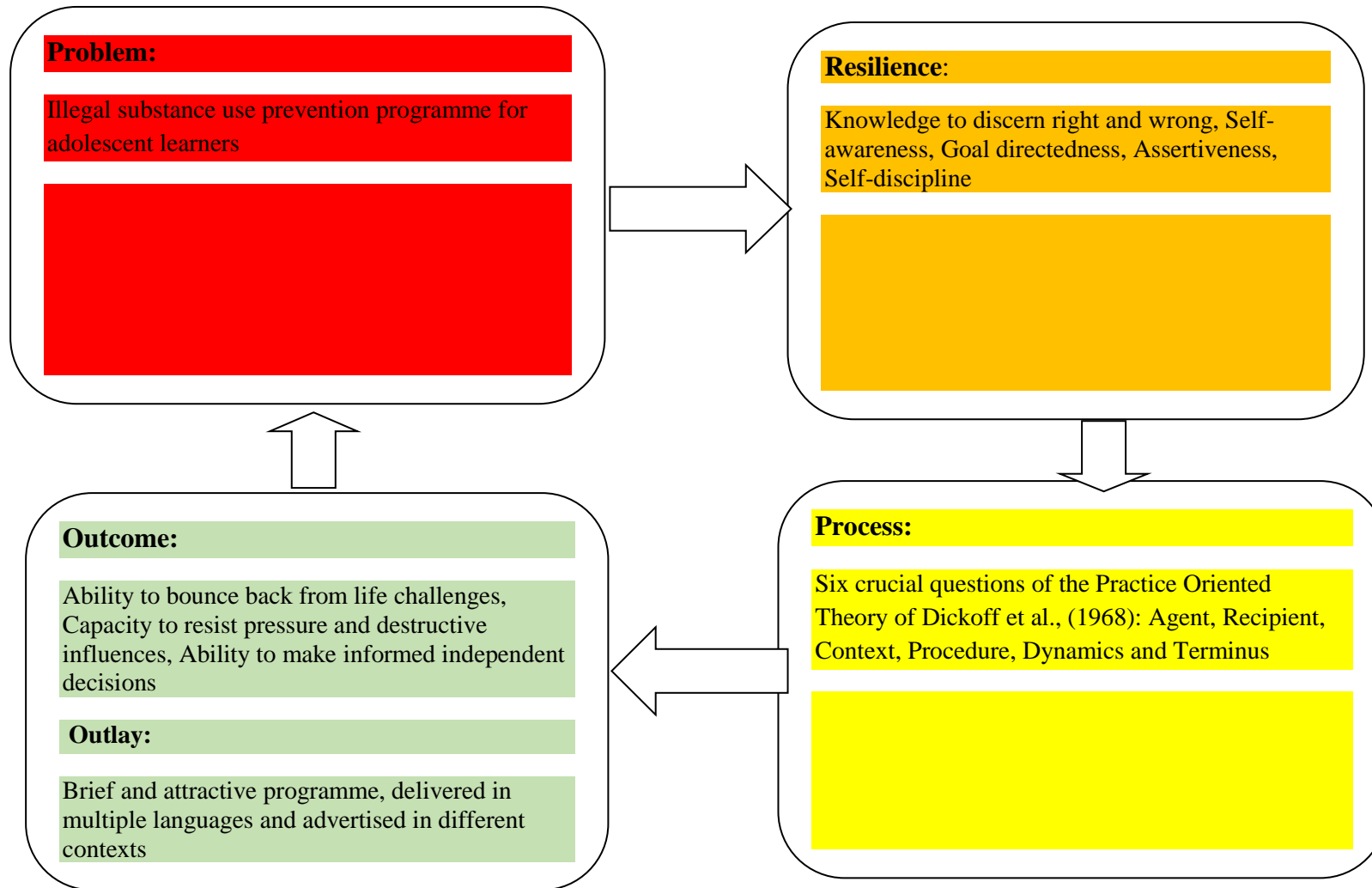
Table 3: Converged results on the stakeholders’ perceptions of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor

Theme 1:	Theme 2:	Theme 3:	Theme 4:	Theme 5:
Peer-related activities	Parent-related activities	School-related activities	Community-related activities	Government-related activities
Subthemes	Subthemes	Subthemes	Subthemes	Subthemes
<ul style="list-style-type: none"> - Positive peer relationships - Peer education - Forming or joining support groups 	<ul style="list-style-type: none"> - Parental education - Parental supervision - Parental monitoring - Parental support - Parents as role models - Constructive communication with parents 	<ul style="list-style-type: none"> - Conducting awareness campaigns - Continuous random body searches of learners by the police and teachers - Offering Facebook platforms to communicate illegal substance use education - Arranging rehabilitation center visits for adolescents - Stricter laws at schools 	<ul style="list-style-type: none"> - Participating in constructive activities - Community meetings - Community involvement - Respecting others - Community prayers 	<ul style="list-style-type: none"> - Raise age of accessing alcohol - Ban alcohol advertisements - Stringent penalties on foreigners - Collaboration among stakeholders (school health nurses, mental health nurses, social workers and registered counselors, police officers, life orientation teachers, pastors, community policing forums, community members, former substance users, parents, adolescents, friends and government)

A conceptual framework

From the Tables 1 – 3 above, the conceptual framework for illegal substance use prevention programme for adolescent learners was deduced. The six crucial questions of the Practice Oriented Theory of Dickoff, James and Wiedenbach (1968), as well as Mouton and Marais' (1996) four characteristics of percussive theoretical models were used to deduce a conceptual framework for illegal substance use prevention programme for adolescent learners. The six crucial questions were on the agent, recipient, context, procedure, dynamics and terminus. In line with Mouton and Marais (1996), the researcher simplified and systematised the conceptual framework for illegal substance use prevention programme for adolescent learners, and provided a new language game or universe of discourse within which the conceptual framework may be discussed and provided explanation sketches and the means for making predictions. The concept map of the conceptual framework for illegal substance use prevention programme for adolescent learners is given below:

Conceptual Framework Map *(Designed by Sehularo & Pienaar and drawn by Mvala, 2016)*



The concept map of the conceptual framework for illegal substance use prevention programme for adolescent learners is described below:

Problem

Illegal substance use among adolescent learners is an important public health problem in the whole world. Illegal substance use among adolescent learners contributes greatly to morbidity and mortality rates throughout Canada, United States and globally (Griffin & Botvin, 2010). This global problem does not exclude the NWP of SA. Illegal substance use among adolescent learners increase the risk for future mortality, morbidity including depression and other problems such as school dropout, delinquent behaviour, legal problems and social impairment (Richardson, Kwon & Ratner, 2013). Therefore, early intervention makes sense, preferably before the adolescent learner starts experimenting with illegal substances such as marijuana, alcohol, glue, *nyaope*, heroin or cocaine. As a result, it is far better to prevent adolescent learners from beginning with illegal substance use than attempting to resolve illegal substance use problems at a later stage (UNODC, 2004). From the above information, it is clear that there is a need to deduce a conceptual framework for illegal substance use prevention programme for adolescent learners.

Resilience

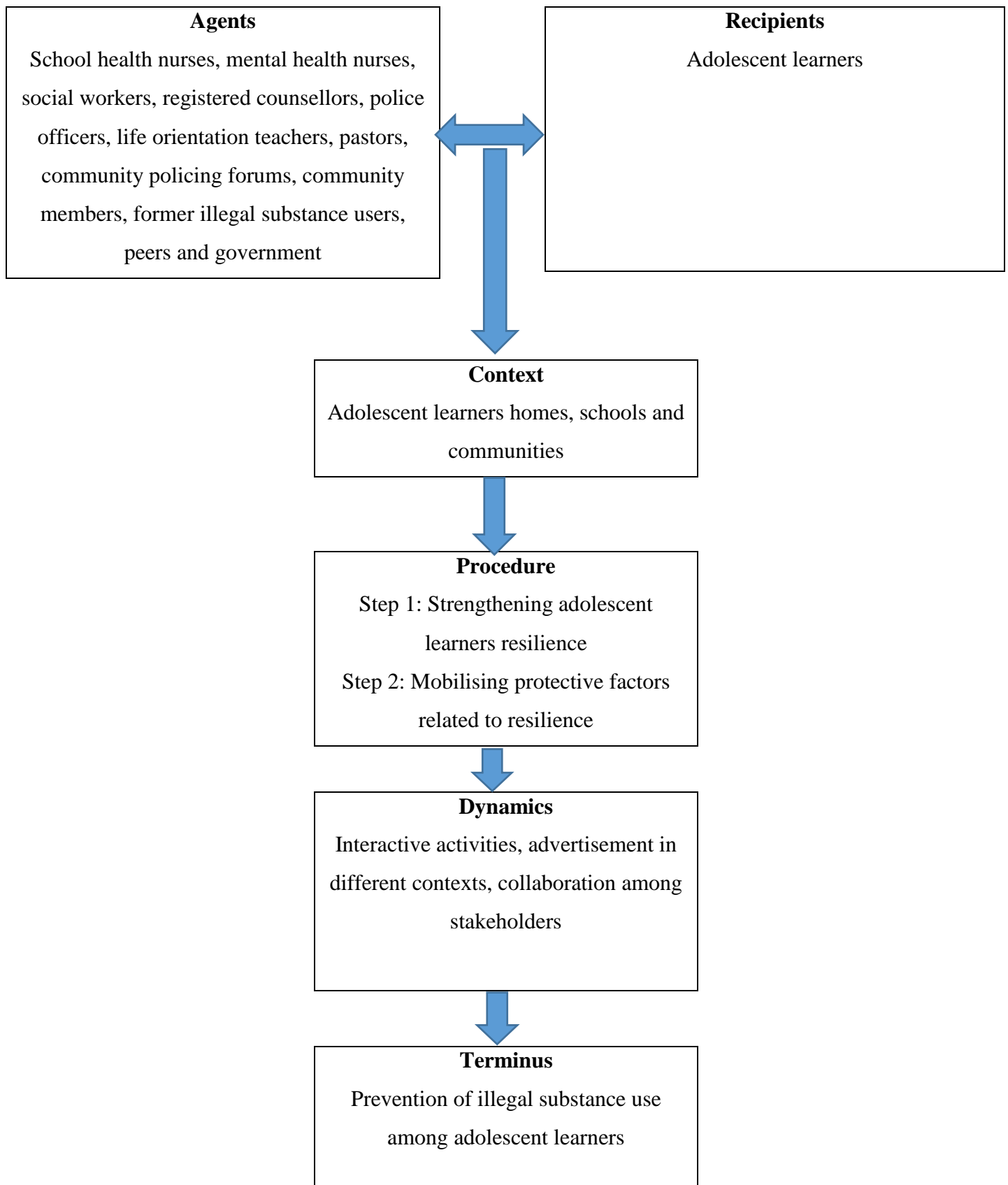
Resilience is understood as the behaviours that adolescent learners exhibit in making their decisions not to use illegal substances and putting this into practice, despite having been exposed to those substances and other risk factors (Dillon, Chivete-Matthews, Grewal, Brown, Webster, Weddel, Brown & Smith, 2007). This is a strength-based approach. Adopting a strengths-based perspective on adolescent learners, several post-modernist thinkers acknowledge the opportunity for growth and maturation during the adolescent learner's life stage (Goliath & Pretorius, 2016). In a qualitative phase of this research which focused on the stakeholders' perceptions of resilience as a protective factor in illegal substance use prevention programme, stakeholders mentioned that adolescent learners should

be assisted to discern right and wrong, to be self-aware, goal directness, assertive and self-disciplined.

Process

The process for preventing illegal substance use among adolescent learners includes the six crucial questions of the Practice Oriented Theory of Dickoff et al. (1968). The table for the application of Dickoff et al. (1968) is given in the next page:

Figure 1: Application of Dickoff, James & Wiedenbach (1968) to illuminate the process



Detailed description of Dickoff et al. (1968) to illuminate the process:

Detailed explanation of agents, recipients, context, procedure, dynamics and terminus is given in the following paragraphs:

Agents of the programme (Who or what performs the programme?)

The first aspect on the survey list is the agent. The agent is the person who performs the programme towards achieving the goal. These are people who are involved in dealing with illegal substance use among adolescent learners; therefore they have direct impact on adolescent learners. The point is that someone must entertain the programme goal and must see that the programme is performed and achieve its goals. The list of agents include the following people: school health nurses, mental health nurses, social workers, registered counsellors, police officers, life orientation teachers, pastors, community policing forums, community members, former illegal substance users, friends and the government. These agents are described below:

School health nurses should guide, support, direct and encourage other agents so that illegal substance use prevention programme is implemented effectively, and that it achieves its goal which is to prevent illegal substance use among adolescent learners. School health nurse as a mental health care practitioner, health educator, and school/family/community liaison, is in a unique position to act as a change agent for illegal substance use among adolescent learners. These nurses have relevant education and experience on illegal substance related issues.

Mental health nurses particularly the specialists in mental health and substance use disorders should collaborate with other agents such as school health nurses, social workers and registered counsellors to identify, assess, diagnose and manage adolescent learners who present with substance use disorders. They should also do consultations, research, mental health education, psychoeducation and counselling for illegal substance use among adolescent learners. They should also screen and refer adolescent learners who have illegal substance use problems.

Social workers as mental health care practitioners should evaluate and treat adolescent learners who have illegal substance use problems. They should also help adolescent learners overcome their illegal substance use problems by counselling them and referring them to the relevant mental health care institutions for appropriate care, treatment and rehabilitation services.

Registered counsellors as mental health care practitioners with relevant education and experience in mental health; should provide mental health education, supportive counselling and psychological assessments to adolescent learners who have illegal substance use problems. They should also work closely with school health nurses and social workers to ensure that the proposed programme achieve its goal which is to prevent illegal substance use among adolescent learners.

Police officers who are trained and experienced to work with illegal substance use and adolescent learners should liaise between the department of police and of education and provide information to adolescent learners and the school's personnel on the law enforcement issues pertaining to illegal substance use and gangs. They should also search and arrest adolescent learners who possess, use or sell illegal substances in school premises.

Life orientation teachers as adolescent learners' parents away from home should also play a role in preventing illegal substance use among adolescent learners. They should create a safe and healthy school environment, provide appropriate health services and support as well as involving the family and the community in the planning and delivery of illegal substance use prevention programme (UNODC, 2004).

Pastors should collaborate with different churches and other agents mentioned in this manuscript to prevent illegal substance use among adolescent learners. They should learn about the symptoms of substance use disorders and their impact so as to educate adolescent learners and empower the believers to respond to and support adolescent learners with illegal substance use issues (Gilliam, 2014). Pastors should also visit different schools to pray for adolescent learners and provide a strong support system for those in recovery, which might include support groups (UNODC, 2004).

Community policing forums should collaborate with other agents such as school health nurses, life orientation teachers and community members to combat illegal substance use among adolescent learners. They should be empowered by the school health nurses and other

stakeholders such as social workers to identify adolescent learners who present with illegal substance use problems; and refer them for appropriate care, treatment and rehabilitation services. They should also refer adolescent learners who possess, use or sell illegal substances to the police officers for proper intervention.

Community members should work together with other agents to prevent illegal substance use among adolescent learners. For instance, they should identify adolescent learners who use illegal substances and refer them to other agents such as school health nurses, social workers and registered counsellors for further care, treatment and rehabilitation services. They should also be aware of adolescent learners' constitutional rights and avoid taking law into their own hands like assaulting those who use illegal substance use, rather they should refer them to community policing forums or police department. They should also participate in illegal substance use awareness campaigns.

Former illegal substance users are important people who should not be left out in prevention of illegal substance use among adolescent learners. They should collaborate with other agents mentioned in this manuscript and participate in community awareness campaigns, mental health education programmes and meetings. Former illegal substance users should educate and encourage adolescent learners to stay away from illegal substance use. They should educate them about the effects of illegal substance use such as substance use disorders, educational, social and legal problems.

Peers who do not use illegal substances should be involved in preventing illegal substance use among adolescent learners. They should be motivated by other agents such as life orientation teachers and school health nurses to empower, educate and create change among other adolescent learners by implementing the proposed programme. They should encourage their peer (adolescent learners) to make healthy choices and decisions regarding illegal substance use. The act of sharing information between peers benefits both parties, as each is able to learn from the other's life story and personal experience (UNODC, 2003).

Government should collaborate with other stakeholders including all agents mentioned in this manuscript to prevent illegal substance use among adolescent learners. They should allocate adequate funds for research and other illegal substance use prevention efforts targeted at adolescent learners. Government should toughen penalties to all people who bring illegal substances to the country or those who possess, use or sell it illegally, including adolescent learners themselves.

Recipients of the programme (Who or what is the recipient of the programme?)

The second on the survey list is the recipients of the programme. The recipients in this manuscript are adolescent learners aged between 10 and 19 years who are at risk of using illegal substance use. The recipients receive illegal substance use prevention programme from the agents. Therefore, they should be assisted to cooperate with agents mentioned in this manuscript to achieve the goal of the programme. They should also be educated about features and protective factors relevant for a prevention programme. Their resilience skills should also be strengthened in order to be able to resist the pressure to use illegal substances.

Context of the programme (In what context is the programme performed?)

The third aspect on the survey list is the context of the programme. The context of the programme refers to the setting, location and the physical structure of where the programme will be performed. The programme is performed within a context by an agent and received by a recipient. The context of the proposed programme constitute the adolescent learners homes, schools and communities within which adolescent learners may use illegal substances such as marijuana, alcohol, *nyaope*, glue and cocaine. The programme could be advertised in different contexts including the schools, community organisations, online, or in subway trains and buses (Fang et al., 2011).

Procedure of the programme (What is the guiding procedure, technique or protocol of the programme?)

The fourth aspect on the survey list is the procedure of the programme. Procedure includes the steps or rubric to be taken towards success of the programme. In this manuscript, there are 2 steps which will be taken towards achievement of the goal of the programme namely, strengthening adolescent learners' resilience as a protective factor as well as mobilising protective factors related to resilience. All agents mentioned above should collaborate to

strengthen adolescent learners' resilience as a protective factor. The agents should also remind adolescent learners that resilience develops over time. In line with Griffin and Botvin (2010), protective factors at the level of peers, parents, schools, communities and the government will be utilised to prevent illegal substance use among adolescent learners (recipients of the programme).

Dynamics of the programme (What is the energy source for the programme?)

The fifth aspect on the survey list is the dynamics of the programme. Dynamics are the power sources such as agent, recipient, or part of context for programme realising a goal. Such power sources are more familiarly termed motivation, goal-orientedness, drive, or impetus. These power sources give direction to perform and sustain the programme. Power sources for the illegal substance use prevention programme for adolescent learners are interactive activities, advertisement in different contexts and collaboration among stakeholders. It is important for agents mentioned above to use interactive activities relevant to their contexts when they deliver the programme to adolescent learners. For instance, life orientation teacher can use games and puzzles to educate adolescent learners about the programme. The programme should be advertised in different contexts including the schools, community organisations, online, or in subway trains and buses (Fang et al., 2011). There is a need for all agents of the programme to develop and maintain a respectable working relationship so that each of them knows exactly what she/he must do and how to do it when implementing the programme. These dynamics will enhance the development of a sustainable illegal substance use prevention programme for adolescent learners.

Terminus or purpose of the programme (What is the end point of the programme?)

The sixth aspect on the survey list is the terminus or purpose of the programme. The purpose of this conceptual framework is to work as the basis for the development and validation of illegal substance use prevention programme for adolescent learners. The terminus is the end point which confirms that the goal which was set for the programme in question was

achieved or not. The programme should be viewed from the perspective of the end point or accomplishment. All agents mentioned in this manuscript are expected to successfully implement the programme and ensure that the programme achieve its set goal which is to prevent illegal substance use among adolescent learners.

Outcome and Outlay

The outcome and outlay of the programme are described below:

Outcome

The focus of the main research project was on developing and validating illegal substance use prevention programme for adolescent learners focusing on resilience as a protective factor. The outcome of the programme is that adolescent learners participating in illegal substance use prevention programme should be able to bounce back from life challenges, be able to resist pressure and destructive influences and be able to make informed independent decisions. Alaska Division of Behavioral Health (2011) mentioned that resilient adolescent learners have the competencies that prepare them to make independent positive choices, maintain healthy relationships, and succeed in life because of their capacity to resist negative peer pressures and destructive influences and thereby avoid possible dangerous situations such as illegal substance use.

Outlay

For an illegal substance use prevention programme to achieve its objectives, it should be brief and attractive. Stakeholders should use interactive activities relevant to their contexts when they deliver the programme to adolescent learners. The programme should also be delivered by different stakeholders to adolescents in multiple languages such as English, Setswana,

Afrikaans and isiXhosa. Life orientation teacher can use games and puzzles to educate adolescent learners about the programme. The programme should be advertised in different contexts including the schools, community organisations, online, or in subway trains and buses (Fang et al., 2011). There is also a need for all stakeholders of the programme to develop and maintain a respectable working relationship so that each of them knows exactly what she/he must do and how to do it when implementing the programme. These dynamics will enhance the development of a sustainable illegal substance use prevention programme for adolescent learners.

Conclusion

The conceptual framework was deduced for the development of illegal substance use prevention programme for adolescent learners. Intervention research design was utilised to deduce a conceptual framework for illegal substance use prevention programme for adolescent learners. The survey list of the Practice Oriented Theory of Dickoff, James and Wiedenbach as well as Mouton and Marais' characteristics of precursive theoretical models were used as a guide for the conceptual framework. The conceptual framework deduced in this manuscript is recommended as the basis for illegal substance use prevention programme for adolescent learners.

References

- Akpabio, I. I. & Uyanah, D. A. (2015). Utilization of Conceptual and Theoretical Framework in Research by Nurse Educators in Akwa Ibom and Cross River States, Nigeria. *Global Journal of Medical Research*, 15(4), 1-9.
- Alaska Division of Behavioural Health. (2011). *Risk and Protective Factors for Adolescent Substance Use (and other problem behaviours)*. Alaska Department of Health and Social Services.
- Branstrom, R., Sjostrom, E. & Andreasson, S. (2007). Individual, group and community risk and protective factors for alcohol and drug use among Swedish adolescents. *European Journal of Public Health*, 18(1), 12–18.
- Brink, H., Van der Walt, C., & Van Rensburg, G. (2012). *Fundamentals of research methodology for health care professionals*. Cape Town: Juta and Company.
- Brook, J.S., Pahl, T., Morojele, N.K. & Brook, D.W. (2006). Predictors of Drug Use Among South African Adolescents. *J Adolesc Health*, 38(1), 26–34.
- Creswell, J. 2014. *Research design: Qualitative, quantitative, and mixed methods approaches*. SAGE Publications, Incorporated.
- De Vos, A., Strydom, H., Fouché, C. & Delport, C. (2011). *Research at grass roots for the social sciences and human service professions*. Pretoria: Van Schaik.
- Dickoff, J., James, P. & Wiedenbach, E. (1968). Theory in a practice discipline: Part I. Practice Oriented Theory. *Nursing research*, 17(5), 415-434.
- Dillon, L., Chivite-Matthews, N., Grewal, I., Brown, R., Webster, S., Weddell, E., Brown, G. & Smith, N. (2007). *Risk, Protective Factors and Resilience to Drug Use: Identifying Resilient Young People and Learning from their Experience*. London: Home Office.

Fang, L., Barnes-Ceeney, K., Lee, R. A., & Tao, J. (2011). Substance use among asian-american adolescents: Perceptions of use and preferences for prevention programming. *Social Work in Health Care*, 50(8), 606-624.

Gau, S.F., Chong, M., Yang, P., Yeng, C.F., Yeelang, K. & Cheng, A.A. (2007). Psychiatric and psychosocial predictors of substance use disorders among adolescents. *British Journal of Psychiatry*, 190, 42-48.

Gilliam, B.L. (2014). A Response to Substance Abuse: Equipping Church Leaders. *Encounter: Journal for Pentecostal Ministry*, 11(1), 1 – 9.

Goliath, V. & Pretorius, B. (2016). Peer risk and protective factors in adolescence: implications for drug use prevention. *Social Work/Maatskaplike Werk*. 52(1), 113 – 129.

Green, H. (2014) Use of theoretical and conceptual frameworks in qualitative research. *Nurse Researcher*, 21(6), 34-38.

Griffin, K. W., & Botvin, G. J. (2010). Evidence-based interventions for preventing substance use disorders in adolescents. *Child and Adolescent Psychiatric Clinics of North America*, 19(3), 505-526.

Hagell, A. (2013). Adolescent substance use. *AYPH Research Summary*, 15, 1-9.

Holloway, I. & Wheeler, S. (2010). *Qualitative research in nursing and healthcare*. Chicago: John Wiley & Sons.

Jules-Macquet, R. (2015). Exploring Substance Use Among South African Adult And Young Offenders. *NICRO for a safe South Africa*. Pretoria: South Africa.

Mini Drug Master Plan. (2011/12-2013/14). Pretoria: Government Printers.

Mouton, J. & Marais, H.C. (1996). *Basic concepts in the methodology of the social sciences. Revised edition – fifth impression*. Pretoria: HSRC.

Page, R.M., Dennis, M., Lindsay, G.B. & Merrill, R.M. (2011). Psychosocial Distress and Substance Use Among Adolescents in Four Countries: Philippines, China, Chile, and Namibia. *Youth & Society*, 43(3) 900–930.

Richardson, C.G., Kwon, J.Y. & Ratner, P.A. (2013). Self-esteem and the Initiation of Substance Use Among Adolescents. *Can J Public Health*; 104(1), 60-63.

Sehularo, L.A., Manyedi, M.E. & du Plessis, E. (2016). Substance use prevention programmes among adolescents focusing on resilience as a protective factor: A systematic review. *African Journal for Physical Activity and Health Sciences*, 22(1:2), 227-241.

Sehularo, L.A., Manyedi, M.E., du Plessis, E. & Pienaar, A.J. (2015a). Stakeholders' understanding of resilience as a protective factor in a substance use prevention programme for adolescents. Unpublished article.

Sehularo, L.A., Manyedi, M.E., du Plessis, E. & Pienaar, A.J. (2015b). Stakeholders' perceptions of how substance use can be prevented among adolescents by focusing on resilience as a protective factor. Unpublished article

Sinclair, M. (2007). A guide to understanding theoretical and conceptual frameworks. *Evidence Based Midwifery* 5(2): 39.

Stagman, S., Schwarz, S.W. & Powers, D. (2011). *Adolescent Substance Use in the U.S. Facts for Policymakers*. National Centre for Children in Poverty: Mailman School of Public Health, Columbia University.

Ukachi, M. (2013). Motivational interview, evidence based strategy in the treatment of alcohol and drug addiction. *An International Journal: Psychotherapy: Unity in Diversity*, 21(3), 174-196.

United Nations Office on Drugs and Crime (UNODC). (2004). *Conducting Effective Substance Abuse Prevention Work among Youth in South Africa*. Pretoria: South Africa.

United Nations Office on Drugs and Crime (UNODC). (2003). Peer to peer: using peer to peer strategies in drug abuse prevention. Pretoria: South Africa.

Visser, M. & Routledge, L. (2007). Substance abuse and psychological well-being of South African adolescents. *South African Journal of Psychology*, 37(3), 595-615.

**Manuscript Five: Illegal substance use prevention programme for
adolescent learners**

Illegal substance use prevention programme for adolescent learners

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Abstract

The aim of the present study was to develop and validate illegal substance use prevention programme for adolescent learners. An intervention research design was adopted to develop and validate the programme. The design involves four phases, namely problem analysis and planning, information gathering and synthesis, design as well as early development and validation. The findings confirmed the content of the programme, and indicate that the programme to prevent illegal substance use among adolescent learners should focus on strengthening adolescents' resilience and on mobilising protective factors. Experts in mental health and substance use disorders as well as adolescent learners validated the programme. Both the experts and the adolescent learners indicated that the programme is clear, simple, general, accessible and important. A unique contribution of this study is the development of a conceptual framework and illegal substance use prevention programme for adolescent learners. This programme adds important knowledge and practice guidelines to the field of psychiatry and mental health. Recommendations were made for implementation of the programme.

Keywords: adolescent, prevention programmes, substance use prevention, resilience, protective factor

Introduction

Illegal substance use among adolescent learners should be identified and addressed before the problems arise. Illegal substance use among adolescent learners needs to be prevented (NIDA, 2014). The early onset of illegal substance use particularly among adolescent learners leads to later negative social, health, and behavioural consequences comprising physical and mental health problems, violent and aggressive behaviour, and adjustment problems (Griffin & Botvin, 2010). According to the researcher's personal experience as a mental health nurse specialist at a psychiatric hospital in the NWP of SA, some problems associated with using illegal psychoactive substances particularly among adolescent learners include multiple readmissions at psychiatric hospitals due to dual or triple diagnosis and these are often triggered by early onset of illegal substance use.

In addition to the above concerns, there are challenges on available prevention programmes for illegal substance use among adolescent learners. For example, some provinces such as the NWP of SA do not have illegal substance use prevention programmes for adolescent learners. Toumbourou, Stockwell, Neighbours, Marlatt, Sturge and Rehm (2007) indicated that available approaches to illegal substance use prevention in some countries are ineffective and in some cases contraindicated. There are also inconsistencies in some prevention programmes for illegal substance use among adolescent learners (Stephens, Sloboda, Stephens, Teasdale, Grey, Hawthorne, & Williams, 2009). Many programmes have not been evaluated at all (Bandy & Moore, 2008). There are also debates about who the most appropriate stakeholders should be in order to implement illegal substance use prevention programmes (Soole, Marezolle & Rombouts, 2007). On the other hand, Stephens et al. (2009) mention that while the prevention field has made good progress in improving the efficacy of prevention programmes, there is still much to learn about how best to construct and implement these programmes to produce desired results in reducing illegal substance use among adolescent learners. Schwartz, Waddell, Barican, Nightingale, Gray-Grant and Pauls (2010) mention another point in this regard, that when prevention is challenging there is still much that can be done such as conducting more studies on this topic. This highlights the gap that more research is needed on prevention programmes for illegal substance use among adolescent learners. Despite the above discussion, a consensus is that prevention programmes can work,

and people can and do recover (SAMSA, 2014). Prevention is especially recommended with adolescent learners, who often can be reached before problems become entrenched because the aim is to stop problematic use before it begins (Schwartz et al., 2010). Reles (2011) indicates that prevention of illegal substance use among adolescent learners is a process that attempts to stem the beginning of illegal substance use or limit the development of challenges associated with using illegal psychoactive substances.

Evidence suggests that the rates of illegal substance use among adolescent learners can be reduced through early-intervention programmes (Toumbourou et al., 2007). Effective prevention of illegal substance use requires that the same messages about the illegal substances be delivered by multiple messengers. According to Owen (2010), prevention of illegal substance use particularly among adolescent learners is effective when attention is given to resilience as a protective factor. In addition, Dillon, Chivite-Matthews, Grewal, Brown, Webster, Weddell, Brown and Smith (2007) mention that the protective factors enhance resilience of an adolescent learner for coping with risk factors and protecting them from illegal substance use. Protective factors help delay adolescent learners' experimentation with illegal substances and thus reduce long-term problems (Owen, 2010). In line with Soole et al. (2007), a proposed programme should thus seek to build resilience in the adolescent learners in order to resist illegal substance use. The above information therefore highlights the reasons why it is important to develop and validate illegal substance use prevention programme focusing on resilience as a protective factor for adolescent learners.

No documented illegal substance use prevention programmes focusing on resilience as a protective factor are currently available for adolescent learners in the NWP of SA could be found. The present study fills this gap. The following research question was asked to answer this concern: "What should illegal substance use prevention programme for adolescent learners entail?" The purpose of the present study was therefore to develop and validate illegal substance use prevention programme for adolescent learners in the NWP of SA.

Research methodology

The research methodology for this study is discussed according to programme development and programme validation.

Programme development

The programme was developed from a systematic review and qualitative, exploratory, descriptive and contextual research results, a conceptual framework and literature control. A systematic review was conducted to explore and describe current evidence on substance use prevention programmes among adolescents focusing on resilience as a protective factor (Sehularo, Manyedi & du Plessis, 2016).

A qualitative, exploratory, descriptive, contextual research was conducted to explore stakeholders (that is, professional nurses, teachers, parents and the adolescents) perceptions of resilience as a protective factor in illegal substance use prevention programme for adolescent learners (Sehularo, Manyedi, du Plessis & Pienaar, 2015a unpublished article) and their perceptions of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor in the NWP of SA (Sehularo, Manyedi, du Plessis & Pienaar, 2015b unpublished article). A purposive sampling technique was utilised to select all stakeholders for inclusion in the present study. Focus group discussions and field notes were used to collect data from all groups of participants. Tesch's method of qualitative data analysis was utilised in the study (in Creswell, 2009).

Based on the results of systematic review and qualitative research, a conceptual framework and the programme were developed. A conceptual framework was used to guide the researcher to link the results of systematic review and qualitative research with the programme. The survey list of the Practice Oriented Theory of Dickoff, James and Wiedenbach (1968) as well as Mouton and Marais' (1996) characteristics of precursive theoretical models were used as a guide for deducing the conceptual framework and developing the programme.

Programme validation

The programme was validated through presentation of the results of qualitative research at an international conference, experts in mental health and substance use disorders as well as adolescents in the NWP of SA.

Presentation of results at international conference

The programme was validated through presentation of the results of qualitative research at an international conference in April 2015 (*see Appendix M for presentation slides*). The feedback from reviewers attending this conference is discussed later in this manuscript.

Experts' validation

The programme was further validated through submitting a description of the programme to mental health care experts. The experts' included two community mental health nurse specialists, a psychologist and a psychiatrist (*see Appendix P for their brief curriculum vitae*). One community mental health nurse specialist is a research professor at a local university in the NWP of SA. The other specialists are employed at public and private mental care institutions in the NWP of SA. These mental health care experts met selection criteria of having experience and relevant qualifications in mental health and substance use disorders, registration with SANC or HPCSA as well as the ability to give voluntary informed consent. Chinn and Kramer's (2008) critical reflection questions, which answered questions about the programme's clarity, simplicity, generality, accessibility and importance was used to obtain experts' feedback about the programme (*see Annexure O for example of a validation form*). Tesch's method was used to analyse participants' feedback about the programme (in Creswell, 2009).

Participants (adolescents) validation

The programme was also validated in two public schools in the NWP of SA. The schools were chosen by the district coordinators for inclusion in the study. The validation of the programme included adolescent learners aged between 10 and 19 years and who were purposively selected for their voluntary participation in the validation process. The researcher used focus group discussions as well as field notes to obtain participants' feedback about the programme. In focus group discussions, the researcher presented the programme to two groups of adolescent learners and participants gave feedback about the programme. After presentation of the programme, Chinn and Kramer's (2008) critical reflection questions, which answered questions about the programme's clarity, simplicity, generality, accessibility and importance, were used in focus group discussions to obtain participants' feedback about the programme. After focus group discussions, the researcher and the co-coder followed Tesch's method of qualitative data analysis to analyse data (in Creswell, 2009).

Ethical considerations

Approval to embark on this study was granted by School of Nursing Science, Faculty of Agriculture, Science and Technology Health Research Ethics Committee as well as the Research Ethics Committee of the North-West University, North West Provincial Department of Health and of Education, Districts Offices, public psychiatric hospitals as well as public schools where data was collected. The researcher conducted this study ethically from the identification of the topic, demonstrating consistency in reporting of results of all phases until publication of this article. The researcher conducted this study under the supervision of three promoters from two different campuses of the North-West University. The researcher described the programme in such a way that participants' names, schools or hospitals cannot be traced. All sources used in the programme were acknowledged in text and the reference list. The study settings and participants were selected fairly for inclusion in this study. Participants were selected for reasons directly related to the research problem, not because they were readily available or can be easily manipulated and they participated in this study voluntarily.

Trustworthiness

Trustworthiness was ensured by following Lincoln and Guba's framework (in Holloway & Wheeler, 2010). Credibility was ensured by conducting this study under the supervision of experts in programme development and validation. Triangulation was done for developing the programme through the use of data from different sources as well as literature control. The programme was also validated by different stakeholders. For example, the researcher has presented the results of qualitative study at an international conference in April 2015 (*see feedback under programme validation*). Again, participants in the programme validation process included different mental health practitioners namely two mental health nurse specialists, a psychiatrist and a psychologist. The programme was also validated by the adolescent learners in two focus group discussions. The results of programme validation process were co-coded by an experienced qualitative researcher, who is also a postdoctoral student. The results of the programme are congruent with those of past studies and a literature control. The results of this thesis will be examined by three external examiners that are not known by the researcher and five articles will be published from the thesis. The research methodology followed to develop and validate illegal substance use prevention programme for adolescent learners was described in detail as a way of ensuring dependability. The researcher believes that if the present study is duplicated with similar of same participants in the same setting, its results would be recurring. Confirmability was achieved through the use of recording tape and field notes during programme validation with the adolescent learners in order to ensure that the data represented the information provided by the participants. To ensure transferability, the research methodology which was used to develop and validate the programme is described in detail so that the programme can be transferred or applied in other contexts or other provinces of SA.

Results and discussion

The results of this phase are arranged according to a conceptual framework, development and validation of illegal substance use prevention programme for adolescent learners.

Conceptual framework

A conceptual framework was used in this study to guide the researcher to link the results of systematic review and qualitative research with the programme (*see Tables 1-3 below for the results of systematic review and qualitative research*):

Table 1: Results of systematic review on current evidence on substance use prevention programmes among adolescents focusing on resilience as a protective factor

Themes	Sub-themes
Theme 1: Features of a prevention programme	<ul style="list-style-type: none"> • Prevention programme should be brief and attractive and to the point • Programme activities should include pictures, videos, comic strips • Programme could also include specific theme in each session • Programme should be delivered in multiple languages • Programme could be advertised in different contexts
Theme 2: Protective factors relevant to a prevention programme	<ul style="list-style-type: none"> • Peer-related protective factors • Parent-related protective factors • Family-related protective factors • Community-related protective factors • School-related protective factors

Table 2: Converged results of stakeholders' perceptions of resilience as a protective factor in illegal substance use prevention programme for adolescent learners

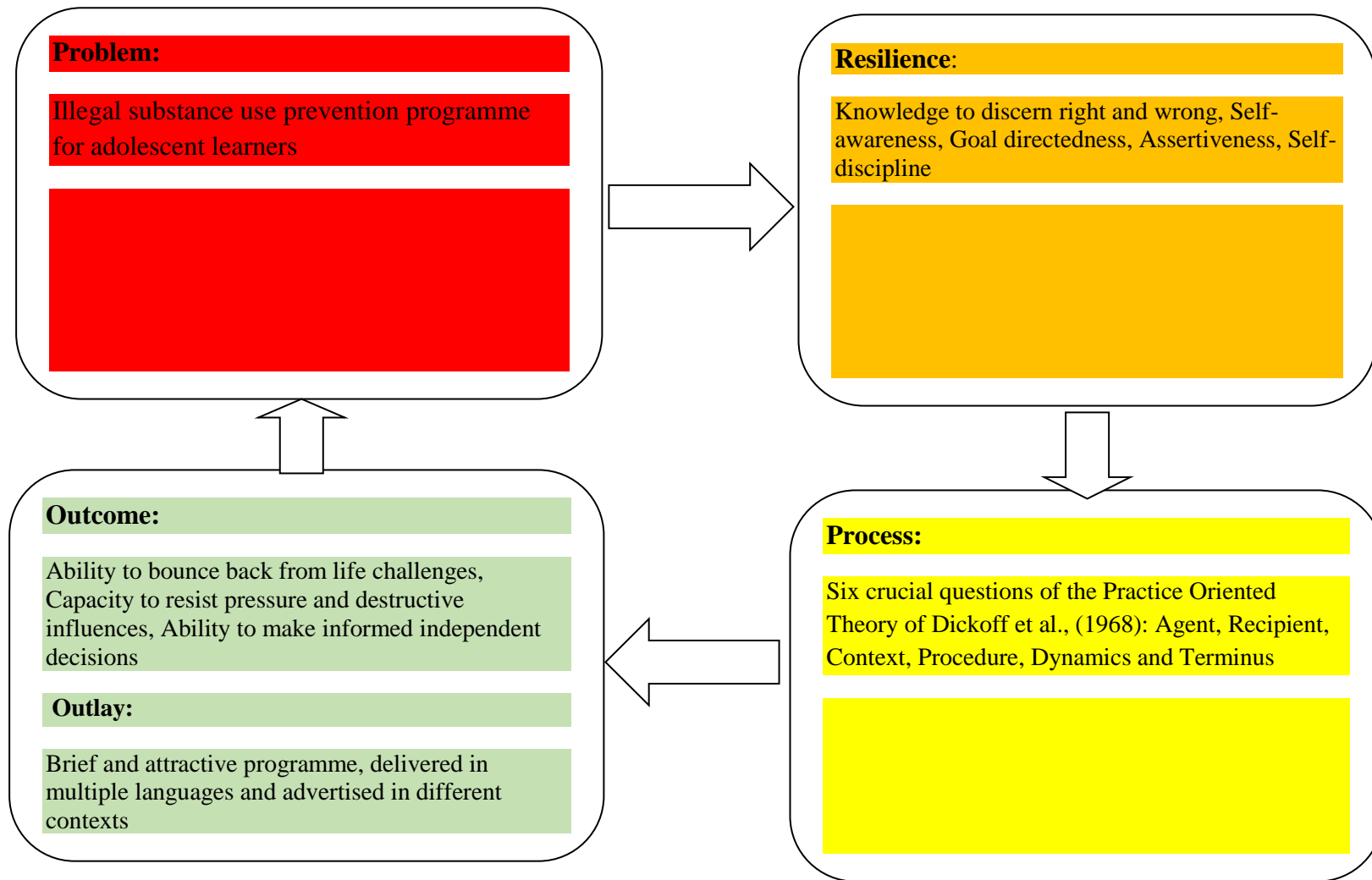
Converged results on the stakeholders' perceptions of resilience as a protective factor for illegal substance use prevention programme for adolescent learners	
Themes	Sub-themes
Theme 1: Characteristics of resilient individuals	<ul style="list-style-type: none"> - Knowledgeable to discern right and wrong - Self-awareness - Goal directedness - Assertiveness - Self-discipline
Theme 2: Competencies of resilient individuals	<ul style="list-style-type: none"> - Ability to bounce back from life challenges - Capacity to resist pressure and destructive influences - Ability to make informed independent decisions

Table 3: Converged results on the stakeholders’ perceptions of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor

Theme 1:	Theme 2:	Theme 3:	Theme 4:	Theme 5:
Peer-related activities	Parent-related activities	School-related activities	Community-related activities	Government-related activities
Subthemes	Subthemes	Subthemes	Subthemes	Subthemes
<ul style="list-style-type: none"> - Positive peer relationships - Peer education - Forming or joining support groups 	<ul style="list-style-type: none"> - Parental education - Parental supervision - Parental monitoring - Parental support - Parents as role models - Constructive communication with parents 	<ul style="list-style-type: none"> - Conducting awareness campaigns - Continuous random body searches of learners by the police and teachers - Offering Facebook platforms to communicate illegal substance use education - Arranging rehabilitation center visits for adolescents - Stricter laws at schools 	<ul style="list-style-type: none"> - Participating in constructive activities - Community meetings - Community involvement - Respecting others - Community prayers 	<ul style="list-style-type: none"> - Raise age of accessing alcohol - Ban alcohol advertisements - Stringent penalties on foreigners - Collaboration among stakeholders (school health nurses, mental health nurses, social workers and registered counselors, police officers, life orientation teachers, pastors, community policing forums, community members, former substance users, parents, adolescents, friends and government)

From the above findings of a systematic review and qualitative research, the survey list of the Practice Oriented Theory of Dickoff, James and Wiedenbach (1968) as well as Mouton and Marais' (1996) characteristics of precursive theoretical models were used as a guide for deducing the conceptual framework. The concept map of the conceptual framework for illegal substance use prevention programme for adolescent learners is given in the next page:

Conceptual Framework Map *(Designed by Sehularo & Pienaar and drawn by Mvala, 2016)*



Brief description of a conceptual framework

Conceptual framework is briefly described in this manuscript. A detailed description of the conceptual framework for illegal substance use prevention programme for adolescent learners is given in the previous manuscript (Sehularo, Manyedi, du Plessis & Pienaar, 2015c unpublished manuscript).

Problem

Illegal substance use among adolescent learners is a serious concern for government policy makers, researchers and mental health care practitioners. Illegal substance use among adolescent learners contributes to morbidity and mortality rates throughout Canada, United States and globally (Griffin & Botvin, 2010). However, it seems there are no illegal substance use prevention programmes for adolescent learners in the NWP of SA. Therefore, the researcher deemed it necessary to develop and validate illegal substance use prevention programme for adolescent learners in the NWP of SA.

Resilience

Resilience is understood as the behaviours that adolescent learners demonstrate in making their independent decisions not to use illegal substances and putting this into practice (Dillon et al., 2007). Therefore, adolescent learners should be assisted to discern right and wrong, to be self-aware, goal directness, assertive and self-disciplined.

Process

The process for preventing illegal substance use among adolescent learners includes the six crucial questions of the Practice Oriented Theory of Dickoff et al. (1968). These six crucial questions focus on the agents, recipients, context, procedure, dynamics and terminus of the programme.

Outcome and outlay

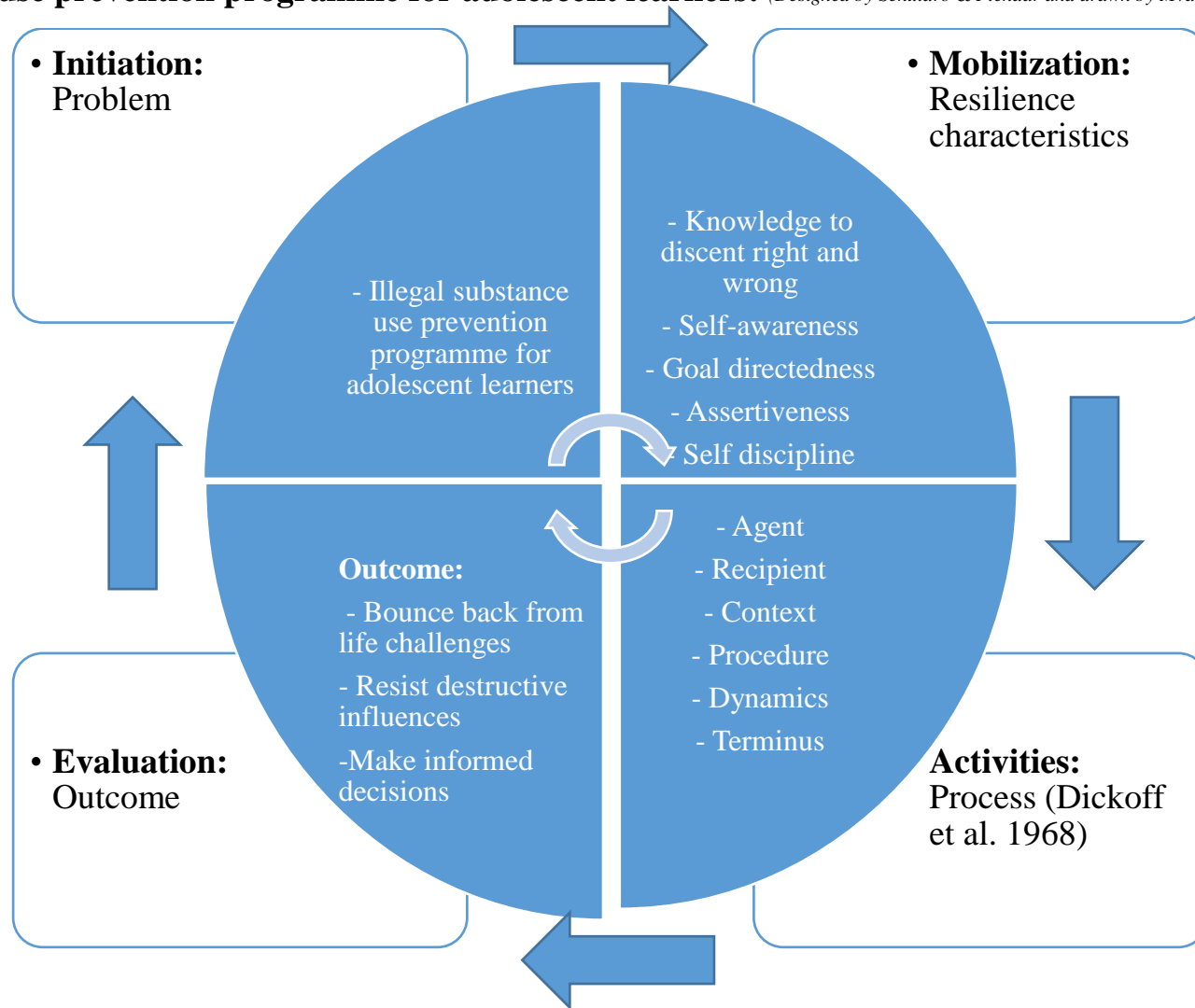
The outcome of the programme is that adolescent learners participating in illegal substance use prevention programme should be able to bounce back from life challenges, be able to resist pressure and destructive influences and be able to make informed independent decisions. The programme should be brief and attractive. The programme should also be delivered by different stakeholders to adolescents in multiple environments. The programme should be advertised in different contexts. These dynamics will enhance the development of a sustainable illegal substance use prevention programme for adolescent learners.

The programme was deduced according to this conceptual framework, as discussed below.

Programme development

The programme was developed through integrating and synthesizing the results of a systematic review and qualitative research and related literature, and ultimately using the conceptual framework as a guide and structure. The illegal substance use prevention programme is given in the next page:

Illegal substance use prevention programme for adolescent learners: *(Designed by Sehularo & Pienaar and drawn by Mvala, 2016)*



The description of the programme

The description of the programme is given in the following paragraphs:

Initiation (Illegal substance use problem)

Illegal substance use among adolescent learners need to be identified and prevented (NIDA, 2014). Early onset of illegal substance use particularly among adolescent learners leads to later negative social, health and behavioural outcomes including physical and mental health problems, violent and aggressive behaviour, and adjustment problems (Griffin & Botvin, 2010). According to available literature, it is far better to prevent adolescent learners from beginning to use substances than intervening at a later stage trying to get them to give up those illegal substances (UNODC, 2004). As a result, there is a need to develop and validate illegal substance use prevention programme for adolescent learners, particularly in the NWP of SA, where there are no programmes available to prevent illegal substance use among this population.

Mobilisation of resilience characteristics

There is a need to foster resilience characteristics among adolescent learners. A study by Sehularo et al. (2015a, unpublished article) indicated that resilience characteristics such as knowledge to discern right and wrong, self-awareness, goal directedness, assertiveness and self-discipline should be mobilised in order to prevent illegal substance use among adolescent learners. This is a strength-based approach to the fight against illegal substance use among this population. Resilient individuals are knowledgeable and healthy, they are hopeful and have high self-awareness (Brooks & Goldstein, 2007). They are are focused on the future and are goal-directed, they are solution focused, assertive and possess good communication skills (Theron, Theron & Malindi, 2012).

Activities (Process to prevent illegal substance use among adolescent learners)

Activities to prevent illegal substance use among adolescent learners involve the six crucial questions of the Practice Oriented Theory of Dickoff et al. (1968). The six crucial questions

focuses on the agent, recipient, context, procedure, dynamics and terminus. The application of Dickoff et al. (1968) in the programme is explained below:

Agents of the programme (Who or what performs the programme?)

The words ‘stakeholders’ and ‘agents’ will be used interchangeably because both words refer to groups of people who have the information that should be taken into serious cognizance, which will be important to use when implementation the proposed programme and have an interest in research outcomes (Deverka, Lavalley, Desai, Esmail, Ramsey, Veenstra & Tunis, et al., 2013:182). Stakeholders (agents) in this programme should thus include agents that strengthen and mobilise available protective factors namely health workers like school health nurses, mental health nurses, social workers and registered counselors, police officers, life orientation teachers, pastors, community policing forums, community members, former substance users, parents, adolescent learners, friends and the government. Some of these stakeholders are already working with adolescents who have illegal substance use problems in the NWP of SA. So, their unique experience and/or qualifications assist to make this programme a success. The roles of stakeholders in preventing adolescents’ illegal substance use are given below.

Parents should be the first people to prevent illegal substance use among adolescent learners because they know them better than anyone else. They should act as role models, supervising, monitoring and supporting adolescent learners at all times. Parents should start by creating a warm and favourable environment to avoid stressors that may push adolescent learners into illegal substances. They should also talk to the adolescent learners about illegal substances, regardless of how old adolescents are, but they should not be harsh on them.

School health and mental health nurses should coordinate the programme but other stakeholders might also be leaders of the programme in their respective contexts. For example, parents leading the programme at home. School health and mental health nurses should educate other stakeholders such as adolescent learners, teachers, parents and the community members about the negative effects of illegal substance use among adolescent learners. They should also make the different agents aware of the programme and its benefits, and guide the different agents to collaborate and initiate such a programme.

Social workers should do home visits and intervening appropriately where there is a need because some of the adolescents use illegal substances because of social problems. When social workers do home visits, they should also make parents, adolescents and community members aware of this programme and its benefits.

Registered counselors should be employed in all schools. They should work closely with other stakeholders such as school health and mental health nurses at local mental health care institutions in their efforts to prevent illegal substance use among adolescent learners. They should also do continuous counselling and education about the dangers or effects of illegal substance use among adolescents. They should also obtain adolescent learners' cooperation during body searches for illegal substance use, and counsel and refer those who are suspected to be using illegal substances to relevant institutions such as psychiatric hospitals.

Police officers should work together with other stakeholders such as community members, community policing forums, nongovernmental and governmental departments such as the department of health, social development, justice and education. They should continuously visit schools unannounced and searching all adolescent learners for possession or use of illegal substances in the school premises (UNODC, 2004). Police officers should show respect when they search adolescent learners for illegal substances. They should also educate adolescent learners about characteristics and capabilities of resilient individuals and the negative effects of illegal substance use and refer those who have serious illegal substance use problems to the relevant mental health care institutions.

Life orientation teachers should educate adolescent learners about the negative effects of illegal substances. They should also continuously conduct awareness campaigns in schools to make adolescent learners aware of the dangers of illegal substance use among adolescents. They should arrange visits for school learners (adolescents) to go and see mental health care users who are suffering from the negative effects of illegal substance use.

Pastors, as moral and spiritual leaders, should counsel, educate and pray for adolescent learners to stop illegal substance use. This is because of their belief that prayer brings hope and with God everything is possible. Pastors should visit schools and hospitals in the province to educate, counsel and pray about illegal substance use.

Community policing forums should be established and made viable in every community. These stakeholders should work together with the local police stations and other community organisations. They should patrol the communities and report adolescent learners' who use illegal substances to the police and the community leaders. They should also be trained on different illegal substances.

Community members should be involved in preventing adolescent learners' illegal substance use, including former substance users. They should focus on activities that build resilience such as conducting of community meetings where community members can be able to share information on any substance related issue. They should also use their spirituality to influence adolescent learners and hence stop illegal substance use in their community meetings.

Former illegal substance users should also participate in the prevention of illegal substance use among adolescent learners in the NWP of SA. For instance, a school health or mental health nurse should make arrangements for adolescent learners to visit mental health care institutions so that adolescent learners can see people suffering from the negative effects of illegal substance use. Proper arrangements should be made with management of mental health care institutions in consideration of the ethical aspects. For instance, when adolescent learners arrive at those mental health care institutions, former illegal substance users should have a talk with adolescent learners, inform them about the dangers or effects of illegal substance use because it seems likely that adolescent learners understand better when they hear about the dangers of illegal substance use from former substance users.

Adolescent learners and their friends, because they share almost everything most of the times, should educate each other about the effects of illegal substance use. On the other hand, adolescent learners should also choose friends who are like themselves, who do not use illegal substances.

Government should speed up the process of constitutionally raising the age of possessing and consuming alcohol from the present 18 to 21. They ought to ban or limit alcohol advertisements because adolescent learners use illegal substances such as alcohol when they see the glamorous advertisements on television or they heard about the hyped effects of such illegal substances on the radio. Government should also come up with stricter penalties for people who are involved in drug trafficking especially those who bring illegal substances from other countries to South Africa.

Recipients of the programme (Who or what is the recipient of the programme?)

The recipients of this programme are adolescent learners aged between 10 and 19 years and this includes substance users and non-users. When the recipients (adolescent learners) participate in such a programme, they are assisted to terminate (substance users) or prevent the onset of illegal substance use in NWP of SA. In line with Kulis, Nieri, Yabiku, Stromwall and Marsiglia (2006), participating in the programme empowers adolescent learners to be resilient by resisting illegal substances. In the case of adolescent learners who use illegal substances, the attainment of resistance skills could facilitate reduced or recently discontinued use whereas in the case of non-using adolescent learners, it facilitates continued abstinence from illegal substance use initiation. Adolescent learners (recipients) will be guided by the school health nurse or any other relevant agent to display their characteristics and capabilities of resilient individuals to be able to make informed independent decisions to resist the pressure of using illegal substance(s). Different stakeholders (agents) should also collaborate in identification of recipients and on implementation of the programme.

Context of the programme (In what context is the programme performed?)

This unique programme should be performed by different agents for the recipients in different contexts such as adolescent learners' homes, schools, communities, youth centers and community health centers where they are at high risk of accessing and using various illegal substances and where there is a need to initiate such a programme. The programme can also be advertised in virtual contexts such as in Facebook pages and websites. The most effective context to promote the prevention of illegal substance use is at school where adolescent learners receive most of their health education and where most of the agents are involved.

Procedure of the programme (What is the guiding procedure, technique or protocol of the programme?)

The guiding procedure, technique or protocol of the programme involves two steps. The first step focuses on strengthening adolescent learners' resilience and the second step focuses on mobilisation of protective factors related to resilience to prevent illegal substance use among adolescent learners. These two steps are discussed below.

Step 1: Strengthening adolescents' resilience as a protective factor

Adolescent learners' resilience should be strengthened by focusing on their resilience characteristics and competencies. When participating in the programme, adolescents should display characteristics of resilient individuals such as knowledge to discern right and wrong, self-awareness, goal directness, assertiveness as well as self-discipline. Additionally, when adolescent learners participate in the programme, they eventually increase their knowledge of what is more or less effective, particularly regarding illegal substance use and subsequently get protected from using illegal substances. With regards to their competencies, when adolescent learners participate in the programme, they should be guided to display competencies of resilient individuals such as the ability to bounce back from life challenges, capacity to resist pressure and destructive influences and ability to make informed independent decisions.

Adolescent learners' resilience characteristics and competencies should be strengthened by all stakeholders. For example, stakeholders should start by praising adolescent learners when they start showing these characteristics and competencies. All stakeholders mentioned under agents above should be actively involved. The school health or mental health nurse should teach adolescent learners how to be assertive without being aggressive, particularly at school where adolescent learners sometimes become aggressive due to use of illegal substances. On the other hand, stakeholders in their different contexts should teach adolescent learners about generic skills training programmes. School health nurses and other relevant agents should also teach adolescent learners social influence programmes. Adolescent learners should also be taught good communication skills so that they can express their needs, thoughts and feelings (Steyn, 2006). School health nurses should also teach other stakeholders communication skills such as making use of eye contact, questioning, listening, paraphrasing, reflecting and summarizing so that these adolescent learners can be able to communicate

effectively with parents and draw their attention. Lastly, stakeholders should help adolescent learners believe that they can succeed with illegal substance use problem if they try. Stakeholders should provide situations in which adolescent learners are able to succeed (Harvey, 2007). After participating in the programme, the school health nurse should assess whether adolescent learners' resilience has improved. Possible ways of assessing adolescent learners' resilience includes one-on-one interviews and formal reports from the life orientation teachers about adolescent learners. The school health nurse can also get progress reports about the identified adolescent learners from their parents.

Step 2: Mobilising protective factors related to resilience to prevent illegal substance use

The programme aims at strengthening protective factors through peer, parental, school, community and government-related activities. The following paragraphs explain how these activities should be mobilised to prevent illegal substance use among adolescent learners.

Mobilisation of protective factors through peer-related activities

Peer-related activities by different stakeholders involve teaching adolescent learners to form positive peer relationships. Stakeholders, in their unique contexts, should provide adolescent learners with accurate information about their peers. Misconceptions on the subject of adolescent learners' illegal substance use are also corrected and replaced with more accurate information (Soole et al., 2007). Stakeholders should also encourage adolescent learners to use peer education when they prevent illegal substance. Stakeholders should also encourage adolescent learners to form or join support groups either at school or in the community.

Mobilisation of protective factors through parent-related activities

Effective prevention of illegal substance use among adolescent learners should start at home. Parents should start by being role models for adolescent learners and creating a warm and favourable environment to avoid stressors that may push the adolescent learners into illegal substances. For example, they should not use substances such as alcohol in front of adolescent learners. Secondly, there should be constructive communication between parents and adolescent learners. For instance, parents should always strive to talk to adolescent learners respectfully and constructively, because this makes their message clear and trustworthy to the adolescent learners. Parents should also educate adolescent learners about illegal substances and how to resist outside pressures. Parents should also monitor and supervise adolescent learners. Parents should be less strict and more supportive on adolescent learners so that they are free to share everything with them at all times.

Mobilisation of protective factors through school-related activities

School-related protective factors should be mobilised through appointment of school health nurses in all schools. School health nurses should work together with other stakeholders such as the mental health nurses, adolescents, life orientation teachers and community members to prevent illegal substance use in schools. They should strengthen school-family partnership intervention and train life orientation teachers about the benefits of this programme. They should teach other stakeholders communication skills such as making minimal verbal response, paraphrasing, reflecting, clarifying and summarising. Secondly, school health nurses should train life orientation teachers and principals how to conduct illegal substance use awareness campaigns just to make adolescent learners aware of the dangers of illegal substance use. Resilience promoting teacher behaviour is also needed in all schools, which includes the life orientation teachers knowing adolescent learners by their names, as well as life orientation teachers being firmly in control of the class and remaining calm in volatile situations (Du Toit, 2010). The school principal or his or her delegate may also, randomly search any group of learners, or the property of a group of learners, for the substances, if a fair and “reasonable suspicion” has been established (Jobert, Sughrue & Alexander, 2013).

Thereafter, they should discipline adolescent learners who possess, use or distribute illegal substances in their schools. Both the school health nurses and the life orientation teachers should arrange rehabilitation centre visits for the learners so that they can see people suffering from the negative effects of illegal substance use. Schools should use social networks such as a Facebook and what's up groups to communicate illegal substance use education.

Mobilisation of protective factors through community-related activities

Community-related activities should be initiated by the school health nurses through teaching community members about the programme and by encouraging them to participate actively in the fight against illegal substance use in their own communities. Community involvement including conduction of meetings in illegal substance prevention can be effective where it is well designed using strategies that reduce either illegal substance use behaviour, the underlying influences that lead to this behaviour or factors that result in substance-related harm (Resource Guide for Planning Effective Drug Prevention, 2009). Community members can also participate in illegal substance use prevention programmes by praying for the adolescent learners to terminate illegal substance use. Community based participatory research is an important approach in ensuring community ownership of and investment in the programme adaptations, implementation, and evaluation (Baydala, Kyme, Rasmussen, Fletcher, Letendre, & Sewlal, 2012).

Mobilisation of protective factors through government-related activities

Government-related activities should be initiated by the school health nurses when they encourage different stakeholders and the government to collaborate in their efforts to prevent illegal substance use among adolescent learners in the NWP of SA. School health nurses should also strengthen collaboration between stakeholders and the government. This is because effective solutions to illegal substance use problems require bold collaboration across school, family, and community systems (Lasser & Schmidt, 2009). School health

nurses should also encourage the government to apply stringent penalties on people who possess, use or distribute illegal substances to the adolescent learners.

Dynamics of the programme (What is the energy source for the programme?)

A number of dynamics and power sources need to be considered in order to successfully prevent illegal substance use among adolescent learners in the NWP of SA. Firstly, this programme should be based on the values related to resilience as a protective factor through peer, parental, school, community and government-related activities. An effective illegal substance use prevention programme should be brief and attractive and to the point. The programme should also include interactive activities and be delivered in an engaging and interesting fashion. The programme should also include a specific theme in various sessions, meetings and interactions with adolescent learners, covering a variety of issues such as smoking, drinking, safe sex, and HIV/AIDS. The programme should be delivered in multiple languages to reach a broader audience. The specific programme will be delivered in multiple languages that are commonly used in the NWP of SA such as English, Setswana and Xhosa. This programme will be advertised in different contexts such as in adolescents' homes, schools, community organisations such as youth centres and community health centres, online or in public transport. Networks such as a Facebook will also be used to communicate illegal substance use education. Effective collaboration will sustain the programme. There is also a need for all stakeholders to develop good working relationships so that each of them knows exactly what he/she must do and how to do it when preventing illegal substance use among adolescents in the NWP of SA. Again, it is clear that this programme is not a once-off 'event', but rather an ongoing, comprehensive, community-wide approach to prevention. Thus, multiple agents are involved, with multiple entry points into the programme, and multiple 'levels'. The different agents will focus on different aspects, and that there is a need for a 'champion' who will create awareness and drive the initiative. Based on the current context, school health nurses are currently best to initiate the programme, but that this is not cast in stone, and that further research and validation is needed to identify a champion and starting point.

Terminus or purpose of the programme (What is the end point of the programme?)

The purpose of this programme is to prevent illegal substance use among adolescent learners in the NWP of SA through focusing on the resilience of adolescent learners as a protective factor. The expectation is that when adolescent learners participate in this programme, they avoid or stop using illegal substances. They also demonstrate strengthened characteristics and abilities of resilient individuals and the increased use of available protective factors such as peer-related activities, parent-related activities, school-related activities, community-related activities and government-related activities (*see Step 1 and 2 of the procedure of the programme*).

Evaluation

Evaluation is the last step in illegal substance use prevention programme for adolescent learners. As explained by De Vos, Strydom, Fouché and Delpont (2011), evaluation in this study refers to the systematic collection of information about programme activities, characteristics of resilient adolescent learners and outcomes of programmes to make judgements about the programme, improve its effectiveness and or inform decisions about future programming. When evaluating the current programme, adolescent learners who participated in the programme are expected to be able to bounce back from life challenges such as illegal substance use, to be able to resist pressure and destructive influences and to be able to make informed independent decisions without being influenced by anyone.

Programme validation

The following discussion highlights the results of programme validation and feedback from the reviewers, experts and participants who validated the programme. This feedback has

already been incorporated into the programme. Discussion of programme validation is given according to presentation at the conference, experts as well as adolescent's validation.

Presentation at the conference

The researcher presented results of qualitative research (*see Appendix M*) at an international conference in April 2015 to see whether information is relevant for the development and launch of an illegal substance use prevention programme for adolescent learners. Conference delegates were impressed about the information presented and verbalised that the proposed programme could work because it is comprehensive. Delegates also added that the researcher should also make a plan to reach adolescents staying on streets because the majority of them are also using illegal substances. It was also added that the programme should be advertised for the whole country because illegal substance use among adolescents is a national problem. To make the programme available for the whole country, the researcher will publish it in the form of an article and thesis for wider dissemination among like-minded professionals and present it at local, national and international conferences. Recommendations are made for the Provincial Department of Health and of Education for implementation of the programme. The researcher requested conference delegates to share information of this programme with other people such as their children, friends, families, and colleagues.

Experts' validation

The programme was validated by the experts in mental health and substance use disorders. These experts included a psychiatrist, a psychologist and two community mental health nurse specialists. One of the community mental health nurse specialists is a research professor, educationist and a community developer. The researcher sent a complete illegal substance use prevention programme for adolescent learners to the experts to validate it. Chinn and Kramer's (2008) critical reflection questions, which answered questions as to the programme's clarity, simplicity, generality, accessibility and importance were used by the

experts to document their responses about the programme (*see Appendix O for a validation form*).

Mental health experts indicated that the programme is clear and simple from the topic, purpose and activities to be done to achieve the programme objective. They wrote that it is simple to follow the programme as long as it can be written in different languages that most adolescent learners and agents can understand. One of the experts wrote: *“The topic, purpose and objectives of the programme are clear.”* Another expert wrote: *“Everything in the programme is clear even for uneducated people.”* Another expert wrote: *“Roles and responsibilities of all stakeholders are clear and straightforward, even though some stakeholders might need thorough orientation about the programme.”*

Mental health experts agree that the programme is general. To confirm this statement this is what one of the experts wrote: *“Yes it is broad enough, because almost all stakeholders that are relevant to prevent illegal substance use on adolescent learners have been covered, that includes mental health practitioners, police, community members, schools etcetera.”*

Mental health experts concur that the programme is accessible. They indicated that the programme is accessible but the resources may not be enough such as social workers who are already overloaded in the community. To confirm this statement, this is what one of the experts wrote: *“This programme is accessible but the budget may not allow for employment of more social workers, registered counsellors etc.”*

All mental health experts agree that illegal substance use prevention programme for adolescent learners is important. One of the experts wrote: *“It is a good initiative. Illegal substance use is rife and needs to be prevented and cured.”* Another expert wrote: *“The programme is important because substance-related problems are the major challenges among adolescent learners today, and something needs to be done about that.”*

In the question “What would you like to add on the programme and why?” experts added that *“recreational activities should be built to keep adolescent learners busy. This may reduce and or stop the use of illegal substances by the adolescent learners as mostly do it out of boredom and peer pressure.”* Another expert wrote that *“the role of the church and pastors should be clear. The majority of the adolescent learners belong to a particular church. If they are not at school or community, they are at church. So, the pastor as a moral or spiritual leader can contribute a lot towards the success of this important programme.”*

Adolescents' validation

The researcher used two focus group discussions with adolescent learners obtained from two public schools in the NWP of SA to validate the programme. The following paragraphs depict the results obtained during focus group discussions:

All participants conceded that the programme is clear and understandable. They indicated that the language used in the programme does not even need to be clarified, it is clear, but they indicated that the programme should be written in different languages because not all people are comfortable with English. From the discussion in focus group discussions, participants agreed: *"The programme is clear, we understand it, it is not complicated, but it just need to be written in different languages to cover more people even those who are from the rural areas, who cannot speak English well."* In another focus group discussion, participants indicated: *"Everyone knows about illegal substances and even the language used there is understandable, it does not need to be clarified or whatever..."*

Participants were in accord with regard to the simplicity of the programme. They stated that the programme is simple, straightforward and understandable. Participants made example that the programme is simple and straightforward, like a ruler. To confirm this finding, as quoted from the transcript: *"Yes it is simple, it is like a ruler, very straight, all of us here understand it."* In another focus group discussion participants said, *"this programme is very simple and straightforward; everyone can understand it and follow it."* Participants also agree that *"There are no big terms here, it is very simple to be followed."* Simplicity in this study refers to a simple and broad programme that can be used as a general guide.

There was consensus with regards the generality of the programme. Participants indicated that programme is general because it includes different stakeholders. They mentioned that all important people are covered in the programme including former substance users. This finding is confirmed by a direct quotation from the transcript: *"Yeah it is too general, because everyone is involved here, all of us should actually work together, including people from other provinces, they should also be brought in."* In another focus group discussion this was mentioned by adolescent learners: *"Our school is not the only school with problems of illegal drugs or substances in South Africa, so this programme can also be used in other provinces like Western Cape or Gauteng; I know they also have the same problem."*

Generality in this study refers to the breadth of scope and purpose; a general programme can be applied to other contexts.

Participants agreed that the programme has the potential to achieve its goal, meaning prevention of illegal substance use among adolescents in the NWP of SA. To confirm this finding, the following quote from the focus group discussion is provided: *“I really have trust in this programme, I believe it has everything to control or stop illegal substances in the Province.”* In another focus group participants agreed that *“Inclusion of all important people is a strength of this programme, hence I think it will achieve its goal of stopping illegal substances.”* Accessibility in this study refers to the extent to which the goals of the programme can be achieved.

All participants were in agreement that this unique programme is important because it has the potential to prevent illegal substance use among adolescents in the NWP of SA. To confirm this finding, participants said, *“There is actually nothing presently available in our school to control or stop illegal substances, so I think this programme is important for most of us.”* In another focus group this was emphasised by adolescent learners: *“I think it is very important because currently people especially youth or adolescents use illegal substances the way they like because there is nothing to control that, so yes it is important.”* Importance in this study refers to the clinical significance or practical value of the programme.

Conclusion

Illegal substance use prevention programme for adolescent learners in the NWP of SA was developed and validated following an intervention research design. The findings of this study confirm the content of the programme, and indicate that the programme should focus on strengthening adolescents’ resilience and on mobilising protective factors. From the findings of this study, it is hoped that this unique programme would be used to prevent illegal substance use among adolescent learners in the NWP of SA. The programme was validated by experts in mental health and substance use disorders as well as adolescents. Both the experts and the adolescents confirmed that the programme is clear, simple, general, accessible and important. This unique programme adds important knowledge to the field of

psychiatry or mental health. Recommendations were made for the implementation of the programme.

Limitations

The programme was limited to only one province, that is, NWP, out of nine provinces of SA. Also, the development and validation of the programme were mostly based on qualitative studies, so the programme cannot be generalized, but it can be transferred or applied in other provinces, contexts or settings. However, it is described in detail so that people interested in applying it in their contexts are thoroughly informed.

Recommendations

In view of the fact that there are no documented prevention programmes currently available for illegal substance use among adolescent learners in the NWP of SA, it is recommended that this newly developed programme be implemented by various stakeholders in various contexts such as in families, schools and communities for preventing illegal substance use among adolescent learners in NWP of SA. There is a need to create awareness, educate, train and prepare stakeholders such as school health nurses, mental health care nurses, life orientation teachers, adolescents, parents, community members and the government about this newly developed programme, so that they can also be thoroughly informed about what to do when preventing illegal substance use among adolescent learners in NWP of SA. There is also a need to use various approaches such as quantitative and mixed method approaches when conducting research related to prevention programmes for illegal substance use among adolescent learners. It is also recommended that other researchers and policy makers focus on using resilience as a protective factor when developing effective illegal substance use prevention programmes for adolescent learners. There is also a need to evaluate this programme in future research as part of intervention research.

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References

- Bandy, T. & Moore, K.A. (2008). What Works for Preventing and Stopping Substance Use in Adolescents: Lessons from Experimental Evaluations of Programmes and Interventions. Fact Sheet. http://www.childtrends.org/wp-content/uploads/2013/03/Child_Trends-2008_05_20_FS_WhatWorksSub.pdf. Accessed: July 2015.
- Baydala, L., Kyme, G., Rasmussen, C., Fletcher, F., Letendre, L. & Sewlal, B. (2012). *Life Skills Training (LST) Substance Abuse Prevention Program for Aboriginal Children and Youth Final Report*. Edmonton: Alberta.
- Brooks, R., & Goldstein, S. (2007). *Raising a self-disciplined child*. New York: McGraw-Hill
- Chinn, P., & Kramer, M. (2008). *Integrated theory and knowledge development in nursing*. 7th Ed. St Louis: Missouri.
- Creswell, J. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. SAGE Publications, Incorporated.
- De Vos, A., Strydom, H., Fouché, C. & Delport, C. (2011). Research at grass roots for the social sciences and human service professions, Pretoria: Van Schaik. EISA. *Electoral Institute for Sustainable Democracy in Africa. Programmes. Our Work*. Available: <http://content.eisa.org.za/old-page/our-work-2> [2014, April 28].
- Deverka, P.A., Lavalley, D.C., Desai, P.J., Esmail, L.C., Ramsey, S.D., Veenstra, D.L. & Tunis, S.R. (2013). Stakeholder participation in comparative effectiveness research: defining a framework for effective engagement. *Journal of Comparative Effectiveness Research*, 1(2), 181-194.
- Dickoff, J., James, P. & Wiedenbach, E. (1968). Theory in a practice discipline: Part I. Practice Oriented Theory. *Nursing research*, 17(5), 415-434.

Dillon, L., Chivite-Matthews, N., Grewal, I., Brown, R., Webster, S., Weddell, E., Brown, G. & Smith, N. (2007). *Risk, protective factors and resilience to drug use: identifying resilient young people and learning from their experiences*. Home Office.

Du Toit, C. (2010). Raising resilience by tackling texts. *Mousaion: Children's Literature and reading/Kinderliteratuur En Lees Deur Kinders: Special Issue 2(28)*, 101-116.

Griffin, K. W., & Botvin, G. J. (2010). Evidence-based interventions for preventing substance use disorders in adolescents. *Child and Adolescent Psychiatric Clinics of North America*, 19(3), 505-526.

Harvey, V.S. (2007). Schoolwide Methods for Fostering Resiliency: Support from caring adults is key to students' success in the face of adversity. *Student Services*, 10-14.

Holloway, I. & Wheeler, S. (2010). *Qualitative research in nursing and healthcare*. Chicago: John Wiley & Sons.

Jobert, R., Sughrue, J., & Alexander, D. M. (2013). Search and seizure of learners in schools in a constitutional democracy: A comparative analysis between South Africa and the United States. *De Jure*, 46(1), 114-133.

Kulis, S., Nieri, T., Yabiku, S., Stromwall, L. K., & Marsiglia, F. F. (2006). Promoting reduced and discontinued substance use among adolescent substance users: Effectiveness of a universal prevention program. *Prevention Science*, 8(1), 35-49.

Lasser, J., & Schmidt, E. (2009). Substance use, abuse, and dependency in adolescence. *Principal Leadership*, 9(5), 12-16.

Mouton, J. & Marais, H.C. (1996). *Basic concepts in the methodology of the social sciences. Revised edition – fifth impression*. Pretoria: HSRC.

National Institute on Drug Abuse (NIDA). (2014). *Principles of Adolescent Substance Use Disorder Treatment: A Research-Based Guide*. United States of America.

Owen, P., (2010). *Preventing adolescent substance abuse*. Butler Centre for Research.

Reles, M., (2011). *Prevention Signature Initiative Grant Programs Directory*. ONDCP Office of Performance and Budget.

Resource Guide for Planning Effective Drug Prevention. (2009). *Victorian Government Department of Human Services*: Melbourne, Victoria.

SAMSA, Center for Behavioral Health Statistics and Quality. (2014). *The NSDUH Report: Substance Use and Mental Health Estimates from the 2013 National Survey on Drug Use and Health: Overview of Findings*. Rockville, MD.

Schwartz, C., Waddell, C., Barican, J., Nightingale, L., Gray-Grant, D., & Pauls, N., (2010). Preventing substance abuse in children and youth. *Children's Mental Health Research Quarterly*, 4(2).

Sehularo, L.A., Manyedi, M.E. & du Plessis, E. (2016). Substance use prevention programmes among adolescents focusing on resilience as a protective factor: A systematic review. *African Journal for Physical Activity and Health Sciences*, 22(1:2), 227-241.

Sehularo, L.A., Manyedi, M.E., du Plessis, E. & Pienaar, A.J. (2015a). *Stakeholders' perceptions of resilience as a protective factor in a substance use prevention programme for adolescents*. Unpublished article.

Sehularo, L.A., Manyedi, M.E., du Plessis, E. & Pienaar, A.J. (2015b). *Stakeholders' perceptions of how substance use can be prevented among adolescents by focusing on resilience as a protective factor*. Unpublished article.

Sehularo, L.A., Manyedi, M.E., du Plessis, E. & Pienaar, A.J. (2015c). *Conceptual framework for illegal substance use prevention programme for adolescent learners*. Unpublished article.

Soole, D. W., Mazerolle, L., & Rombouts, S. (2007). School-based drug prevention programs: A review of what works. *Australian & New Zealand Journal of Criminology*, 41(2), 259-286.

Stephens, P. C., Sloboda, Z., Stephens, R. C., Teasdale, B., Grey, S. F., Hawthorne, R. D., & Williams, J. (2009). Universal school-based substance abuse prevention programs: Modeling targeted mediators and outcomes for adolescent cigarette, alcohol and marijuana use. *Drug and Alcohol Dependence*, 102(1), 19-29.

Steyn, S. T. (2006). *Resilience in Adolescents: A Psycho-Educational Perspective*. Pretoria: UNISA. (Dissertation - MEd.).

Theron, L.C., Theron, A.M.C. & Malindi, M.J. (2012). Toward an African Definition of Resilience: A Rural South African Community's View of Resilient Basotho Youth. *Journal of Black Psychology*, 39(1), 63-87.

Toumbourou, J. W., Stockwell, T., Neighbors, C., Marlatt, G., Sturge, J., & Rehm, J. (2007). Interventions to reduce harm associated with adolescent substance use. *The Lancet*, 369(9570), 1391-1401.

United Nations Office on Drugs and Crime (UNODC). (2004). *Conducting Effective Substance Abuse Prevention Work among Youth in South Africa*. Pretoria: South Africa.

Section Three: Conclusions, Limitations and Recommendations

Section Three: Conclusions, limitations and recommendations for illegal substance use prevention programme for adolescent learners

1. Introduction

The previous section consists of five manuscripts which are written for publication in an accredited journal (*AJPHEs*). This final section of research includes conclusions, limitations and recommendations for illegal substance use prevention programme for adolescent learners. Limitations of the research are given. Recommendations are made with specific reference to education, research and practice.

2. Conclusions

The overall purpose of this research has been achieved which was to develop and validate illegal substance use prevention programme for adolescent learners through an Intervention research design. Conclusions are given based on the four phases of the design.

The first phase, problem analysis and planning, confirmed that there is a need to develop and validate illegal substance use prevention programme for adolescent learners. The second phase involved two stages namely a systematic review and a qualitative, explorative, descriptive and contextual stage. The results of the systematic review are presented in manuscript one. Two main themes were identified, namely features of a prevention programme as well as protective factors relevant to a prevention programme. The results of the qualitative, explorative, descriptive and contextual stage are presented in manuscript two and three. In the second manuscript which focused on the stakeholders' perceptions of resilience as a protective factor in illegal substance use prevention programme for adolescent learners, two main themes emerged from the results. They are characteristics of resilient individuals as well as competencies of resilient individuals. In the third manuscript which focused on the stakeholders' perceptions of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor, five themes

emerged. Those themes include peer-related activities, parent-related activities, school-related activities, community-related activities as well as government-related activities.

In the fourth manuscript, the findings of a systematic review and qualitative research were used to deduce a conceptual framework for illegal substance use prevention programme for adolescent learners. Conceptual framework was used as a guide to develop and validate illegal substance use prevention programme for adolescent learners in the fifth manuscript. The programme was validated to acquire the necessary information to assess its ability or procedures to reliably obtain desired results of preventing illegal substance use among adolescent learners. The results of the fifth manuscript confirm the content of the programme, and indicate that the programme should focus on strengthening adolescents' resilience and on mobilising protective factors.

Specific conclusions with regards to phase two to five of the research are discussed in the following sections.

2.1 Conclusions regarding Phase 2: Information gathering and synthesis

Conclusions regarding information gathering and synthesis are given below:

2.1.1 Conclusions regarding a systematic review of substance use prevention programmes among adolescents focusing on resilience as a protective factor

From the findings of a systematic review, a conclusion is drawn that little is known about substance use prevention programmes among adolescents specifically programmes focusing on resilience as a protective factor. This is due to insufficient literature obtained as evidenced by merely seven studies included in systematic review. No manual studies are available on substance use prevention programmes among adolescents, specifically programmes focusing on resilience as a protective factor in the North-West University libraries. Only one out of the

seven studies included in a systematic review emphasized the features of a prevention programme. This indicates a gap that more studies should be conducted specifically studies focusing on how substance use prevention programme for adolescents should look like. For adolescents' substance use prevention programmes to be effective, they should be brief, attractive and to the point. They should be advertised in different settings such as schools or community organizations, online, or in subway trains and buses. Substance use among adolescents can only be prevented if resilience as a protective factors are utilised effectively. Substance use among adolescents can be prevented by using the protective factors such as peer-related activities, parent-related activities, family-related activities, community-related activities and school-related activities. Parental monitoring is a universal protective factor for illegal substance use among adolescents. For example, parents should have rules concerning adolescents' substance use. Again, parents should always know about their children's whereabouts, they should know their children's companions, parents should also monitor with whom adolescents are spending their time in the evenings. As indicated in the background of this research, "prevention is better than cure". The results of a systematic review conducted in stage one of this research have the potential to prevent illegal substance use among adolescent learners in the NWP of SA. These results are included in a conceptual framework and illegal substance use prevention programme for adolescent learners in the NWP of SA, specifically as part of the agents, recipients, contexts, procedure and dynamics of the programme.

2.1.2 Conclusions regarding stakeholders' perceptions of resilience as a protective factor in illegal substance use prevention programme for adolescent learners

From the findings, literature control and the field notes on the stakeholders' perceptions of resilience as a protective factor in illegal substance use prevention programme for adolescent learners, a conclusion is drawn that there are two themes on the stakeholders' perceptions of resilience as a protective factor in illegal substance use prevention programme. These themes are characteristics of resilient individuals as well as competencies of resilient individuals. Sub-themes of the characteristics of resilient individuals include knowledge to discern right

and wrong, self-awareness, goal directedness, assertiveness as well as self-discipline. It seems that resilient individuals have characteristics of goal directedness and self-awareness. For instance, stakeholders indicated that resilient individuals know what they want or what they want to achieve in their lives. It also seems that resilient individuals are in a position to resist illegal substance use because they know how to say no to substance use. Again, resilient individuals are known by the stakeholders to be self-disciplined. For example, stakeholders in a focus group discussion with the parents mentioned that resilient individuals are self-disciplined because they always try to do the correct things at the correct time. Again, resilient individuals are perceived as people who have a better knowledge or are more knowledgeable of life in general than non-resilient individuals. They are able to differentiate what is right from what is wrong.

On the other hand, some of the competencies of resilient individuals include the ability to bounce back from life challenges, capacity to resist pressure and destructive influences as well as the ability to make informed independent decisions. Resilient individuals are able to bounce back from life challenges. For instance, in a focus group with teachers an example was made that when these resilient individuals fall, they are able to stand up and become strong again as if nothing has happened. Resilient individuals are able to resist pressure and destructive influences. For example, stakeholders indicated that there is already enough information about illegal substances out there. Stakeholders said, you go to school, they talk about illegal substances, you go home or just in the community, you still hear a lot about illegal substances. So, non-resilient individuals just need to be able to resist the pressure of using illegal substances, knowing what the substances will do to them. Resilient individuals are able to make informed independent decisions without being influenced by anyone, and stick to those independent decisions. The above information shows that stakeholders have their own way of defining resilience as a protective factor in illegal substance use prevention programme for adolescent learners. It can also be concluded that the results of the stakeholders' perceptions of resilience as a protective factor in illegal substance use prevention programme are consistent with available literature on the characteristics of resilient individuals. Therefore, they can be used to prevent illegal substance use among adolescent learners in the NWP of SA. These results are included in a conceptual framework and illegal substance use prevention programme for adolescent learners, specifically as part of the procedure of the programme.

2.1.3 Conclusions regarding stakeholders' perceptions of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor

From the findings, literature control and field notes on the stakeholders' perceptions of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor, a conclusion is drawn that there are five themes relating to resilience protective factors that may be used to prevent illegal substance use among adolescent learners in the NWP of SA. These protective factors are peer-related activities, parent-related activities, school-related activities, community-related activities as well as government-related activities. Peer-related activities that can be used to prevent illegal substance use among adolescent learners are positive peer relationships, peer education and forming or joining support groups. Parent-related activities that can be used to prevent illegal substance use among adolescent learners are parental education, parental supervision, parental monitoring, parental support, parents as role models as well as constructive communication among parents and adolescent learners. School-related activities that can prevent illegal substance use among adolescent learners include conducting awareness campaigns, continuous random body searches of learners by the police and teachers, offering Facebook platforms to communicate illegal substance use education, arranging rehabilitation center visits for adolescent learners and stricter laws at schools. Community-related activities that can prevent illegal substance use among adolescent learners are adolescents' participation in constructive activities, inclusion of former substance users, conduction of community meetings, community involvement, respecting others as well as community prayers. Government-related activities that can prevent illegal substance use among adolescent learners include the raising age of acquiring alcohol, banning of alcohol advertisements, stringent penalties on people involved in drug trafficking as well as collaboration among stakeholders. It can also be concluded that these results are consistent with available literature, particularly on the protective factors that may prevent illegal substance use among adolescent learners in the NWP of SA. These results have the potential to prevent illegal substance use among adolescent learners in the NWP of SA. These results are included in a conceptual framework and illegal substance use prevention programme for adolescent

learners in the NWP of SA, specifically as part of the agents, recipients and context of the programme.

2.2 Conclusions regarding Phase 3: Deducing a conceptual framework

From the results of systematic review and qualitative, exploratory and descriptive research and literature control, a conceptual framework was deduced for illegal substance use prevention programme for adolescent learners. A conclusion is drawn that the conceptual framework deduced in this research has the potential to prevent illegal substance use among adolescent learners in the NWP of SA. The conceptual framework is included in illegal substance use prevention programme for adolescent learners.

2.3 Conclusions regarding Phase 4: Early development and validation of illegal substance use prevention programme for adolescent learners

From the conceptual framework, literature control and illegal substance use prevention programme for adolescent learners, a conclusion is drawn that the programme should focus on strengthening adolescent learners' resilience and on mobilising protective factors. The programme has been confirmed to be clear and understandable. Participants who were included in validation of the programme indicated that the language used in the programme does not even need to be clarified, it is clear. Participants were also in accord that the programme is simple, straightforward and understandable. The programme is general and it can be applied in other provinces because illegal substance use is a national problem. The programme has the potential to achieve its goal. Meaning, prevention of illegal substance use among adolescent learners in the NWP of SA. It can also be concluded that these results are consistent with available literature, particularly on the protective factors that may assist to prevent illegal substance use among adolescent learners in the NWP of SA.

2.4 General conclusion

From the results of this research as well as the literature control, a general conclusion is drawn that illegal substance use among adolescent learners can be prevented by focusing on resilience as a protective factor in the NWP of SA. When adolescent learners of the NWP participate in this unique programme, they will be able to stop using illegal substances. Again, adolescent learners participating in this unique programme are expected to demonstrate strengthened characteristics and competencies of resilient individuals and the increased use of available protective factors such as peer-related activities, parent-related activities, school-related activities, community-related activities and government-related activities.

This programme will be delivered to the adolescent learners by different stakeholders such as health workers, school health and mental health nurses, social workers and registered counselors, police officers, teachers, pastors, community policing forums, community members, former substance users, parents, adolescent learners, friends and the government. Collaboration of these stakeholders is needed to make this programme a success. The recipients of this programme include adolescents aged between 10 and 19 years, and this includes illegal substance users and nonusers. To reach the broader recipients of the programme, adolescent learners will be recruited through advertisements in different contexts such as schools, community organisations, community meetings, community youth centres and in public transportation. Recipients will also be recruited through social networks such as Facebook pages. To make this programme effective, it should be performed by the agents for the recipients in different contexts such as adolescent learners' families, schools and communities where they are at high risk of accessing and using various illegal substances and where there is a need to initiate such a programme. Again, in order to successfully prevent illegal substance use among adolescent learners in the NWP of SA, a number of dynamics and power sources need to be considered. For example, this unique programme is brief and attractive; it also include interactive activities, it will be delivered in an engaging and interesting fashion, including online formats, it will be delivered in multiple languages such as English, Afrikaans and Setswana, it will demonstrate stakeholders' collaboration and good working relationships between the agents (stakeholders) and the recipients (adolescent learners).

3. Limitations

Although this research was carefully prepared enough to achieve its purpose, which was to develop and validate illegal substance use prevention programme for adolescent learners in the NWP of SA, there were some unavoidable limitations. These unavoidable limitations are described below:

In a systematic review of substance use prevention programmes, particularly programmes focusing on resilience as a protective factor, the researcher did not have experience of conducting a systematic review; hence he used the services of an independent reviewer. His services were not for free and it was a little bit expensive for the researcher. Most of the articles which were identified for inclusion in a systematic review were excluded because they did not meet inclusion criteria.

In a qualitative study which focused on exploring the stakeholders' perceptions of resilience as a protective factor in illegal substance use prevention programme for adolescent learners and their perceptions of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor in the NWP of SA, initially the researcher planned to recruit ten to fifteen participants in all focus group discussions. In some focus group discussions, the researcher did not obtain that targeted number of participants. Some of the adolescent learners did not show up on the day of scheduled focus group discussions, probably because data was collected during 2014 final examinations. It was also difficult to recruit the parents, as some of them were saying they do not want to be arrested for their participation in this research and they cannot speak English. Some of the professional nurses were also known by the researcher, so they refused to participate even though they were informed that their voluntary participation is highly confidential. Therefore, in some focus group discussions, the researcher had to continue with available number of participants which were at times only five. Furthermore, even though the researcher gave all participants details about this research, especially about the main aim of this research and their voluntary participation, some participants, particularly adolescent learners, were asking the researcher to buy them something like airtime before they can participate in research. The researcher refused this for ethical and professional reasons.

The school principals, who assisted the researcher in recruiting participants, also informed all prospective participants that their participation is voluntarily and there are no incentives. Some participants asked the researcher to make sure that schools utilise the results of this research. The researcher informed them that he cannot force schools to utilise the results of this research but he can only make recommendations for the department of education and of health and publish the results at accredited journals and present it at local, national and international conferences. Again, a qualitative phase was also expensive as the researcher had to travel to four districts of the province which are far from each other as well as two public psychiatric hospitals in the province. At times the researcher was forced to reschedule appointments for other days because participants were not available. This research on illegal substance use prevention programme for adolescent learners was conducted in only one province out of nine provinces of the country. Again, the results of a qualitative, exploratory, descriptive and contextual study cannot be generalised because of a small sample size of only four public schools, two public psychiatric hospitals and fourteen focus group discussions with adolescent learners, parents, teachers and the professional nurses. In spite of the above unavoidable limitations, the main aim was achieved, which was to develop and validate illegal substance use prevention programme for adolescent learners in the NWP of SA.

4. Recommendations for practice, education and research

There are no documented illegal substance use prevention programmes currently available for the adolescent learners in the NWP of SA. Therefore, the following recommendations for practice, education and research should be considered in order to prevent illegal substance use among adolescent learners in the NWP of SA.

4.1 Recommendations for practice

Practice in this research refers to the mental health care / community health initiatives that aim to prevent illegal substance use among adolescent learners in mental health care institutions. Some of the mental health care practitioners or providers that this programme is

targeted for include psychiatrists, psychologists, nurses, occupational therapist and social workers.

These recommendations for practice are also related to the conceptual framework of research.

Terminus and agents

For this programme to achieve its goal (terminus) which is to prevent illegal substance use among adolescent learners in the NWP of SA, all stakeholders (agents) should collaborate including the government and non-governmental organisations. Some of these stakeholders include health workers such as school health nurses, social workers and registered counselors, police officers, teachers, church elders, community policing forums, community members, former substance users, parents, adolescent learners, friends and the government. Mental health care practitioners and providers who are involved in caring for adolescent learners, particularly those that are diagnosed with substance related disorders or dual diagnosis should use the programme to increase their insight of how to prevent illegal substance use among adolescent learners. They should also try to simplify this programme when preventing illegal substance use among adolescent learners. Other stakeholders such as the department of education (DOE) in the NWP of SA should include the findings of this research in their teaching curriculum such as in a life orientation subject with the aim of educating adolescent learners about how illegal substance use can be prevented. The NW provincial department of health (DOH) should also use this study to prevent illegal substance use among adolescent learners in the NWP of SA. The DOH can design pamphlets or brochures on the prevention of illegal substance use among adolescent learners.

Recipients

This programme should include adolescent learners aged between 10 and 19 years, and this includes illegal substance users and nonusers. All stakeholders' roles should be to assist these adolescent learners to terminate (substance users) or avoid (nonusers) the onset of illegal substance use. Adolescent learners should be guided by any relevant agent to display their characteristics and competencies of resilient individuals in order to be able to make informed independent decisions to resist the pressure of using illegal substance(s). For instance school

health or mental health nurses should attend workshops or in-service training on this programme. They should also be informed about their roles in the programme such as educating other stakeholders including adolescent learners about the programme. These nurses will be encouraged to implement the programme even in their own communities. Adolescent learners should be recruited through advertisements in different contexts such as schools, community organisations, community meetings, community youth centres, public transportations as well as social networks such as Facebook pages.

Context

The programme for preventing illegal substance use among adolescent learners should be performed by the agents mentioned above for the adolescent learners in different contexts such as adolescent learners' families, schools and communities where they are at high risk of accessing and using various illegal substances and where there is a need to initiate such a programme.

Procedure and dynamics

The programme should be based on the values related to resilience and protective factors through peer-related activities, parent-related activities, school-related activities, community-related activities and government-related activities. Adolescent learners' resilience should be strengthened, namely their resilience characteristics and competencies. It is also highly recommended that nothing should be added to this unique programme as it is brief and attractive and to the point and developed and validated by different mental health practitioners or experts in mental health and substance use disorders. When implementing the programme, stakeholders should always include interactive activities and deliver the programme in an engaging and interesting fashion. They should also include a specific theme in each session, covering a variety of issues such as smoking, drinking, safe sex, and HIV/AIDS. They should deliver the programme in multiple languages such as Setswana, English or Afrikaans for broader audience.

This unique programme add value to practice in general because it is the first programme of this nature to be developed by a mental health nurse specialist for the nurses and other mental

health care practitioners in the NWP of SA. It is also hoped that proper implementation of this programme would prevent illegal substance use among adolescent learners in the NWP of SA. All mental health care practitioners and other stakeholders in the NWP of SA are encouraged to implement this programme at their different institutions and consult the researcher in case of misunderstanding. This means that collaboration between the researcher and the managers of mental health care institutions in the NWP of SA is extremely important for proper implementation of this programme.

4.2 Recommendations for education

Recommendations for education are aimed at educating all people relevant for implementation of the programme. To educate most people especially adolescent learners about how to prevent illegal substance use in the NWP of SA, this thesis will be made available electronically as well as manually on the shelves of the library of the Mafikeng Campus of the North-West University. Study promoters, examiners and a consultant will also be given hard copies to share with other people especially adolescent learners either at church, school or community. Again five manuscripts are submitted to the African Journal for Physical Activity and Health Sciences (AJPHEs) for publication as a way of educating all stakeholders and the public in general about the programme.

All institutions of higher learning offering programmes related to mental health and substance use should include the results of this programme in their educational programmes, particularly under the management of substance related disorders or dual or triple diagnosis. Private and public mental health care institutions should develop their institutional policies based on the results of this research in order to manage substance related disorders or dual diagnosis in their mental health care institutions. Again, resilience as a protective factor should also be included in the curriculum of all institutions of higher learning offering programmes related to mental health and substance use so that students can be thoroughly informed at the completion of their studies. This might also assist them (students) to strengthen resilience of adolescent learners' as they interact with them at the clinical services.

School health nurses should educate other stakeholders about the programme and its benefits, and guide them to collaborate and initiate such a programme. Thereafter, these different

stakeholders will also be expected to educate adolescent learners about the programme. All stakeholders including the researcher should educate adolescent learners of the NWP about the programme in different contexts. The programme should be easy for all stakeholders to follow, and the stakeholders should be able to use adolescent learners preferred language such as English, Setswana or Afrikaans.

4.3 Recommendations for research

From the findings of this research as well as literature control, it is clear that there is a need to conduct more research on this topic.

Although it was mentioned by most studies in section one of this research that the rate of illegal substance use among adolescent learners are the lowest in the NWP as compared to other provinces of the country, there is still a need to conduct more research in this province. The researcher concur that “prevention is better than cure”. Such research should be conducted by following different research approaches such as qualitative, quantitative and mixed methods. From a systematic review of illegal substance use prevention programme focusing on resilience as a protective factor, not even a single study was obtained from the NWP of SA, hence the need for more research in this province. The results of such research should be published in accredited journals and presented at local, national and international conferences for peer review and evaluation.

The conference delegates at an international conference in 2015 verbalised that illegal substance use among adolescent learners is a national problem. Furthermore, delegates recommended that the researcher advertise the programme in the whole country. This indicates that there is a need to conduct research for the whole country on prevention programmes for illegal substance use among adolescent learners as the developed programme for this research is specific to NWP. When conducting that research, such programmes should focus on resilience as a protective factor as it was mentioned in almost all studies that illegal substance use among adolescent learners can be prevented if prevention programmes focuses on resilience as a protective factor.

More research should also be conducted on how to improve and maintain effective collaboration of all stakeholders including governmental and non-governmental organisations in prevention of illegal substance use among adolescent learners particularly in the NWP of SA. Research on specific context on prevention of illegal substance use among adolescent learners is also needed. This includes, family-based illegal substance use prevention programmes, school-based illegal substance use prevention programmes and community-based illegal substance use prevention programmes.

Further research could be done on the long term effectiveness of illegal substance use prevention programme for adolescent learners in the NWP of SA. This will be conducted to determine whether the effectiveness of the programme is maintainable. That research will be on a final phase of intervention research design, namely evaluation.

5. Summary

There are no documented illegal substance use prevention programmes for adolescent learners in the NWP of SA. Prevention of illegal substance use among adolescent learners can be achieved if prevention programmes focus on resilience as a protective factor. As a result, the researcher deemed it necessary to address the following question: what can be done to prevent illegal substance use among adolescent learners in the NWP of SA? Intervention research design was followed to achieve the purpose of this research. The design involves four phases namely, problem analysis and planning, information gathering and synthesis, design as well as early development and validation.

The first phase covered problem analysis and planning which included an overview of the research (*See section one*). The second phase covered information gathering and synthesis. This phase included two stages namely a systematic review and a qualitative, explorative, descriptive and contextual approach. The third phase covered the design. This phase included the deducing of a conceptual framework for illegal substance use prevention programme for adolescent learners in the NWP of SA. The fourth phase covered early development and validation. The fourth phase comprised of the development and validation of the proposed programme. The findings of this phase confirmed the content of the programme, and indicate that the programme to prevent illegal substance use among adolescent learners should focus

on strengthening adolescents' resilience and on mobilising protective factors. Experts in mental health and substance use disorders as well as adolescents validated the programme. Both the experts and adolescents indicated that the programme is clear, simple, general, accessible and important.

Conclusions, limitations and recommendations for illegal substance use prevention programme for adolescent learners were made. This thesis was written following article format as prescribed by the manual for postgraduate studies of the NWU. Hard copies of the thesis will be stored in the library of the Mafikeng Campus of the NWU. Electronic copy of the thesis will be found on internet. One article is published, two manuscripts are submitted and two manuscripts will be submitted to AJPHEs for publication. The results of research will be shared at conferences.

A unique contribution of this research is the development of a conceptual framework and the illegal substance use prevention programme for adolescent learners in the NWP of SA. This programme adds important information to the field of psychiatry and mental health. Recommendations were made for the implementation of the programme.

Appendices

Appendix B: Request letter to various authorities for permission to conduct research

Dear Sir or Madam

Request to various authorities for permission to conduct research

I am currently studying for a Doctor of Philosophy (PhD) degree at the Mafikeng Campus of the North-West University. I am working on a research project for completion of my studies.

I hereby request permission to conduct research on: **Illegal substance use prevention programme for adolescent learners.**

The purpose of the research is to develop and validate illegal substance use prevention programme for adolescent learners in the NWP of SA.

In order to achieve the above purpose, intervention research design will be followed (*see research proposal for more information*).

Participants' (adolescent learners, parents, teachers and professional nurses) human rights which will be maintained from the identification of the research topic until publication of articles are as follows:

- the right to self-determination;
- the right to privacy;
- the right to anonymity and confidentiality;
- the right to fair treatment, as well as
- the right to protection from discomfort and harm.

Interviews with participants who voluntarily give consent to participate in this research will be conducted from October till December 2014.

Your favourable consideration of the above matter and a response at your earliest convenience will be appreciated.

Attached please find the research proposal for further information

Thanking you in advance

Yours faithfully

Mr. L.A. Sehularo

PhD Candidate

Promoter: Prof. M. E. Manyedi

Co-promoter: Prof. E. Du Plessis

Appendix C: Permission from various authorities to conduct research



NORTH-WEST UNIVERSITY
YUNIBESITHI YA BOKONE-BOPHIRIMA
NOORDWES-UNIVERSITEIT
INSTITUTIONAL OFFICE

Private Bag X1290, Potchefstroom
South Africa 2520

Tel: 018 299-4852
Web: <http://www.nwu.ac.za>
2014/05/27

ETHICS APPROVAL OF PROJECT

This is to certify that the next project was approved by the NWU Ethics Committee:

Project title :

Substance use prevention programme among adolescents in North West Province,
South Africa

Project leader: Dr E. Manyedi

Student: Leepile Sehularo

Ethics number: NWU-00037-14-A9

Status: S = Submission; R = Re-Submission; P = Provisional Authorisation; A = Authorisation

Expiry date: 2019/05/15

The Ethics Committee would like to remain at your service as scientist and researcher, and wishes you well with your project.

Please do not hesitate to contact the Ethics Committee for any further enquiries or requests for assistance.

The formal ethics approval certificate will follow shortly.

Yours sincerely

HM Halgryn
NWU Research Ethics Secretariate



health

Department of
Health
North West Province
REPUBLIC OF SOUTH AFRICA

3801 First Street
New Office Park
MAHIKENG, 2735

Enq: Keitumetse Shogwe
Tel: 018 391 4504
kshogwe@nwpg.gov.za
www.nwhealth.gov.za



POLICY, PLANNING, RESEARCH, MONITORING AND EVALUATION

To : Mr. L.A Sehularo
From : Policy, Planning, Research, Monitoring & Evaluation
Subject : Approval Letter- Substance use prevention programme for adolescents in North West Province, South Africa.

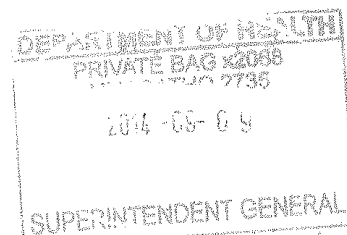
To inform the researcher that permission to undertake the above mentioned study has been granted by the North West Department of Health. The researcher is expected to arrange in advance with the chosen districts or facilities, and issue this letter as prove that permission has been granted by the provincial office.

Upon completion, the department expects to receive a final research report from the researcher.

Kindest regards


Acting Director: PPRM&E
Mr.B Redlinghys


Date



Healthy Living for All



health

Department of
Health
North West Province
REPUBLIC OF SOUTH AFRICA

02 Deppe Street Dassierand
Potchefstroom
2520
Tel:
Fax:
Enquiries:
Email:

Private Bag X253
Potchefstroom
2520
0182949100
0182947069
Mrs. N.L. Mocwaledi-Senyane
nmocwaledi@nwpg.gov.za



WITRAND HOSPITAL

Witrans Hospital: Office of the Chief Executive Officer

12/09/2014

Mr L H Sehularo

**RESEARCH REQUEST: SUBSTANCE USE AND PREVENTION PROGRAMME FOR
ADOLESCENTS IN THE NORTH WEST PROVINCE SOUTH AFRICA**

1. The above-mentioned research request received from you and already approved by the NWDoH refers
2. It was presented at our local Ethics and Research meeting dated 12/09/2014 and based on NWDoH approval already granted it was also approved
3. Please contact the nurse Manager Mrs A de Bruin to arrange access to the nursing staff of the child and adolescent unit at tel no 018 – 294 9100

Kind Regards

DR T G K OOSTHUIZEN
SENIOR MANAGER MEDICAL SERVICES, CHAIRPERSON ETHICS AND RESEARCH MEETING

MRS N L MOCWALEDI-SENYANE
CHIEF EXECUTIVE OFFICER: WITRAND HOSPITAL



Healthy Living for All



health

Department of
Health
North West Province
REPUBLIC OF SOUTH AFRICA

Lichtenburg Road
Donville
Private Bag X2031
Mankeng
2745

Tel (016) 383 6700
Ext. 6708
m.monokoane@nwps.gov.za



CEO'S OFFICE: BOPHELONG PSYCHIATRIC HOSPITAL

DATE : 13 NOVEMBER 2014

TO : MR LEEPILE SEHULARO
FROM: Mr M.D. MONOKOANE
CEO: BPH

RE: CONDUCTING RESEARCH

Kindly be informed that your request to conduct research on Substance Use Prevention Programme for Adolescents in North West Province South Africa at Bophelong Psychiatric Hospital has been approved.

Wish you all the best.

Mr M.D. Monokoane
CEO: Bophelong Psychiatric Hospital



Healthy Living for All



education

Lefapha la Thuto la Bokone Bophirima
Noord-Wes Departement van Onderwys
North West Department of Education
NORTH WEST PROVINCE

1st Floor, East Wing,
Garona Building, Mmabatho
Private Bag X2044,
Mmabatho 2735
Tel.: +27 (18) 388-3429 / 3432 / 3404
Fax.: +27 (18) 388-3430
e-mail: sgedu@nwp.gov.za
e-mail: ptyatya@nwp.gov.za

OFFICE OF THE SUPERINTENDENT-GENERAL

Enquiries: Mpiiso Tyatya
Tel.: +27 (18) 388-3429
Fax.: +27 (18) 388-3430
e-mail: ptyatya@nwp.gov.za

Date: 28 July 2014

To: **Mr. L. A. Sehularo**
North-West University
Mafikeng Campus
Faculty of Agriculture, Science and Technology

Tel: 060 347 0183

From: **Dr. I.S. Molale**
Superintendent General

REQUEST FOR PERMISSION TO CONDUCT RESEARCH

Reference is made to your letter regarding the above matter. The content is noted and accordingly, approval is granted to your kind self to conduct research as per your request, subject to the following provisions: -

- That you contact the District Directors, about your request and this letter of approval. In this regard please liaise with them directly.
- That as far as possible the general school functionality should not be compromised by the research process.
- That participation in your project will be voluntary.
- That the findings of your research will be made available to the NW Education Department upon request.

With my best wishes

Thanking you.

DR. I.S. MOLALE
SUPERINTENDENT GENERAL

Cc: **Mr B Monale**
District Director: Ngaka Modiri Moleama
018 388 3383

Cc: **Ms P Mokhutle**
District Director: Bojanala
014 597 8600/1

"Towards Excellence in Education"

Cc: Mr H Motara
District Director: Dr Kenneth Kaunda
018 2998264

Cc: Mr G Valtyn
Dr. Ruth Segomotsi Mompati
053 928 7502/3



"Towards Excellence in Education"



OFFICE OF THE DIRECTOR: BOJANALA DISTRICT

Enq. Dr. ET Matshidiso

To : Mr. L. A. Sehularo
North West University – Mahikeng Campus

From : Ms. M. P. Mokhutle
District Director – Bojanala District

Date : 16 September 2014

Subject: Permission to conduct research – Thethe Secondary School

Reference is made to your letter regarding the above matter. The content is noted and accordingly, approval is granted for your kind self to visit Thethe Secondary school as requested for the purpose of conducting a research as your sampled school, subject to the following provisions:-

- That you notify Area and Circuit Manager about your request and this subsequent letter of approval;
- That the onus to notify the principal of Thethe Secondary about your intended visit and the purpose thereof rests with your good self;
- That participation in your research project will be voluntary;
- That as far as possible the general academic programme of this school should not be interfered with; and
- That upon completion of your research, a report is send to my Office detailing the major findings and recommendations of your research and/or a final copy of your Thesis.

With my best wishes

M. P. Mokhutle – District Director

cc Ms. M. J. Paledi – Area Manager – Rustenburg Area Office



Education and Sport Development
Department of Education and Sport Development
Departement van Onderwys en Sport Ontwikkeling
Lefapha la Thuto le Tlhabololo ya Metshameko
NORTH WEST PROVINCE

McGregor Street
Rustenburg 0299
Private Bag X82103
Rustenburg 0300
Tel.: (014) 592-7559/84
Fax: (014) 592-7500/2
e-mail: Mpaledi.nwpg.gov.za

OFFICE OF THE AREA MANAGER: RUSTENBURG AREA OFFICE

To : Mr L.A. Sehularo
North-West University
Mafikeng Campus
Faculty of Agriculture, Science and Technology

From : Mrs M.J Paledi
Rustenburg Area Manager

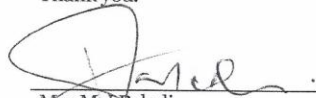
Date : 25 September 2014

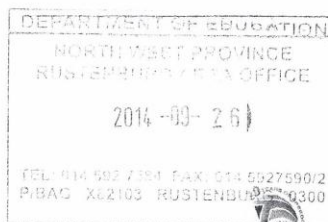
SUBJECT: **REQUEST FOR PERMISSION TO CONDUCT RESEACH:**
THETHE H.S

The above matter refers.

Permission to conduct research is hereby granted in line with permission granted by Superintendent General of NW Department of Education and Sport Development.

Thank you.


Mrs M.J Paledi
Rustenburg Area Manager



THETHE HIGH SCHOOL



"THUTO LORE"

TEL: 0145663344
FAX: 0145663344

P.O. BOX 1242
PHOKENG 0335

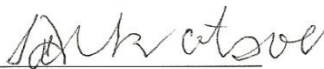
Enquiries: M.A.Nkotsoe
0736360646

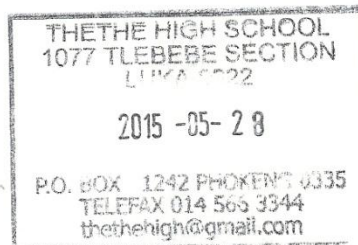
TO WHOM IT MAY CONCERN

This serves to certify that Mr Leepile Sehularo had sought for and was conceded permission by school authorities to interact with various stakeholders within our school community as part of his research in pursuance of a PhD degree. The stakeholders Mr Sehularo interacted with participated in the process out of their own volition. He presented to us his research topic as: "A prevention programme for substance use among adolescents in the North West Province of South Africa."

We wish Mr Sehularo good luck in his research studies and hope that besides himself, the general citizenry of South Africa will draw benefit from them.

Yours faithfully


Principal
M.A.Nkotsoe





Education and Sport Development

Department of Education and Sport Development
Departement van Onderwys en Sport Ontwikkeling
Lefapha la Thuto le Tlhabololo ya Metshameko

NORTH WEST PROVINCE

10 Nelson Mandela Drive,
Mafikeng
Private Bag X10,
Mmabatho 2735
Tel.: (018) 388-1964 / 3383
Fax: 086 513 9881 / (018) 381-8299
e-mail: bmonale@nwpg.gov.za
e-mail: omolete@nwpg.gov.za (Off. Man.)

NGAKA MODIRI MOLEMA DISTRICT

Enquiries S.O. Molete
Telephone 018 - 388 - 3383

To : Mr M.N. Kokong
Area Manager: Mahikeng Area Office

From : Mr B.E. Monale
District Director

Date : 05 September 2014

Subject : Permission to conduct a research in Mmabatho High School

Permission is hereby granted to **Mr L.A. Sehularo**, a PhD student in the North West University to conduct a research on ***"Substance use prevention programme for adolescents in the North West Province"***.

Area Office and School Management are requested to cooperate with him and provide him with necessary support during this project.

Your cooperation and support in this regard is highly appreciated

Yours in education

Mr B.E. Monale
District Director



"Towards Excellence in Education"



**Mmabatho High School
Office of the Principal**

E-Mail: principalmhs@mweb.co.za

Private Bag X9
Mmabatho 2735
Tel: (018) 3921665
Fax: (018) 3841381

27 October 2014

Dear Sir/Madam

PERMISSION TO CONDUCT RESEARCH IN MMABATHO HIGH SCHOOL

The above-mentioned school hereby informs you that permission to conduct research is granted. As per your request 6 learners from Grade 8-10 will be selected. Please be advised that these learners will only be available on Thursday (30/10/2014) between 11:00 am & 12:00 pm.

Thanking you for your co-operation.

Regards,


SETHIBE, T.F
Principal

RECEIVED OFFICE OF THE PRINCIPAL
Mmabatho High School
TEL: (018) 3921665
FAX: (018) 3841381

**Education and Sport Development**

Department of Education and Sport Development
Departement van Onderwys en Sport Ontwikkeling
Lefapha la Thuto le Tihabololo ya Metshameko
NORTH WEST PROVINCE

30 Emmanuel Street,
Colridge
Private Bag X21,
Vryburg
8600
Tel.: (053) 928 7502/3
Tel.: (053) 927 0564
e-mail: gvaltyn@nwpg.gov.za

DR RUTH SEGOMOTSI MOMPATI DISTRICT**OFFICE OF THE ACTING DISTRICT DIRECTOR**

15 October 2014

To : Mr L.A. Sehularo
PHD Candidate

From: Mr G.P. Valtyn
Acting District Director

RE : REQUEST FOR PERMISSION TO CONDUCT RESEARCH

Your request was studied and the content therefore noted.

Kindly be informed that permission has been granted as requested. In terms of your request the interviews will be conducted at Vryburg High School. All stakeholders indicated in your request are kindly edge to support and co-operate with you through out the exercise.

We wish you luck in your studies and hope to hear from you soon.

Yours sincerely

Mr G. P. Valtyn
Acting District Director



"Towards Excellence in Education"



Hoërskool Vryburg High School

Tel: 053 927 3938 / 9
Faks/Fax: 053 927 3239

De Kockstraat / De Kock Street
Posbus / P.O. Box 143
VRYBURG
8600

e-pos/e-mail: hsvryburg@wam.co.za

15 September 2014

Dear Mr Sehularo

Re: Request to Conduct Research

This letter serves to confirm that your request to conduct research at Vryburg High School has been granted.

Since you shall be dealing with minors, further approval must be obtained from the learners' parents or guardians.

Yours Truly

M.B. Fuleni
(PRINCIPAL)



Education and Sport Development

Department of Education and Sport Development
Departement van Onderwys en Sport Ontwikkeling
Lefapha la Thuto le Tlhabololo ya Metshameko
NORTH WEST PROVINCE

Tamara Building
8 O.R. Tambo Street, Potchefstroom
Private Bag X1256,
Potchefstroom 2520
Tel.: (018) 299-8216
Fax: (018) 294-8234
Enquiries: Mr H. Motara
e-mail: hmotara@nwpg.gov.za

DR KENNETH KAUNDA DISTRICT

OFFICE OF THE DISTRICT DIRECTOR

04 August 2014

Mr L A Sehularo
PhD Candidate
North West University – Mafikeng Campus

PERMISSION TO CONDUCT RESEARCH ON "SUBSTANCE USE PREVENTION PROGRAMME FOR ADOLESCENTS IN NORTH WEST PROVINCE (NWP) SOUTH AFRICA (SA)" AT TLOKWE HIGH SCHOOL, TLOKWE AREA OFFICE, DR KENNETH KAUNDA DISTRICT

The above matter refers.

Permission is hereby granted to you to conduct your research at Tlokwe High School, Tlokwe Area Office in Dr Kenneth Kaunda District under the following provisions:

- The activity you undertake at the school should not tamper with the normal process of learning and teaching; and will take place after school hours.
- You inform the principal of your identified school of your impending visit and activity;
- You provide my office with a report in respect of your findings from the research; and
- You obtain prior permission from this office before availing your findings for public or media consumption.

Wishing you well in your endeavour.

Thanking you

MR H MOTARA
DISTRICT DIRECTOR
DR KENNETH KAUNDA DISTRICT

cc Mr C Botes – Acting Area Manager: Tlokwe

Tlokwe Secondary School



**TLOKWE SECONDARY
SCHOOL**

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IKAGENG
2520
TEL: (018) 2950969
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23 SEPTEMBER 2014

MR L.A. SEHULARO
PhD CANDIDATE
NW UNIVERSITY - MAFIKENG CAMPUS

Dear Sir

REQUEST FOR PERMISSION TO CONDUCT RESEARCH AT SCHOOL

Your letter regarding the above matter has reference.

Both the Management and Governance Structure of Tlokwe Secondary School hereby grant you permission to conduct your research at this as requested.

The provisions set out by the District Director, Mr H. Motara, in his correspondence to you, will apply.

Best wishes in your endeavour

Kind regards

M. J. KHUMALO (MR)
PRINCIPAL.

Appendix D: Informed consent by parents/guardians for adolescent learners to participate in research

I (parent/guardian) ----- hereby give written permission for my son/daughter (adolescent learner) to participate in the research project titled: **Illegal substance use prevention programme for adolescent learners**. I give written permission for the adolescent learner to be approached and invited to participate in research (in accordance with Section 10 of the Children's Act 38 of 2005). Permission should also be obtained from the adolescent learner in writing (i.e. agreement to participate) if he or she chooses to participate (Department of Health, Republic of South Africa, 2015). I understand that an interview will be conducted with him/her (adolescent learner) as personally arranged and that it will be audio-taped.

I also understand that his/her participation is voluntarily and that he/she has the right to decide whether or not to participate in research, without the risk of penalty or prejudicial treatment. He/she has the right to withdraw from the research anytime he/she so wish, to refuse to give information or to ask for clarification about the purpose of research. Results will be included in a research report, scientific articles and presented at national and international conferences.

The research data will be coded so the findings in this study will not be linked to his/her name. His/her identity will not be revealed while the research is being conducted or when the research is reported or published. All data will be stored in a secure place and not shared with any other person without my written permission.

I (parent/guardian) have read this consent form for my son/daughter (adolescent learner) to participate in this research.

Parent/guardian's signature: -----

Date: -----

Researcher's signature: -----

Date: -----

Appendix E: Informed consent by stakeholders (that is, professional nurses, teachers, parents and adolescent learners) to participate in research

I ----- hereby give consent to voluntarily participate in the research project titled: **Illegal substance use prevention programme for adolescent learners**. I give written permission that an interview will be conducted with me as personally arranged and that it will be audio-taped.

I also understand that my participation is voluntarily and that I have the right to decide whether or not to participate in research, without the risk of penalty or prejudicial treatment. I also have the right to withdraw from the research anytime I so wish, to refuse to give information or to ask for clarification about the purpose of research. Results will be included in a research report, scientific articles and presented at national and international conferences.

The research data will be coded so they will not be linked to my name. My identity will not be revealed while the research is being conducted or when the research is reported or published. All data will be stored in a secure place, and not shared with any other person without my written permission.

I have read this consent form and voluntarily give consent to participate in this research

Participant's signature: ----- Date: -----

Researcher's signature: ----- Date: -----

Appendix F: Interview guide

1. What are your perceptions of resilience as a protective factor in illegal substance use prevention programme for adolescent learners?
2. What are your perceptions of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor?

Appendix G: Request to act as co-coder in research

Dear Dr Vicki Koen

I am currently studying for a Doctor of Philosophy (PhD) degree at the Mafikeng Campus of the North-West University. I am working on a research project for completion of my study.

The title of the research project is: **Illegal substance use prevention programme for adolescent learners.**

You are requested to act as co-coder on a manuscript titled: **Stakeholders' perceptions of resilience as a protective factor in illegal substance use prevention programme for adolescent learners and their perceptions of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor.**

This research has been approved by the School of Nursing Science, Faculty of Agriculture, Science and Technology, and the Research Ethics Committee of the North-West University (Reference number NWU-00037-14-A9), North West Provincial Departments of Health and Education, Offices of the District Directors, public psychiatric hospitals as well as public schools where data will be collected. Participant's right to self-determination, privacy, anonymity and confidentiality, fair treatment, as well as the right to protection from discomfort and harm will be protected. Verbal and written informed voluntary consent will be obtained from all participants.

The purpose of the manuscript is to explore stakeholders' perceptions of resilience as a protective factor in illegal substance use prevention programme and their perceptions of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor.

In order to achieve the above purpose, I request your assistance as co-coder. Focus group discussions will be conducted with stakeholders at psychiatric hospitals (for professional nurses) and public schools (for teachers, parents and adolescent learners). The central questions that will be asked are: What are your perceptions of resilience as a protective factor

in illegal substance use prevention programme for adolescent learners and your perceptions of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor?

For more information, enclosed please find the research proposal that has been approved by the above mentioned institutions and office bearers.

Your favourable consideration of the above matter and a response at your earliest convenience would be highly appreciated.

Thanking you in advance

Yours faithfully

Mr L.A. Sehularo

PhD Candidate

Promoter: Prof. M. E. Manyedi

Co-promoter: Prof. E. Du Plessis

Appendix H: Approval letter to act as co-coder in research



NORTH-WEST UNIVERSITY
YUNIBESITHI YA BOKONE-BOPHIRIMA
NOORDWES-UNIVERSITEIT
POTCHEFSTROOM CAMPUS

Private Bag X6001, Potchefstroom
South Africa 2520

Tel: 018 299-1111/2222
Web: <http://www.nwu.ac.za>

Africa Unit for Transdisciplinary Health Research
Email: 12976121@nwu.ac.za

18 May 2015

To whom it may concern,

This letter serves as confirmation that I was requested by L. Sehularo to act as co-coder and that I co-coded data collected in the study "A prevention programme for substance use among adolescents in NWP of SA".

Yours sincerely

Dr Vicki Koen
Postdoctoral fellow (AUPHeR)
Research Psychologist (PS 0121169)

Appendix I: Request to act as independent reviewer in research

Dear Dr. Lufuno Makhado

I am currently studying for a Doctor of Philosophy (PhD) degree at the Mafikeng Campus of the North-West University. I am working on a research project for completion of my study.

The title of the research project is: **Illegal substance use prevention programme for adolescent learners.**

You are requested to act as independent reviewer of a manuscript entitled: **Illegal substance use prevention programmes among adolescent learners specifically programmes focusing on resilience as a protective factor: a systematic review.**

The purpose of the manuscript is to describe current evidence on illegal substance use prevention programmes among adolescent learners specifically programmes focusing on resilience as a protective factor.

In order to achieve the above purpose, I request your assistance as independent reviewer. A clear focused review question for this systematic review is “What current evidence exists on illegal substance use prevention programmes among adolescent learners specifically programmes focusing resilience as a protective factor?”

Your consideration of the above matter and a response at your earliest convenience would be highly appreciated.

Thanking you in advance

Yours faithfully

Mr L.A. Sehularo

PhD Candidate

Promoter: Prof. M. E. Manyedi

Co-promoter: Prof. E. Du Plessis

Appendix J: Approval letter to act as independent reviewer in research

Private Bag X2046, Mmabatho
South Africa 2735

Tel: 018 389-2111
Fax: 018 392-5775

Nursing Sciences

Tel: 0183892236
Email: 22891935@nwu.ac.za

25 May 2015

To: Mr. L.A. Sehularo

Dear Sir

I, Lufuno Makhado, confirm and certify that I have conducted an independent review of a systematic review research article, entitled:

Substance use prevention programmes among adolescents focusing on resilience as a protective factor: A systematic review.

Yours sincerely



Dr Lufuno Makhado
Senior Lecturer

Appendix K: Request to act as language editors in research

Dear Sir

I am currently studying for a Doctor of Philosophy (PhD) degree at the Mafikeng Campus of the North-West University. I am working on research project towards the completion of my study. The title of the research project is:

Illegal substance use prevention programme for adolescent learners.

The purpose of research is to develop and validate illegal substance use prevention programme for adolescent learners in the North West Province of South Africa. In order to achieve the above purpose, I request your services as language editor. This research has been read and approved for language editing and final submission by promoters.

For more information, enclosed please find the research project that has been read and approved for submission by the promoters.

Your favourable consideration of the above matter and a response at your earliest convenience would be highly appreciated.

Thanking you in advance

Yours faithfully

Mr L.A. Sehularo

PhD Candidate

Promoter: Prof. M. E. Manyedi

Co-promoter: Prof. E. Du Plessis

Appendix L: Approval letters to act as language editors in research



DECLARATION OF LANGUAGE EDITING

August 2016

To whom it may concern

Dear Sir/Madam

This is to certify that I have fully edited the PhD thesis of Mr. Leepile Alfred Sehularo entitled **ILLEGAL SUBSTANCE USE PREVENTION PROGRAMME FOR ADOLESCENT LEARNERS** (North-West University). The text was checked for style, clarity and ease of reading, grammar and usage, spelling and punctuation, consistency in the use of text and figures in illustrations and tables, completeness and consistency in references, as well as consistency in page numbering. Headers and footers and suggestions were offered. The editor makes no pretension to have improved the intellectual content of the thesis and did not re-write any text. The editor's suggestions are to be accepted or rejected by the author. The author effected the final changes by him- or herself.

Yours sincerely,

SHADRECK NEMBAWARE: Corporate communications Consultant – Performance Dynamix
(DPhil Candidate-UKZN; MA English UZ; B.A. Hons English (UZ); IMM (RSA)
Lecturer and Discipline Coordinator (Communication Studies)
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Performance Dynamix
Generating value through Communication



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2 November 2015

TO WHOM IT MAY CONCERN

CERTIFICATE OF EDITING

I, **Muchativugwa Liberty Hove**, confirm and certify that I have read and edited the entire thesis **A substance use prevention programme focusing on resilience as a protective factor for adolescents in the North-West Province of South Africa**

by Leepile Alfred Sehularo (MCur, BNSc), submitted in fulfilment of the requirements for the degree of **Doctor of Philosophy in Nursing Science** at the Mafikeng Campus of the North-West University.

Leepile was supervised by Dr. Mofatiki Eva Manyedi (principal promoter) and Prof. Emmerentia du Plessis (co-promoter) both of the FAST, North-West University.

I hold a PhD in English Language and Literature in English and am qualified to edit academic work of such nature for cohesion and coherence.

The views and research procedures detailed and expressed in the thesis remain those of the authors.

Yours sincerely

Dr M.L.Hove

Original details: Dr M.L.Hove(22055215) C:\Users\22055215\Desktop\CERTIFICATE OF EDITING.docm
2 November 2015

File reference: Dr M.L.Hove

Appendix M: Conference presentation slides



Stakeholders' perceptions of how substance use could be prevented among adolescents by focusing on resilience as a protective factor

Leepile A. Sehularo
PhD Candidate

It all starts here ®



Presentation Outline

Introduction

Methodology

Results

Recommendations

Limitations

Conclusion

Introduction

- Needs to be identified and addressed as soon as possible (NIDA, 2014)
- Start using substances at the age of 12 or 13 & they end up experiencing physical, educational, social, legal and mental health problems (Sehulero, Du Plessis & Scrooby, 2010).
- Prevention of substance use needs to start during the elementary years (Parsai, Volzine, Marsiglio, Kulis & Nieri, 2009).
- In NWP, rates of SU lower
- Proverb - "prevention is better than cure".
- Prevention of adolescents' SU may be achieved through programmes aimed at protective factors that can enhance resilience (Schwartz et al. 2007)
- No previous studies could be found on this topic in NWP

Research Purpose

- To explore and describe stakeholders' perceptions of how substance use could be prevented among adolescents by focusing on resilience as a protective factor in the NWP, SA

Definition of key concepts

- **Adolescent** refers to individuals aged 10 to 19
- **Prevention** refers to any activity designed to prevent or delay the onset of substance use
- **Protective factor** refers to all factors which reduce the chances of using substances
- **Resilience** refers to adolescents' ability to resist bad thoughts or behaviors of using substances
- **Stakeholders** refers to study participants, that is, professional nurses, teachers, parents and adolescents
- **Substance use** refers to the adolescent's recreational or occasional use of substances

Methodology

Design	A qualitative, explorative, descriptive and contextual design
Population	All interested stakeholders from two public psychiatric hospital and four public schools in the NWP of SA
Sampling approach	Non-probability sampling approach
Sampling criteria	Purposive sampling
Sampling criteria	Willing to participate, consent forms, males and females, English or Setswana
Data collection	Focus groups, field notes, recording tapes (Dec 2014)
Data analysis	Tesch's (Cresswell, 2009:183) method
Setting	4 public schools & 2 public psychiatric hospitals
Ethical considerations	NWU Research Ethics Committee, NWP DoE, NWP DoH, District Directors, School Principals, Parents/Guardians, Adolescents, psychiatric hospitals, professional nurses

Results

Theme 1: Peer factors	Theme 2: Parental factors	Theme 3: School factors	Theme 4: Community factors	Theme 5: Government factors
<ul style="list-style-type: none"> - Positive peer relationships - Peer education - Forming or joining support groups 	<ul style="list-style-type: none"> - Parental education - Parental supervision - Parental monitoring - Parental support - Parents as role models - Constructive communication with parents 	<ul style="list-style-type: none"> - Conduction of awareness campaigns - Continuous random searching of learners by the police and teachers - Facebook to communicate substance use education - Arranging rehabilitation center visits for adolescents - Stricter laws at schools 	<ul style="list-style-type: none"> - Participating in constructive activities - Community meetings - Community involvement - Respecting others - Community prayers 	<ul style="list-style-type: none"> - Raise age of acquiring alcohol - Ban alcohol advertisements - Stringent penalties on foreigners - Collaboration among stakeholders

Theme 1: Peer factors

- Positive peer relationships - *"we have to choose good friends and talk about substances with those friends at all the times"*
- Peer education - *"...our peers are the ones who can educate us better because we spend most of the time together, we share everything"*
- Forming or joining support groups - *"yes in those support groups we are going to try to talk to those who are using the substances, showing them that it's not the right thing to do and that they should try to stop those practices completely"*

Theme 2: Parental factors

- Parental education - *"you have to teach your child how to resist pressure"*
- Parental supervision - *"...you start thinking negatively about substances because they don't supervise you"*
- Parental monitoring - *"we should monitor adolescents, we should teach them; we should tell them that substances are not good for their lives"*
- Parental support - *"I think our parents should just be less strict and support us, so that we can also be able to share everything with them"*
- Parents as role models - *"Parents should also be our role models because if I see my father smoking a cigarette or drinking alcohol and then..."*
- Constructive communication with parents - *"parents should try to talk to us nicely and not to shout at us and that will make their message clear and loud to us"*

Theme 3: School factors

- Conduction of awareness campaigns - *"awareness campaigns should be conducted in our schools just to make adolescents aware of the dangers of substance use"*
- Continuous random searching of learners by the police and teachers - *"I think the police should do continuous search in all schools maybe four times a year"*
- Facebook to communicate substance use education - *"in our school there is also a Facebook page where we post and educate each other about the dangers of substances"*
- Arranging rehabilitation center visits for adolescents - *"adolescents should be taken to rehabilitation centres just to see how bad or what substances can do to you, just to see how terrible those people are fighting for"*
- Stricter laws at schools - *"the principals of all schools should be strict about substance use in their schools, and they should discipline those adolescents that use substances at their schools"*

Theme 4: Community factors

- Participating in constructive activities - *"... if they can join some activities or sports or meeting weekends and doing most of good things together rather than using substances..."*
- Community meetings - *"we need things like community meetings where we are going to share information about the use of substances by our own children"*
- Community involvement - *"we need community members who can be able to say no to substance use by any adolescent in this community"*
- Respecting others - *"as adolescents we can respect our communities or societies or try to come up with something that will benefit us"*
- Community prayers - *"the very important last thing that we can do as parents, is to pray for our adolescents"*

Theme 5: Government factors

- -Raise age of acquiring alcohol - *"our government needs to do something about particularly about alcohol, maybe to increase the age that is there for getting alcohol, 18 years is very little at least 21 or 25 is something"*
- Ban alcohol advertisements - *"...at least if we talk about banning of alcohol advertisements because that's when some adolescents experiment it because they saw it on TV"*
- Stringent penalties on foreigners - *"the penalties should be severe when they (foreigners) are caught here with substances; punishment must be very harsh just like in other countries"*
- Collaboration among stakeholders - *"...the government, the different departments, the parents, the teachers, and actually all departments including lay men on the streets, all of us actually needs to be involved"*

Recommendations

- School health nurses should educate more adolescents about how they can prevent substance use
- The results of this study should be included in the nursing curriculum
- Mental health care providers should increase their insight of how they can prevent substance use among adolescents
- There is a need to use these results to develop effective substance use prevention programmes for adolescents in the NWP, SA

Limitations

- Some of the participants did not show up on the day of the scheduled focus group discussions
- Some of the recording tapes were not audible during transcription
- Findings of this qualitative study cannot be generalized, but can be transferred or applied in other contexts or settings

Recommendations

- School health nurses should educate more adolescents about how they can prevent substance use
- The results of this study should be included in the nursing curriculum
- Mental health care providers should increase their insight of how they can prevent substance use among adolescents
- There is a need to use these results to develop effective substance use prevention programmes for adolescents in the NWP, SA

Conclusion

- Findings confirm some important findings from other studies
- Adolescents' substance use can be prevented by focusing on protective factors such as personal, peer, parental, school and government factors
- Researchers interested in developing effective substance use prevention programmes for the adolescents in the NWP, should focus on these protective factors
- This study add important literature to psychiatry and mental health nursing science

References

- Creswell, J.W. 2009. *Research design: qualitative, quantitative, and mixed methods approaches*. 3rd Edition. Thousand Oaks: Sage.
- NIDA., 2014. *Principles of Adolescent Substance Use Disorder Treatment: A Research-Based Guide*, 14-7953.
- Parsai, M., Voisine, S., Marsiglia, F.F., Kulis, S., & Nieri, T. 2009. The protective and risk effects of parents and peers on substance use, attitudes and behaviours of Mexican and Mexican American female and male adolescents. *Youth Soc*, 40(3):353-376.
- Schwartz, C., Harrison, E., Garland, O. & Waddell, C. 2007. *Preventing substance use disorders in children and youth*. Simon Fraser University.
- Sehularo, L.A., Du Plessis, E. & Scrooby, B. 2012. *Exploring the perceptions of psychiatric patients regarding marijuana use*. Potchefstroom: North West University. (Dissertation – MNSc).

Thank you



**Appendix N: Example of transcripts of focus group discussions with
various stakeholders**

Focus group discussion with teachers

R – Researcher

All – All participants

A, B, C etc. – Participants names

R – Good afternoon ladies and gentlemen.

All – Afternoon Mr Sehularo.

R – How are you today?

All – We are fine thanks and you?

R – I'm fine thank you. Again, my name is Leepile Alfred Sehularo, a PhD student from the North-West University Mafikeng Campus. I want to thank you very much for agreeing to participate in this research entitled "Illegal substance use prevention programme for adolescent learners." As we discussed last week when I was here, I have only two questions for you, the first one is, what are your perceptions of resilience as a protective factor in illegal substance use prevention programme for adolescent learners? The second one is what are your perceptions of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor? So please feel free to participate in this focus group discussion. There is no right or wrong answer and as we agreed, we are not going to use our real names in this focus group discussion; you are going to be A, B, C, D just like that. I hope you understand me.

C – Yes sir.

R – Let's go straight to our first question, what are your perceptions of resilience as a protective factor in illegal substance use prevention programme for adolescent learners?

F – I think resilience is the knowledge that is possessed by the adolescents or learners, the knowledge that one has before he or she could indulge in illegal substances, so that when you are exposed to the illegal substances, you are well informed.

R – Mhhhhh.

F – Yeah.

R – The others, what do you think about resilience as a protective factor in illegal substance use prevention programme for adolescent learners?

G – I think resilience as a protective factor is an ability of an adolescent learner to resist temptations like illegal drugs and alcohol.

R – Mhhhhh and what else?

C – I think resilience is an ability to face life challenges because of your strong backbone as an adolescent learner, no matter what, whatever the risks or challenges that you are faced with; you are able to face it.

R – Ms C can you please tell us more about the risks and challenges you are talking about?

C – You mean about the definition I gave you about resilience?

R – Yes please.

C – Okay, the example that I can give you from the definition, for an example if we talk about illegal substance use by the adolescent learners, so no matter how these adolescent learners are pressured, a resilient adolescent learner will always be able to raise his or her voice or to say no to the illegal substances, so that particular adolescent learner can face the challenges of having illegal substances around them.

R – Mhhhhh thank you for that explanation.

B – Another thing about resilience is that an individual is self-aware; this means that adolescent learners are self-aware of what they want in life and what they don't want. When they are resilient it means they are able to resist what they don't want in their lives like illegal substances, because now if you look at our children at the age of 10 or 12 they already know something about illegal substances, so we have to teach them to be self-aware so that they can be able to resist illegal substances around them.

R – Mhhhhh.

E – I can also say that it is an ability to stand for your point especially on the issue of illegal substance use.

Silence

R – Mhhhhh do you still have something to say on question one?

A – Let's go to another question we will come back to this one.

R – Okay, question two, what are your perceptions of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor?

Silence

C – I think we must do something as teachers because we are also parents, maybe our children are also using illegal substances at their schools, so if we can have classes or workshops on illegal substance use in the school, I think that can help, we can call the people who have been using or abusing illegal substances to come forth and talk to the adolescent learners about illegal substances especially the consequences.

R – Mhhhhh and what else?

A – These illegal substances should not be made available to the adolescent learners.

R – Please tell us more about that.

A – It should not be easy for them to access or buy them, in other words, the government and the police should work together with schools because that's where most of adolescent learners get illegal substances, and they get them and use them here in school.

R – Can you please tell us more about what you want them to do specifically?

A – If they know that so and so is selling illegal substances, they should deal with that particular adolescent learner, use the law to stop illegal substances in our schools.

R – Mhhhhh.

B – I think as a teacher, okay I was thinking of maybe inviting SAPS to come and tell them about different types of illegal substances and the consequences, maybe dagga or alcohol, and they should take those who are using illegal substances or those who have them in their possession, having an interview with them thereafter they will see with their own eyes that

it's not a good thing to possess or use illegal substances particularly when you are an adolescent learner.

R – Mhhhhh, your hand was up Mr D?

D – I think on the side of government, on our side as parents or teachers we don't do much by conscientising these learners, these adolescents, we should actually make a lot of campaigns, awareness campaigns, and even at home the parents should take their full responsibility. Again I agree with B but it's not the responsibility of the police only, all of us must, we must actually be united to prevent these illegal substances among the adolescent learners because they are our children, the leaders of tomorrow, so right from the home all of us should be involved.

R – You said parents and children are not doing enough, can you please tell us more about that?

D – Yes sir, let me give an example of our school *neh*, we once had awareness campaigns on illegal substance use and abuse and they were twice in that particular year, as an example, so you see that awareness campaigns in the school programmes, and invite social workers, and the police on top of....(*Can't hear*). At least there must be a plan at least 3 or 4 times a year and then invite other people or different departments so that they can come and assist us in talking to our learners about the dangers of use of illegal substances, you see, so awareness campaigns can help, but if awareness is minimal then those who are selling illegal substances will continue doing that on daily basis, yeah.

C – Another thing is that if we can work with the community, so illegal substance use among our children will be minimal or completely stopped in schools because people are coming from the community to the school and sell illegal substances in the school yard, the priests or the church can also assist to prevent illegal substances in schools.

R – Can you please tell us more about priests or churches, what do you want them to do specifically?

C – Maybe just to..., the role of the church will be to inspire them spiritually.

R – Mhhhhh.

A – Let me assist here, I think the role of the church is to use the church elders to pray for the adolescents of the country especially on this issue. It is one of the ways that can be used even to give teachers the knowledge of how to deal with adolescent learners who use illegal substances, yeah because every time in every place where there is some sort of gathering, church elders are there to pray especially for the adolescent learners of this country.

D – I think the law enforcement needs to be strengthened, they mustn't be lenient on adolescent learners, they must ensure law and order on adolescent learners and every citizen of this country who uses substances illegally as we all know that to use substances while you are still an adolescent is illegal, they must be sort of harsh on learners or adolescents, because tomorrow he or she is arrested then released again on the next day, that is why it becomes a circle, it doesn't end or improve, so the police officers should do their work properly especially when coming to the adolescent learners "the so-called leaders of tomorrow." Especially here in South Africa we are not going anywhere because the law doesn't do what it is supposed to do.

R – Mhhhhh.

D – The police should arrest adolescent learners because it is illegal for them to use substances, they should make sure that they spend more time behind bars, or something like that, just a harsh punishment will assist us as South Africans. They must be more harsh on those who are selling illegal substances. Most of us the South Africans we have seen that people who are selling illegal drugs are people from neighbouring countries, so these people are coming here making money and destroy our children in an unacceptable way, so even the South African government should intervene, they should strengthen their laws for those who are selling illegal substances to our children.

F – Just to add on what teacher D is saying, I was watching another programme on TV showing the foreigners who are dealing with illegal substances, so in this programme they were trying to check the roots of where these illegal substances are coming from, so they went to the mountains, they have informers, even the community they were worried about this kind of thing, so they have a knowledge of where these people are, so they are actually all out, even the community policing forum they know, they even informed the police, that is why I'm saying, it is a mass collection, it needs youth to fight illegal substances, because this drug trafficking thing ... (*Can't hear*), these people have their own way of hiding, so the youth because they spend most of their times with them at schools, in the community and

everywhere they should be used to bring these foreigners forth. They know how to deal with them very well, so the root causes of where these illegal substances are coming from needs to be uprooted, and the police knows about them for example, they know that the Nigerians supply illegal substances to the adolescent learners, our police officers know these very well, they cover them, even our system, our legal system in the country is very corrupt.

B – Let me also say something here, when we talk about illegal substances, something really needs to be done because our country is going nowhere because of these illegal substances particularly in our children, we should also try to assist adolescent learners from a very young age, for an example, in our school, we have children who are using illegal substances because of their particular backgrounds, so when we talk about adolescent learners, I think it is important for us to consider the backgrounds of our learners or adolescents because some of them are using illegal substances because of their backgrounds, so they also need to be given enough information about illegal substances so that they can be able to make what we call an informed decision, I think that background is very important.

R – Let me ask something, when we know your background, how will the knowledge of adolescent learners' backgrounds assist us to prevent illegal substance use particularly in the North West Province of South Africa?

E – I can relate that to the issue of Uganda *neh*, there was also a serious issue or worry or concern about the use of illegal substances by their adolescent learners and they started to make awareness campaigns, abstinence, all the preventive measures you can think of, they went to the relevant people, adolescent learners, and it reduced the rate of substance use to less than 30%, from 90%, so what I'm trying to say here is that it is all about awareness actually, awareness about the dangers or the impact of the use of illegal substances in their bodies, just like HIV and AIDS, there is a lot of awareness campaigns that is why it is reduced as we speak now. So basically the illegal substance users they use them the way they like and tell people that they have been smoking for so many years, but the consequences thereof, they don't have the knowledge about them. And the foreigners are just looking for money from our children, so it is actually the responsibility of every community to stand up, communities are the ones who should do awareness campaigns but with the help of the government because on that issue the different departments, the parents, the teachers, and actually all departments including lay men on the streets, all of us actually needs to be

involved, also to include the councillors and then it should actually come from top to bottom, it will be much easier if we start from top to bottom because it also needs law enforcement.

R – Mhhhhh.

C – I also agree that if all of us can be involved, this problem can be uprooted once and for all. Here at school we only educate or inform learners that they do not need to go out to the community and use illegal substances. Community members should also be informed or taught, they should also consult, because every household, they need this knowledge that they will be able to impart to the learners in the Province.

A – One other thing that I need to mention in this discussion is that there are so many programmes in the form of media like television. So on daily basis our children are bombarded with TV programmes that are not good for them, for an example, they depicts substance users as people who are well known, so adolescent learners use these people as their role models. So we as the society, we need to do something about it, maybe to seek attention from those people who are the so called very good people, we need to talk to those celebrities and show them that they are the ones who are misleading our children. So within our communities we should make adolescent learners aware of you know..., people who can be their role models within their communities, rather than looking at people who are always on TV news because of their arrests for illegal drugs or alcohol misuse or possession of those illegal substances. Adolescent learners can just pick one man at home, in our communities who goes to church like every Sunday, people who are doing everything for their families, but we don't see those people as role models, we ignore them and they are very important for our children. We rather see the ones going to the taverns on a daily basis as role models for our learners, so it is an issue that we need to focus on, that one can take us somewhere.

C – Because this thing is sort of you have this research and you are going to present the findings to the relevant people, and they will be accepted by the relevant institutions, so that's where it must begin because anything that starts from bottom to top it doesn't work, but it must start from top to bottom, you see, so that.... (*Can't hear*). You must see even at taverns these people just do things the way they like, so, there is somebody who doesn't do his or her job well, so it must be and practically and it must be emphasised and again and again, and then it needs attention of high people. It needs to be approved there first at the government level, there should be like a book that deals with drugs only, like it is happening with HIV. Most learners are aware that there are HIV books, because there is a lot of awareness there,

so we also need a lot of awareness campaigns on illegal substances in our communities, but here in illegal substances, awareness is just a word of mouth a lot than doing, so we need a lot of pamphlets on illegal substances, just like in HIV/AIDS, that is why they are aware, people are aware because of a lot of information that is available to them. Even the people who are affected or infected by HIV/AIDS they know that there are a lot of preventative measures that they can use to prevent infecting other innocent people and so forth.

R – Mhhhhh I saw you hand up E?

E – What I want to add is on the issue of taverns, prescribed law is not respected at the taverns there is no one who is monitoring the age of the people who are entering there and that is a serious problem because almost all adolescent learners nowadays go there and drink alcohol or use other illegal substances the way they like.

R – Yes teacher F.

F – Yeah and one other thing is that these tavern owners, they need to hire people who will monitor the people who are going in and out of their buildings to ensure that only relevant people are going there. Another thing is that our police officers also need to be properly trained because it seems like they don't know what they are doing at times.

R – They should be trained on what?

F – On everything, on illegal substances and ... (*Interrupted by C*)

C – These people are trained and on everything, they know all types of illegal substances that adolescent learners are using, they have a lot of information, they are trained, it's only that they are lenient in their work, there should be something on TV on illegal substances, just like we are having news, sports, movie channels et cetera et cetera So what I'm trying to say here is that there must be a channel basically for the illegal substances, because that will help us, for example, we know what is happening in America even though we are not staying there. I know what is happening in Russia even though I don't stay there and so forth, because every time when you switch on your TV there is a channel on illegal substances.

R – Mhhhhh.

E – Government should also fund, I heard somebody this side talking about a drug abuse or use channel, sometimes the.....(*Can't hear*) it needs funds, because sometimes it won't be

sustainable because of lack of funds and time, so it is important for the government to assist on this issue, there must be a budget for that TV channel or radio station, so that it can live longer, in some of our schools we don't even have a security guard at the gate, everyone can just come in and out, nobody is going to say anything because there is no one at the gate. People can even come and take our car keys and leave, so that's the problem.

R – So you are saying that there must be a security guard at the gate to control people who are coming in and out?

E – Yes, because people who are selling dagga are also able to enter the school premises, or they just stay at the gate sometimes.

R – You wanted to say something Mr C?

C – Yeah (*With a loud voice*) there is this thing of 18 that if you are above the age of 18 you can drink and get drunk. According to me an 18 year old is still a child, that's what I'm thinking and they are the ones who are using illegal substances and if restriction say 18, they feel and think that they are matured to drink alcohol and you are an old adult. My problem here is that there is no way that you can talk to that particular person because the law protects them, so if we can increase that age restriction to 21, I think it will be better, and one other thing is opening times of taverns, from 10am in the morning up to late, that means from as early as 10 o'clock people can start drinking up to morning hours, so I think maybe if they can open their taverns from 10 o'clock up to 11 o'clock during the week.

All laughing and talking. Can't hear).

R – Okay good people let's come back to our interview.

C – Yeah, that is why I'm saying illegal substances are easily available to the adolescent learners.

E – Mr Sehularo, Mr Sehularo(*Can't hear because everybody was talking*)

R – D I saw your hand was up?

D – People with liquor licenses know when to open and when to close, they don't sell up to late or morning hours, so the government should do its work.

B – There is actually no control, even learners from poor families they go there and drink the whole day instead of coming to school; even their parents are not doing anything.

R – Can you please tell us more about that Mr B, what do you want the parents to do?

B – Using drugs *neh*, or let me say illegal substances, like they have been talking about parents. Parents do not have control over their children, they go out at night and then, they cannot control them, because these adolescent learners also have rights, for example, if as a father you beat a child as a way of disciplining him or her, this child will go to the police and tell them and tell them everything, even a child who is coming in the morning hours, this is what causes them to be worse, and the government is protecting them.

R – Mhhhhh they become worse?

All – Mmmmm.

C – Now, one other thing is the sports in schools, there should be under 13, under 17 and under 19, all learners have to participate, if they don't participate the principal have to account for that, so there should be a department that will specifically deal with all illegal substances and so forth for the adolescent learners, and even the knowledge should be enforced to reach all learners, there should be campaigns and then somebody should be made to account, whether it is a teacher or a person who will be paid by the department, because something must really be done, there should be accountability and so forth, because some people, not every person can be a campaigner, but if you agree to that, there should be a department and funding like we are saying, it could make a lot of difference.

Silence

C – For this problem of illegal substances to be solved among adolescent learners, a lot of people should be involved.

R – Collaboration?

All – Yes.

R – Yes Mr B.

B – One other thing searching, if a child is suspected to be using illegal substances, that particular child must be searched, or all learners they need to be searched continuously.

R – Who is going to search them?

B – Whoever has the ability to do that, maybe as a teacher you know that this one is using illegal substances, you must be allowed anytime of the day to search that particular learner.

Silence

R – It seems like we need a lot of people to prevent illegal substance use among adolescent learners in the North West Province like you mentioned people who can search them, you mentioned securities, councillors, to do awareness campaigns et cetera etcetera. Yeah, do you still have something that you can add, or maybe we can go back to question one, your perceptions of resilience as a protective factor in illegal substance use prevention programme for adolescent learners.

D – Okay based on the first question even though it was a little bit tricky, I can say that adolescent learners are at increased risk of a lot of things around them, such as illegal substances, I can actually say that parents are good people who can prevent illegal substance use by the learner, and you reach these parents through councillors, through traditional leaders, or through different radio stations, so I'm saying that the whole process should start from top to bottom as they have already mentioned that the government should start, then communities, councillors, traditional leaders et cetera et cetera.

E – The other problem is the parents who drink with children.

R – They drink with children, mhhhhh please tell us more about that.

E – I mean, how do you solve a problem of alcohol on adolescent learners when their parents especially their fathers drink with them, or maybe a life orientation teacher smoking in front of the learners or adolescents, the next thing is, what is he going to say to them in class?

R – You know actually I don't want to end up misinterpreting what you have said Teacher E, can you please put it clearly not in a question form, please?

E – Okay yes I understand, no problem, I was saying that the parents at home should not drink alcohol with the children or in front of them.

R – Okay, thank you.

D – Now what about life orientation teachers?

E – Okay here I’m just trying to say that there are some learners who see their teachers as their role models, so if a teacher is drinking alcohol or smoking in front of learners, what does that mean, it has to stop, and teachers should not smoke or drink alcohol in front of learners even after school.

All laughing

C – I don’t think that will be possible, what is important is that learners should be informed or be reminded that substances are dangerous for them, especially when they are still in school where they are expected to be building or working on their future.

R – Mhhhhh.

C – These adolescent learners should know what is good or bad for them, it’s like when you are at home with other men whether you are drinking or not, that alcohol is not meant for them, they must know that they are still young for that stuff. As a parent you should teach children at home that this is my enjoyment because I’m a parent. I mean, a child should not say he or she is drinking because he or she saw me drinking my beers with other men or my friends.

All laughing

C – It’s just like doing your things with your wife in a bedroom and they say we do what you are doing. No, there are some things that are meant for children or the adults; you can’t just hide yourself for everything that you are doing in your own house. A child should be taught that at a certain age you can’t do this or that, or I can’t give you my car until you are 21 years old or you have a driver’s licence. So you show him the good and the bad, you see.

Silence

R – Mhhhhh.

Silence

R – Do you still have something that you want to add ladies and gentlemen?

F – No, we think we are done.

All laughing

R – Alright ladies and gentlemen, I thank you very much for all the information you gave me on this research entitled “Illegal substance use prevention programme for adolescent learners.” Your participation on a very busy schedule, especially around this time of the year, is highly appreciated. I don’t know if there are questions or anything that you want to say before we terminate our discussion?

C – No, no questions, on behalf of the group I want to thank you very much for choosing our school because we have also learnt something, and some of the things we can also do them to prevent illegal substance use in our own school or even at home.

R – Okay, thank you very much good people.

All – Thank you Mr Sehularo.

Focus group discussion with parents

R – Researcher

All – All participants

A, B, C etc. – Participants names

R – Good afternoon

All – Afternoon sir

R – How are you today?

All – We are fine no complaints

All laughing

R – My name is Leepile Alfred Sehularo, I'm a PhD student at North-West University Mafikeng Campus, and I'm doing research on illegal substance use prevention programme for adolescent learners in North West Province of South Africa. I thank you very much for agreeing to participate in this research and I have only two questions for our discussion, first question is "What are your perceptions of resilience as a protective factor in illegal substance use prevention programme for adolescent learners?", second question, "What are your perceptions or your views or your understanding of how illegal substance use could be prevented among adolescent learners by focusing on resilience as a protective factor?". Please remember that we are not using our real names here, you are going to be A, B, C, D, and E. So now let's go to our first question, what are your perceptions of resilience as a protective factor in illegal substance use prevention programme for adolescent learners?

All – Mmmmmm

R – Anyone can start

B – Alright did I hear well that the first question is perceptions as parents on resilience as a protective factor in illegal substance use prevention programme for adolescent learners?

R – Yes

B – Resilience as a protective factor in illegal substance use prevention programme for me is the adolescent learner's strength or ability to avoid to do wrong things such as illegal substance use particularly when you are still an learner. In this case it means adolescent learners ability to avoid illegal substance use despite availability of those illegal substances around them. The ability to stay away from the illegal substances, despite those illegal substances being around you as an adolescent learner.

R – Mhhhhh the ability to stay away from illegal substances?

B – Yeah I think so

R – Okay

Silence

E – Yeah I do agree with B there, that in this interview we are talking about adolescent learners, and adolescent learners are constantly exposed to peer pressure neh, so now if an adolescent learner can resist in spite of these illegal substances around them maybe here in school, resisting the temptation of indulging in illegal substances, or substance abuse or use, then it means these adolescent learners themselves are resilient because they are able to protect themselves from the illegal substances. When they are resilient they are actually in a position to resist illegal substance use, because resilient person is actually assertive

R – Mhhhhh

D – To add on that, since now we are talking about adolescent learners, resilience as a protective factor means adolescent learners are assertive even though they are exposed to illegal substances, but when they know how to say no to those illegal substances around them, when they are resilient they will be able to say no because they know the dangers of using illegal substances when they are still at school or young, because really illegal substance use is a serious problem among our children

R – When they know the dangers of illegal substances?

D – Yes sir

R – Okay

E – Even when they are constantly exposed to illegal substances around them

D – Now that they always say they are doing life orientation in classes, they must be given a lot of work around the same topic, here in school they should also raise awareness of illegal substances

R – What do they do when they raise awareness of illegal substances?

D – They should do roadshows; they should educate their peers about the dangers of illegal substances, and so fourth, something really needs to be done here

C – These are adolescents, so when they are resilient is when they are able to stay away from illegal substances no matter the pressure or whatever

R – Mhhhhh

Silence

A – Actually this question is difficult you can see that even the participation is not that much

All laughing

R – Okay, maybe we should go to question two, we will come back to this one. How can illegal substance use be prevented among adolescent learners by focusing on resilience as a protective factor in the North West Province of South Africa?

E – Actually we mentioned some of the points that also fits into this question

R – Mhhhhh

D – What is the question again?

R – What are your perceptions, your views or your understanding of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor?

B – I think that communities or schools should have games; there must actually be more recreational activities that will keep them (adolescent learners) busy, that will keep them away from the streets, so when they join sports, they should also be informed that they should love their bodies, because sports men and women love their bodies. In most sporting codes, there are always people who identify and refer people who have problems, just like problems

with illegal substances; these adolescent learners will then be referred for further care when they have illegal substance use problems. In my team I always encourage adolescents to come forth for any problems that they may have because when they are at the gym with me I treat them like my own children, that's why I'm saying it is very important for the adolescent learners to join sports or choirs in their communities in order to keep their minds away from thinking about illegal substances.

R – Mhhhhh

D – And to add on that because the adolescent learners, they have families neh, so if from their homes, their families, they are encouraged to join extra activities like sports, if we don't teach them that instead of using illegal substances you can join sports or community choirs, so because of the families' support to join those activities, they are going to have less time or chance of thinking about illegal substances

R – Okay

C – Let us look at the time when they get exposed to illegal substances and use them, these adolescent learners they start at secondary school level, high school level, at the primary level, so the bottom line here is they start using illegal substances from a very low grades like Grade 4 or 5, so they use illegal substances when they are still very young, According to my view this bomb will explode at an early age, because it is where they start experimenting illegal substances. So the question is when, so according to my view, there must be a constant monitoring of these adolescents, they must be monitored closely at an early age, We as parents should do the constant monitoring of our own children, that is our responsibility

E – I agree with Mr C that parents should constantly monitor their children because they are the ones who know them better than anyone else from a very early age, they must constantly monitor them

A – Early age you are talking about which age specifically because here we are talking about adolescent learners? Because the focus here is on the adolescent learners neh

R – According to my definition adolescent learners are individuals who are aged between 10 and 19 years of age

C – 10 and 19 years

R – Yes sir

A – But it's still a problem because some adolescent learners reach adolescent stage before the age of 10 years, some have even more responsibilities than the older people at their homes, some parents send adolescents to the taverns to go and buy alcohol for them and that is a risk factor for illegal substance use for these children, we actually need to be role models to the children as parents to avoid illegal substance use in the future, or like after drinking a beer and ask an adolescent learner to go and put the bottle away, these adolescent learners start drinking at that time, so what I'm saying here is that parents should not allow adolescent learners to even touch an empty bottle of beer because others want to taste or experiment what their parents are drinking everyday

B – Actually as parents at times we are also exposing adolescent learners to the substances, because of the things we do in front of them

C – I'm still thinking that prevention should start at an early age because if we ignore that age or gap between 3 and 10 then we are not going to win the fight against illegal substance use among adolescent learners because they don't start from age 10 they start before that age group

D – Yeah, and then I agree with them that parents sometimes contributes to illegal substance use by sharing a beer with a child who is 3, 4 or 5 years of age and the things we do in front of our kids are also contributory factors to illegal substance use. These parents should also be taught about the dangers or effects of illegal substance use among their children so that they can be in good position to help them effectively

R – Mhhhhh

C – Let me also go back to the issue of constant monitoring by their parents, because that is an important issue, So what the parents should do here is to engage these adolescent learners, parents should be very strict on adolescent learners to know their whereabouts at all the times, they should also be free to talk about these illegal substances to the adolescent learners, the parents should tell them how dangerous illegal substances are to their bodies and so forth you know

D – And again, parents should also stop using illegal substance in front of adolescents, just for the adolescent learners sake, they can use their substances like alcohol but not in front of the adolescent learners at least they must hide themselves

All laughing

R – They must hide themselves?

All talking (Can't hear)

D – And again to monitor the television

R – What do you mean by monitoring the television?

D – As parents we must make sure that we know which channels these adolescent learners are watching

All laughing

D – As a parent, it is your responsibility to make sure that adolescent learners aren't watching channels that they are not supposed to watch, it is very important to know what they are watching because adolescent learners are more interested in watching irrelevant channels, because at schools, because of peer pressure, they talk about channels which promotes alcohol, sex and stuff like that

All laughing

B – But let me say something here, we are looking at one side that the parents should monitor the adolescent learners, what about the technologies that they are exposed to on daily basis, because their phones have a very high technology where they are able to see everything that they can also watch on TV. These cell phones of our children have everything

A – Monitoring should not only come from the parents, because even the teachers like here in school should also monitor these kids because they are under their control when they are in the school yard, We should work together with our schools in this regard

E – But at times teachers don't have time to monitor them continuously because of their lot of work and its stress, that's why even myself, I'm also a teacher by profession and I never go home with the school work, but there's a lot that we are doing as teachers and as parents on

the other hand. That is why it seems like the teachers are not constantly monitoring the adolescent learners, it's because of a workload nothing else

C – But the teachers should be role models of the learners because we know that there are teachers who are not afraid of standing with the learners at the toilets and smoke. Those teachers should stop smoking with the learner and they should also stop smoking in front of them, at times when they are in school trips, really we always hear about these problems, teachers should see themselves as parents to the learners, they are the learner's role models, so if teachers can stop drinking alcohol and smoking with the learners, these learners will know that smoking cigarette or whatever and drinking alcohol is not the right thing, so what I'm trying to say here is that the teachers should play their role of role models to the adolescent learners, just like us the parents. These teachers are also parents, i don't know what they are thinking, that will also make them being respected by the learners and the whole community or world if I may put it that way

All laughing

E – I think as parents we can also teach children about the dangers or negative effects of toxic stuff at home, this thing of preventing illegal substance use among adolescent learners should be a continuous thing, it should start at home by us the parents taking their part then to be continued at school by the teachers, because in schools teachers will emphasize on what we as the parents have done at home to teach them about the dangers they are making in their bodies when they use illegal substances particularly in schools

A – You know at times education alone is not enough, look at what is happening to HIV/AIDS, there is a lot of talking and talking on TVs, radios and everywhere, here we need actions before the situation gets out of control just like HIV

C – Actually if I listened well here what you are simply saying is that as parents we should work together with our schools and be strict on these adolescents if we want to prevent illegal substance use particularly in our local schools because that's where they spend most of their time, not at home. Or how do I put it. Parents and teachers should be strict and be role models to the adolescent learners rather than smoking in front of them, and you know what I like about our adolescent learners is that if they can see that teacher so and so is doing something that is not acceptable they will never respect that particular teacher for the rest of his or her life, that's why I'm saying that both parents and teachers should teach these adolescent

learners just like their own kids, that will make them respect them and it will also make them stop using illegal substances, particularly here in school. Because we know that there are kids who are not using substances at home but use them here in school

B – Now what about adolescent learners who are orphans, I'm asking about them because we know in our community that there are a lot children who are orphans, they don't have parents or guardians in their homes, some of them are under the care of grannies, they don't have, or they don't stay with their own biological parents, these grannies are not knowledgeable or they are unable to monitor these adolescents, especially adolescents

E – But we have communities; churches and neighbours, there are a lot of people who provide foster care to these adolescent learners

C – What can be done here I think it's simple and straightforward, if community members can join hands and work together, those children will not feel like orphans, if as community members can learn to take full responsibility of the adolescent learners especially on this issue of illegal substance use or abuse, then we can win this battle, we need community members who can be able to say no to illegal substance use by any adolescent learner, unlike the situation where you find that adolescent learners at taverns drinking beers during school time with older people, others are even having sexual relationships with these elders, I think those things should stop, all parents should know that all learners or adolescents are the same, neighbours should not be afraid of reprimanding children if they are doing something wrong such as using the illegal substances we are talking about here today. if it wasn't because of substances we wouldn't be here today, isn't it?

R – Mhhhhh (nodding head)

D – Parents should actually teach learners morals and values

R – Mhhhhh

D – There is something again here, B is talking about the orphans who are able to be guided by the community members, now I'm thinking about adolescents who are outside the schools, who are not attending schools, now the question is, what are we saying or doing to those children, because these adolescent learners are not attending schools but you see them every day in school gates when you pass here, even at other schools they also go there, those people

are trouble makers and nothing is being done about them. I think the people who are not attending schools are also bringing illegal substances to our children

All laughing

A – These people Mr D, they have their homes, it's just that they decided not to go to school and now they come and destroy poor kids who are trying to learn with illegal substances, I also agree that something must be done about them, it's like everyone is allowed to do as they like in schools, nobody is saying anything about those children who are bringing drugs to our children in schools

D – And after school? They are meeting again, so it's difficult to stop illegal substance use on those ones

C – Even at the gyms, they are also accompanying their friends to the gyms, but they are not doing anything, they just wait for them at the gates, and they are very naughty, but not all of them obviously, some of these children want to join us at the gym, but they can't because they don't have money, they can't afford, so i agree with D that something needs to be done to assist these children

R – Mhhhhh

Silence

R – Is there anything that you still want to add on how we can prevent illegal substance use among adolescent learners by focusing on resilience as a protective factor?

All talking (Can't hear)

E – Gone are those days when..... (Can't hear), i think at the churches they can also do something to prevent illegal substance use among adolescent learners, things like Sunday schools can also keep adolescent learners busy especially on Sundays, just like here in school, I know some of the teachers are trying to keep them busy as a way of preventing things like illegal substance use or abuse

B – Here in school the teachers are, as we have mentioned earlier on that there are schools that are already doing something to prevent illegal substance use among these kids. The thing that I think they can do to assist us I think it's to continuously teach them about the dangers or negative effects of illegal substance use

R – Mhhhhh

B – The important thing here is to send a message about what substances are doing to them, because it seems like some of our children still don't know what the illegal substances are doing to their bodies

R – Mhhhhh and what else?

C – I think another important thing is what we have mentioned earlier on that teachers should be role models of the adolescents. Teachers should not use any substances in front of the learners

All – Mmmmmm

A – Not just role models, but good role models to the learners

All laughing

D – Another important thing for us as parents is to love our kids, to have them in our hearts showing them or doing only the right things in front of them, that will definitely show them that we really love them

E – I'm impressed that all of us here are speaking the same language, you know in life, there are good parents and bad parents, and you know what causes that, it's because we are not treating our kids same way, We need to tread kids the same at home, we need to respect them, to talk to them in a way that will show them that we really love them, we don't want them to use things like illegal substances, sex and so fourth, we need to do a lot on our children, otherwise we are not going to win anything as parents, and that's not what we want

R – Okay, so if I may summarize what we talked about in this discussion, you mentioned that teachers, parents, community, schools... yeah, constant monitoring by the parents and the teachers should also be done, and that you must all speak same language

B – And NGO's

R – Mhhhhh what did you say about the NGO's? Can you please tell us more about that?

R – We talked about Khulisha (Not sure about spelling), sports club, love live

A – Let us not ignore the role played by the police, because police are also coming to our community taverns, schools and so fourth to search the them for illegal substances that they are using, or possessing when they come to taverns, they usually come with their dogs which are very good at searching for illegal substances used by our community members. But you know our children, if they know that the tavern or school will get help from the police, they hide their drugs, you know our children are very clever, the can make sure that they are not arrested.

D – And also I think peer education about illegal substances can work, where our children can come together as peers and talk about things that bothers them such as illegal substances, in their meetings they should share information that they know or have about the dangers of using illegal substances, I think another best way to assist these peer educators is when they can attend courses or workshops offered by the professional councillors, you know councillors that usually come to the clinics, I think they can be asked to assist our children with peer education and staff like that

R – Mhhhhh

C – This thing of searching the children should not be done once a year especially in schools, it can be done at least quarterly and these police should come to the schools unannounced so that they can find them relaxed and not ready to be able to hide their substances, You know these kids are boring, at times you even feel like killing them

All – Mmmmmm

C – Yeah, I think once in three months will assist the whole school or community because they will be able to arrest those who do not respect the law. You know before 1994 police used to patrol streets or communities and search people on the streets, I don't know what happened to that

B – Waik, all those things are gone, no one is doing that anymore. In stead we always hear about them on TVs that they ate money that could be used in the fight against substance abuse, HIV, Rape etcetera etcetera

R – Mhhhhh and what else?

Silence

R – Okay, is there anything that you still want to add on this topic?

D – No, I don't think so

All laughing

R – Okay, thank you very much ladies and gentlemen for participating in my research, I don't know if there is anyone who maybe wants to summarise almost everything for us so that we can end our interview session

All silent again

C – If I may try to summarise the whole session Mr Sehularo, all these role players need to work together, including the adolescent learners themselves, they should also be involved or included in the prevention of illegal substance use, because to me they are the ones who know it better than anyone else here because they are the ones who uses those illegal substances, as adults, we don't use those staff

All laughing

C – If we can work together, I think we can be able to prevent or stop illegal substances among our adolescent learners

All – Mmmmmm

R – Okay, thank you very much ladies and gentlemen for sharing information with me the information on how we can prevent illegal substance use among our adolescent learners by focusing on resilience as a protective factor in the North West Province of South Africa

All – You welcome sir

Focus group discussion with professional nurses

R – Researcher

All – All participants

A, B, C etc. – Participants names

R – Good morning ladies and gentlemen

All – Good morning

R – How are you today?

All – We are fine thanks and you

C – We are alright

R – I'm also fine and thank you for asking, my name is Leepile Alfred Sehularo I'm a PhD student at NWU Mafikeng Campus, let me start by thanking you for agreeing to participate in this research and for signing the consent form. Topic of the research is "Illegal substance use prevention programme for adolescent learners in NWP, SA". And I have only two questions that are going to drive our discussion. I don't know whether there is a question or comment or anything before we start with our discussion.

D – No comments, no questions

R – No comments, no questions

All – Yes sir

R – Yeah, again, we don't use our real names in this research, She is A, B, C, D, E, F, G, and H. So our first question is "What are your perceptions of resilience as a protective factor in illegal substance use prevention programme for adolescent learners?".

B – According to my knowledge, resilience as a protective factor is all about resistance. In this case it will mean their (adolescent learners) ability to resist illegal substance use, how

they can resist that or how we as nurses or parents can deny them or protect them from the illegal substances

R – So you understand resilience as a protective factor as the adolescent learners' ability to resist illegal substances

All – Yeah

R – Okay, and what else?

Silence

R – What do you know about resilience as a protective factor in illegal substance use prevention programme for adolescent learners?

A – I think the way I understand it, it is the things that can be done to prevent or to protect adolescents from using illegal substances, things that will prevent illegal substance use

R – Please tell us more about those things that can prevent illegal substance use among adolescent learners?

A – Things like, as adolescent learners neh, they need to be taught at home about illegal substance use, since it is a problem in our country, how to prevent illegal substance use like peer pressure, or those things that can cause adolescent learners to use illegal substances, so they need to be taught at home about illegal substances. So what I'm trying to say here is that resilience on adolescent learners have to start at home, the parents should monitor these learners

G – Adding on that it means parents must be role models of their children. These parents should stay away from using or abusing illegal substances. For example, not drinking alcohol, smoking dagga etcetera etcetera in front of the adolescent learners

H – But again, resilience as a protective factor in illegal substance use to me it should start with you an adolescent learner. I think it's your ability to say no to something that you are exposed to, like illegal substances

A – But how are you going to say no to something that you don't know? Because as children, think about a child who is 10 years old or younger, these people they don't know anything about illegal substances, the effects, so I think if they have knowledge about illegal

substances, it's then they can have knowledge or ability to resist, so that is why I'm saying they need to be taught at home, not only at home actually, even at school, everywhere. You have to teach your child how to resist pressure, like firstly they have to choose right friends because the friends at times are the ones who influence them to use illegal substances, you see

R – So we hear different views because others are saying it begins with you as an adolescent learner, others are saying it starts at home, so we have two different views on your perceptions of resilience as a protective factor in illegal substance use prevention programme for adolescent learners, and those who said parents should monitor the adolescent learners, by monitoring what do you mean?

C – The parents should monitor type of friends adolescent learners are socializing with at school, and again we normally give our children pocket money, so that money also should be monitored, to see what adolescent learners are buying with that money

R – And I also heard that parents should be role models

G – Yes between a parent and a child there must be communication between these two people. A parent must teach a child about the negative effects of illegal substances such as alcohol, because alcohol is illegal on adolescent learners

R – Mhhhhh and what else do you know about resilience as a protective factor in illegal substance use prevention programme for adolescent learners?

B – I understand resilience as an ability to resist bad influences, and while in that process of resisting, it is also protecting adolescent learners from bad influences, you actually resist to do the things that you don't want to do, things like alcohol and other drugs

R – Oh meaning when you resist something at the same time you protect yourself from something?

All – Yes

R – Okay (Nodding)

Silence

R – Is it all on this question?

Silence

R – Good people there is no right or wrong answer, anything that is coming to your mind, please feel free to share it with us

Silence

R – Or maybe let's go to question two, we will come back to question one if we still have time. What are your perceptions or your views of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor in the North West Province of South Africa?

E – I think these adolescent learners should be engaged in recreational activities, just to keep them busy and shift their minds away from illegal substances, they should be engaged in sports activities or anything that can keep them busy and when they are at those recreational activities, there should be people, adults who will look after them to make sure that they start on time and finish on time and they go straight home immediately after those recreational activities, the parents should also know that those recreational activities starts at this time and they finish at this time

R – When you keep adolescent learners busy are you preventing illegal substance use, can you elaborate more on that so that we can all understand better?

C – You keep a child busy let's say when he or she comes from school, the child knows that I have to go straight home because there is something that I have to do at home and after that it's maybe sports or something in the community

B – That thing will actually limit time for friends, especially bad ones

D – But anything can happen, because now you are saying you involve a child in sports activities or whatever, but now on their way home, anything can happen, because now the child will be alone or independent, because maybe at those sports activities a coach or a manager will be there, that's why they can't use illegal substances, but after that anything can happen on their way home, so that's when they can meet with their bad friends and use illegal substances, so I think knowledge is power, so I'm actually trying to say that the child must be well informed about illegal substances you see, so that he or she can resist from these bad behaviors of using illegal substances

H – But still if I may add on what Sister D has just said I think..... (Can't hear). For example, if you are a member or a team member of a certain team and maybe there are rules that certain substances are not allowed on team members maybe to say you cannot smoke dagga or you cannot drink alcohol, so knowing that I'm a soccer player, you cannot try to use illegal substances so somehow you will keep yourself away from those particular things because you know that you are going to be tested

A – But to be honest good people in our schools or community recreational activities or at the soccer, do they test these children for illegal substances, hence I'm saying these adolescent learners should actually have the knowledge about the substances, especially illegal ones, because imagine a 10 year old or a 15 year old playing a soccer, okay from soccer he meet these friends that are abusing dagga neh, so what I'm saying is that if they know the effects of dagga they will resist, if they don't have any knowledge, how can they resist something that they don't know anything about, you see

C – Let me just add, what participant number A is trying to say is that there must be programmes at schools that are explaining what illegal substances are, the dangers of illegal substance use, I think even the conditions that can be caused by illegal substance use

A – After informing them about the dangers of illegal substance use it is then when they choose to join recreational activities, because the thing is they need to be informed first, after they can make an informed decision because of their resilience, the parents, the teachers, counsellors and the nurses need to do their part of informing these adolescent learners about everything regarding illegal substance use, there should be school health nurses in all schools who will be able to inform adolescent learners about illegal substance use

R – Oh you are saying there is a need to have school health nurses who can teach adolescent learners about illegal substances

A – Yes

Silence

R – Mhhhhh and what else, your views or your understanding of how illegal substance use among adolescent learners can be prevented by focusing on resilience as a protective factor in the North West Province? Please remember that by prevention we are talking about stopping it completely or delaying the onset of illegal substance use among these children

Silence

F – I think these adolescent learners should be taken to psychiatric hospitals or rehabilitation centers so that they can see people who are admitted due to illegal substances, to see how they behave or how they leave, so maybe if they can see those people they will learn something from them

R – So you are saying somebody should organize a visit for those adolescent learners to come to a mental health care institution to come and see people who are admitted due to substance related disorders maybe they will learn something from them

All – Mmmmm

R – Mhhhhh and what else, B you wanted to say something?

B – Yeah, I wanted to say that the liquor board, I think they should also play their role in prevention of illegal substance use among adolescent learners. For example, if you want to go and buy a beer they should be strict about this thing of age restriction, like we know that it is illegal for less than 18 year old child to buy a beer, they should not allow these children to buy a beer because there are old people like uncles or fathers who send those children to go and buy beers for them and it is illegal, at least when they are 25 years

R – Are you saying those who are 25 years and above should be the ones who are allowed to buy alcohol?

B – Yeah because to me 18 years old people are still small babies, they are still very small, they shouldn't be allowed to go to taverns, or buy a beer or something like that, or maybe the government should increase the age of drinking and buying alcohol to 25 years

R – Mhhhhh

B – Yes

A – I don't agree with what was mentioned earlier on about bringing adolescent learners to psychiatric hospitals or rehabilitation centers because they will be violating the rights of our patients because we have this right of privacy and we have to respect that, so if we bring those adolescent learners here, it will be violation of patients' rights and we will also be forced to protect those adolescent learners here, so if we allow people from outside to come

and see our patients here, I don't think it will be right because we will be violating their rights as patients

B – I think if those adolescent learners come and see what illegal substances are doing to people, the way these patients live, especially in a restricted place like in a hospital, I think they won't go back to illegal substances, I'm telling you

G – Let's talk about the people who are already affected by illegal substances neh, when they are here in the hospital, they say that I will never come back here because this place is not conducive for me blah blah blah, you can see that they still deny because they are here, but when they go out there, they are going to do or use the same thing, they are going to abuse alcohol, dagga and *nyaope* blah blah blah, so that one I also don't think it will be right for our patients, I don't know what the others are saying about it

H – But still those people we can bring them here as much as advertisements that says smoking kills or it damages your lungs, but people still smoke, there are also adverts that says don't drink and drive but people still do that, so I'm still saying this thing of using or not using illegal substances starts with you as an adolescent learner, you can watch all adverts or bring them to psychiatric hospitals or rehabilitation centers, but if they want to use illegal substances they are going to use them, so I'm still saying it's up to them to make the right decisions for their own lives, there will always be bad friends, advertisements and rehabilitation centers, but if people want to smoke or drink, they will definitely do that

R – I hear what you are saying colleagues and you are saying it for the second or third time that it should start with them, the adolescent learners, what do you want them to do specifically when you say it starts with them, what do you mean or what do you want them to do?

H – To me there is already enough information about illegal substances out there; it's all over the places, so the adolescent learners must just decide whether they want to use illegal substances or not without any external people

R – They must just decide

H – Yes because there is already enough information about illegal substances out there. They just need to be resilient, to be able to resist the pressure of using illegal substances, knowing what illegal substances will do to them, they just lack resilience

R – Mhhhhh

H – Yeah

R – Okay B you wanted to say something?

B – Yeah what I want to say is that most of the adolescent learners don't have that ability to resist illegal substances because when their friends say no man take a puff, they take it, because they lack that ability to say no most of them, their no is actually yes, they are weak these people, if all of them can have an ability to resist we wouldn't be here talking about this research...

All laughing

B – I think we should just give adolescent learners enough information on the dangers of illegal substance use so that they can also be able to say no to illegal substances

C – There should actually be a strong open communication between parents and children, parents and adolescent learners should have trust relationship between each other

G – Parents should assist adolescent learners to choose good friends because as parents we can see that this friend is a good one and this one is a bad one, because in most cases friends are the ones who contribute to illegal substance use among our children, so this thing of preventing illegal substance use should actually start at home

F – Even the awareness campaigns can assist to prevent illegal substance use among adolescent learners

R – Who should do those awareness campaigns, please tell us more about that?

D – The department of health can make bill boards

B – There should also be a day dedicated to illegal substance use, adolescent learners should actually know that every year on this day and month, it's illegal substance use day where they are going to be given a lot of information regarding illegal substance use. I think awareness campaigns and bill boards can assist a lot

A – But those bill boards and awareness campaigns do they really make the difference, do the adolescent learners reduce or stop using illegal substances because of them

B – Yeah

All – Yes

C – In most cases it's not everybody who will understand the message the same way, others will attend those campaigns every year but not changing their lives

A – Let's make an example about HIV/AIDS there are a lot of awareness campaigns, information and all that, even on TVs there are a lot of advertisements but people are still infected daily despite the campaigns and advertisements on the dangers or effects of HIV/AIDS

B – Illegal substance use should also be given a lot of attention just like HIV/AIDS, having a substance abuse day

R – Oh there must be a substance abuse day?

B – Yeah because illegal substance use is not a problem in North West Province only, it's a problem for the whole country or the whole world

R – Oh it's a national problem

B – Yeah

R – Mhhhhh, and what else?

All talking can't hear

G – Justice department and the police should also do something, if they find adolescent learners in possession of illegal substances like dagga, they should arrest them immediately, the punishment should also be harsh because if you make them to pay a fine of R200 or R300 for possessing illegal substances it's not enough, even corporal punishment I think it can help

B – These adolescent learners need a serious sentence for their bad behaviour and actions, even if they say there should not be parole for those who are arrested because of the substances it's still fine

All laughing

F – The thing about illegal substances is that they are always readily available or easily accessible to the adolescent learners, so something very serious or harsh needs to be done if

we want to stop this problem completely, even the people who manufacture those illegal substances should be taught a lesson otherwise we won't go anywhere with this problem I'm telling you, because preventing adolescent learners from using illegal substances but not doing anything about the distributor or manufacturer will not help, this problem must be taken out with its roots

R – I hear what you are saying that illegal substances are easily available for the adolescent learners

Silence

R – Mhhhhh do you still have something that you want to say on this topic maybe to question one or question two?

C – What about the issue of religion, when you advise adolescent learners to attend church regularly and participate actively at the church because to me there is a huge difference between adolescent learners who attend churches and those who don't attend churches. So I think the church can also help adolescent learners to stay away from illegal substances

R – So you are saying adolescent learners should be encouraged to go to church?

C – Yes because there are a lot of things that they can do at church instead of using illegal substances, there are choirs there, youth activities etcetera etcetera, because adolescent learners need something that can keep them busy. Parents must also monitor those adolescent learners when they are in those church activities

R – Yeah most of you were emphasizing on the parents, the government, the police, and only one person is saying it begins with you

Silence

A – But how can it begin with you when you don't know anything?

All laughing including Researcher

H – Now that you are bringing it up, this include everyone including 10 year old adolescent learners, it's up to them whether they want to use illegal substances or not as long as they don't complain that some people are forcing them to use those illegal substances, it's their choice to decide whether they want to use them or not

B – But 10 year olds are vulnerable

All laughing

All talking (Can't hear)

H – What I'm saying here is that once you gave them all the information or health education, the last person to make a decision is them, adolescent learners, no one else

R – Oh if you gave them all the necessary information it will be up to them to decide?

H – Yes actually for these adolescent learners not to use illegal substance you should use all the available methods to prevent illegal substance use, for example if as a parent you drink alcohol in front of them at home, it means you are simply teaching them that alcohol is a nice thing to take or taste. Or you are smoking there but you are telling adolescent learners not to smoke, you are basically doing nothing, you see, so we as parents and family members we are the ones who should teach them because adolescent learners have a tendency of copying things from home whether they are good or bad hence I was saying at the end of the day it's up to them to take the right decision

R – Mhhhhh

H – Yeah because if you are my father drinking and smoking in front of me every time but on the other hand tell me not to do that, I won't listen to you, parents should actually lead by example

E – But at the end of the day you as an adolescent learner should decide what you want with your own life

R – Mhhhhh

Silence

G – Again as an adolescent learner if you socialize with people who use illegal substances I think you will also use them, so choosing of the right friends is also important for the adolescent learners if they don't want to end up having problems because of illegal substance use, if you know as an adolescent learner that you are unable to say no especially when you are under pressure, rather choose friends who are not using those illegal substances

Silence

R – Mhhhhh do you still have something

Silence

R – Okay when people are quiet like this in research we assume that we have reached what we call data saturation, meaning we talked about everything, nothing new is coming. Ladies and gentlemen I thank you very much for participating in this research and signing the consent forms. I don't know if there is a question or anything before we terminate our focus group discussion

Silence

R – Alright thank you very much

All – Thank you sir

Focus group discussion with adolescent learners

R – Researcher

All – All participants

A, B, C etc. – Participants names

R – Good morning ladies and gentlemen

All – Good morning

R – I thank you very much for agreeing to participate in this research, I have only two questions, the topic of the research is “Illegal substance use prevention programme for adolescent learners in North West Province, now I’m going to start with my first question, please feel free to ask questions, to talk, to share what you know with us *neh*, any questions?

All – No questions

R – Nothing, okay my first question is “What are your perceptions of resilience as a protective factor in illegal substance use prevention programme for adolescent learners?

Silence

R – Anyone can start; we don’t go clock wise or anticlock wise

Silence

C – I think resilience as a protective factor in illegal substance use prevention programme is when you are listening to yourself as a person (adolescent learner) about what you want to do, or don’t want to do. Resilience is when you do things that benefit you not anyone else. Resilience as a protective factor, you are actually protecting yourself from whatever that is coming to you, be it illegal substance use, violence etcetera

R – You protect yourself from illegal substance use, violence, mhhhhh, the others, what do you think? What are your perceptions of resilience as a protective factor in illegal substance use prevention programme?

D – I think resilience as a protective factor is a decision, the choice that you want to make, if you do not want to do something, you don't want it, it's your choice

R – It's a choice, can you please tell us more about that, how?

D – An example, like if I say one of your friends asks you to go out with them at night it's your own choice to go with them or not to go, when you are resilient, no one can force you to do anything that you don't want. Just like illegal substances, no one should actually force you to use them

R – Mhhhhh the others what do you think?

E – I think that resilience is your ability to know a good thing and a bad thing and stick to what you want as an individual. For example, when you know that illegal substance use are a bad thing to you

R – Mhhhhh the others, what do you understand by the term resilience as a protective factor in illegal substance use prevention programme for adolescent learners?

A – I can say that resilience is a power of choice meaning, you have all the powers to make independent decisions without being influenced by anyone, you simply choose between what you want and what you don't want, as simple as that

R – Mhhhhh the power of choice

B – Okay I agree with other previous speakers on their understanding of their definition of resilience as a protective factor in illegal substance use, it's like doing things according to our own opinions about the things you want to do or don't want to do. Like when you want to do something you just do it without consulting anyone. For example if I don't want to use illegal substances I don't have to ask anyone about that, it's my own independent decision

R – Mhhhhh

B – Yeah

R – The others what do you think

A – I think resilience is a choice that one take in his or her life in this case, I can say that it's an ability to do wrong things that your friends might try to force you to do

R – The others, F and G you are too quiet, can you say something, What is it that you know or understand about resilience as a protective factor in illegal substance use prevention programme for adolescent learners?

Silence

F – I think resilience is like someone trying to force you to do something and you refuses because maybe you know the disadvantages of that thing, just like on the issue of substances that we are talking about here. Resilience is when you are able to make right decisions about your own life without listening to anyone, your ability to say no or yes where necessary without involving anyone even your boyfriend or girlfriend

All laughing

R – Oh the ability to say no or yes where necessary

F – Yes sir

R – Okay

Silence

R – Let's go to our second question, what are your perceptions or your views or your understanding of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor?

B – By choosing the right friends and talking about illegal substances with your peers

R – Mhhhhh yes D

D – I think you have to know how to say no to your peers, you don't say no and yes at the same time

R – What do you mean by that, can you tell us more please?

D – I mean that if you know how to say no, your friends or peers will not even try to take advantage of you because they know that you don't hide behind the bushes, you stick to your good decisions of not using illegal substances, what is important to adolescent learners is to know what they want in life

R – Mhhhhh

D – Yes

R – The others

E – I think that we need some activities in our communities, activities like soccer, netball, chess etcetera etcetera

R – Okay and what else?

C – I also think that the government should do awareness of illegal substance use by the adolescent learners, because in the communities, information is too little with regard to illegal substance use, the government or officials are holding conferences and then invite themselves only without the presence of adolescent learners, but the concern or problem is on the adolescent learners, So I'm saying information about illegal substances on adolescent learners is very little, so whatever that is being discussed at those conferences will not reach the communities in time or assist us, so I think that awareness campaigns should focus on adolescent learners not government officials only, you can't say to someone don't use illegal drugs or don't smoke when you isolate them at conferences, but if we can put it into play maybe using dramas, movies or whatever so that they can see how dangerous illegal substances are, you can also tell them that you use illegal substances at a young age you are going to burn, I know adolescent learners will not want to test that if you tell them the truth, so making the message funny into play can assist us to prevent illegal substance use among adolescent learners, I think it's a good idea to tell them that illegal substances are dangerous at those conferences. There should be someone showing that yes its true actually that using illegal substances at a young age is actually to commit suicide. So I think it's better to send the message by making some fun as well because just talking alone is not enough

R – Mhhhhh

C – Yeah that's what I think I also want to hear what others think about this issue

E – I think it's about being able to choose good friends from the bad ones that can assist to prevent illegal substance use because at times some adolescent learners are using illegal substances just because of their "so called friends"

R – How are you going to know that this one is a good friend and this one is not a good one?

A – I think if you are resilient enough as an adolescent learner, you don't have to be told by anyone that this person is a good friend for you or not, you have to know good friends yourself without being told by anyone

R – Okay D your hand was up?

D – I think you will see them by if he or she tells you that “Joe” this is wrong and this is right, then you will know that that particular friend is a good one

R – Mhhhhh

E – And I also think it has to start within the households, I mean in our families, coming to school to tell people that do not smoke is not enough, fighting or preventing illegal substance use or abuse should actually start at home, they say charity begins at home, our own parents should actually do their part by telling their children that smoking illegal substances or drinking alcohol when you are still at school is not a good idea, it's wrong. Parents should also be role models because if I see my father smoking a cigarette and then, I might also think that my father has been smoking for a longer time and nothing is happening to him, that means smoking is a good thing, so starting at our homes can assist a lot in fighting or preventing illegal substance use among adolescent learners. So basically I'm trying to say that there are things that parents should or should not do in front of us. So preventing illegal substance use should start in families before community can assist. Parents should also be taught how to behave in front of the adolescent learners because there are some parents who do not even know how to talk to their kids. There are a lot of things that parents should also be taught about such as things that are good or bad for the learners

R – Mhhhhh

A – I think the other way that can assist to prevent illegal substance use among adolescent learners is the adolescents telling themselves that they are not going to use this and that, I also know some of the people make money or income by selling tobacco and stuff like that but they shouldn't sell those things to the adolescent learners because they actually destroy them literally

R – Mhhhhh and what else?

E – I know that some people make a lot of money by selling substances such as alcohol, but I think if all substances including alcohol can be banned it will be better because no one

including the adolescent learners will have time for them, so I think alcohol and other illegal substances should be banned particularly for adolescent learners

All laughing

R – Alcohol should be banned?

E – Yes I think so

R – Okay

C – I don't agree with him because those people also need money, that's why they are selling alcohol, so for the economy to rise up, you have to use money, so that means it won't be possible to ban alcohol completely, for example, we all know again that there is no money without alcohol, but if we teach our people particularly the adolescent learners that they can party without alcohol, okay then it's better, at least if we talk about banning of alcohol advertisements because that's when some adolescent learners experiment it because they saw it on TV

E – But those people can still make money without advertisements, for example, we don't have cigarettes advertisements anymore in Mzansi but people are still smoking the way they like, you see. Do you see cigarettes advertisements on TV now a days, No, so banning of alcohol advertisements will also not work

A – Okay I hear your argument neh, but the thing is, I know that there are no tobacco advertisements anymore but if we can also ban alcohol advertisements, I think it will help somebody somewhere especially adolescent learners because they copy these things from the media

B – What we have to know here guys is that tobacco and alcohol are good for our economy, so we can only ban their advertisements but we can't ban them completely because they boost our economy

All – Yes on that one we agree with you B

C – People, we have to understand something very important here, that alcohol boost our economy very well, so there is no way that we can ban it completely, even the advertisements because whether you ban them or not, people will still drink it, I can't ban something that contributes to my economy

F – Okay we hear what you are saying ... (mentioned his real name by mistake), we all agree with you guys that alcohol contributes to our economy but it's also destroying us at the same time, that's why we are saying that something needs to be done before the situation gets out of control

All – mmmmm (Nodding their heads)

F – Some adolescent learners use illegal substances because they saw them on TV being taken by celebrities or respected people, so that's when adolescent learners think alcohol it is the good thing to taste

C – My point here is, even on the box of tobacco it's written that "smoking causes cancer" others are also written that "smoking is dangerous for your health" so it's the people who decides on taking risks but with knowledge of the consequences, so what I'm saying here is, the people who buy tobacco are the ones who are ignorant, and we can't stop them from buying it, they are using their own money mos

R – Okay, let's hear what the others think, what are your perceptions of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor?

Silence

D – What I'm thinking here is that if we choose right friends for ourselves, that will be able to prevent illegal substance use among us, adolescent learners

Silence

R – I'm still listening ladies and gentlemen, what else can be done to prevent illegal substance use among adolescent learners by focusing on resilience as a protective factor in North West Province of South Africa?

E – I also think that the government should play its part in preventing illegal substance use among adolescent learners, the government should teach adolescent learners about the dangers of illegal substance use, and the community should also do something because to me they know their adolescent learners better than anyone else

R – Let's talk about communities, what do you want them to do to prevent illegal substance use among adolescent learners in the North West Province of South Africa?

E – There are a lot of people in the community who can help about this problem, for example, the people who used illegal substances before, other people are those that are coming from rehabilitation centres, those people have the experience, they are better than anyone else, So I'm saying they must be used to fight this problem of illegal substance use in our communities. Communities should also educate their children, for example, there are ward councillors, ward committees, parents' etcetera, such people must be involved to fight against illegal substance use in our communities

R – Ward councillors, ward committees and the parents

E – Yeah parents

B – And also us adolescents, we should also help, for example, as adolescent learners we should be able to help each other

C – Yes I agree that even the government cannot do anything for the adolescent learners if they don't involve adolescent learners themselves

F – Yes nothing about us without us

All laughing

C – Yeah because at the stadiums, parties and everywhere, even when they go to the stadiums during the votes the government should talk about illegal substance use and abuse at those gatherings

A – The principals of all schools should be strict about illegal substance use in their schools, and they should discipline those adolescent learners that use illegal substances at school yards

R – So you are simply saying the principals should also do something to prevent illegal substance use among adolescent learners?

A – Yes

E – I think the police should do continuous search at all schools, I think this year there were police officers in our school they were here to search us, they were actually searching for marijuana, but the problem is that they came only once a year, so if they can come continuously, or maybe four times a year it could help us to start focusing and it could also reduce illegal substances within the school

R – Mhhhhh

E – Yeah

C – And when they come, they must ... our school is big, I think you can see it, so they must be many otherwise, when they are in Block A, those who are in block D or E will be called by their friends and informed that the police are in school, so that they can go and hide their stuff maybe at the toilets or wherever, so when those police come here, they should make sure that they have enough manpower, others should stand at the gates while others go to different classes at the same time

R – Mhhhhh (Nodding)

F – At the communities again they must check for the ages of all people who are entering the taverns or pubs, they must do something to control adolescent learners not to go there

R – They must do something like what?

B – But I don't think that will help us as we all know that there are people who steal ID's and put their photos there

R – Mhhhhh, and what else can still be done to prevent illegal substance use among adolescent learners by focusing on resilience as a protective factor?

Silence

F – I agree that alcohol be banned completely because if we talk about prevention, when others produce it even now, it means we can't go anywhere

E – Alcophyllex and others, the medication has alcohol, not actually the actual beer only, so it's actually not possible to ban alcohol, even our bodies needs alcohol sometimes, maybe if people can take those medications rather than the real beer, because it's just a drop of alcohol in those medications

R – So you are saying that people should take those medications instead of real alcohol?

All talking can't hear

F – But still others will then decide to overdose it in order to get drunk

E – But still it's just a drop; it's not a real beer

All talking and laughing (Can't hear)

R – Mhhhhh

Silence

R – Are you done people?

A – Uhmhhhhh I think we covered everything especially on question number two of how illegal substance use could be prevented among adolescent learners by focusing on resilience as a protective factor. About question one I'm not so sure whether we covered everything

R – Okay maybe you should add more information on question one, what are your perceptions or your understanding of resilience as a protective factor in illegal substance use prevention programme for adolescent learners.

A – Uhmhhhhh actually that one was difficult for us

All laughing

R – Do you want to assist us B?

B – No I don't have anything to say

Silence

R – Okay ladies and gentlemen, I thank you very much for participating in this research

All – You welcome sir

Appendix O: Example of a validation form

Illegal substance use prevention programme for adolescent learners

Questions	Comments
How clear is this programme	
How simple is this programme	
How general is this programme	
How accessible is this programme?	
How important is this programme?	
What would you like to add on the programme and why?	

Thank you for your participation

Yours faithfully

Mr L.A. Sehularo

PhD Candidate

Promoter: Prof. M.E. Manyedi

Co-promoter: Prof. E. du Plessis

Appendix P: Brief Curriculum Vitae (CVs) of mental health experts

Community mental health nurse expert 1

His qualifications include a PhD (Health Sciences), MA (Community Psychiatric Nursing Science), MEd (Learning and Teaching), Advanced University Diploma in Health Service Management and Health Science Education, BCur (Comprehensive Nursing Science). He is a Psychiatric Nursing Specialist, Educationist, Researcher and Community Developer. He has supervised a postgraduate student on “Validation of a substance abuse programme for Tanzania’ extended in-depth experience on the development of therapeutic health programmes.”

Community mental health nurse expert 2

He completed his matric at Barolong High School in Mafikeng in the NWP. His post matric qualifications include Bachelor of Nursing Science (BNSc), Master of Nursing Science (MNSc). He has held seminars and workshops relevant to mental health and substance abuse on a provincial and national level. He has worked as a mental health nurse specialist at two public mental health care institutions in the NWP of SA for almost ten years. Currently, he is a mental health coordinator in one of the mental health care institutions in the NWP of SA.

Psychiatrist

His qualifications are MBChB and MMED (Psych) Medunsa. He is a specialist psychiatrist with 12 years of experience in mental health care, treatment and rehabilitation services in the NWP of SA. He has worked in both public and private mental health care institutions. Most of his patients are adolescents with either dual diagnosis or a substance use disorder.

Psychologist

Her qualifications are Bachelor of Science (BSc), Honours in Bachelor of Social Science (Hons BSoc Sc) and Master of Social Science (MSoc Sc) in Clinical Psychology. She has seven years’ experience as a clinical psychologist in the NWP of SA.

Appendix Q: Example of field notes

Demographic notes

A focus group discussion was conducted with the participants (adolescent learners) who met the set selection criteria on Wednesday the 3rd of December 2014 between 10H00 and 11H20. This focus group discussion occurred at a time that was convenient for both the researcher and participants. The school clerk is the one who arranged this focus group for the researcher. The weather temperature on the day of data collection was around 30 and 31 degrees Celsius. It was hot on that day and the school principal switched on the air conditioner so that the room could be cool and conducive for a focus group discussion to take place. This focus group discussion was conducted in class room that was locked in order to minimise the disturbance of other learners and staff members. This was also done to ensure privacy, comfort, and safety of all the participants. In this classroom, there was enough space for all participants to sit comfortably in a circle so that the researcher could use his psychiatric nursing skills of maintaining eye contact with all the group members. Before data collection, participants were informed about the use of an audio tape recorder. The researcher made effort to get less obtrusive equipment, in order to make all participants forget about its presence, to relax and speak more freely. Generally, the focus group went well.

Descriptive notes

Before data collection, participants' parents or guardians signed informed consent for the adolescent learners to participate in research. A written informed voluntary consent was also obtained from the participants. The focus group consisted of eight (8) participants, that is, five (5) males and three (3) females. Participants came from different classes, for example, four of them were from Grade eleven (11), three from Grade ten (10) and only one participant was from Grade nine (9). The age of the participants ranged between 15 and 18 years. Six out of eight participants verbalised that they still use illegal substances. Only two participants stated that they have never used illegal substances in their lives. One of the participants further indicated that he had used *nyaope* in the morning before coming to school. Others stated that they only use illegal substances after school. According to these participants, they use illegal substances such as alcohol, dagga, *nyaope* and space cakes. Some of the participants said that they started with illegal substance use around the age of 12. However, to indicate that participants were relaxed during the focus group discussion, one of them

mentioned that irrespective of his excessive use of illegal substances, he is doing very well academically, and at times he is performing much better than non-substance users.

Reflective notes

As in all other focus group discussions, the researcher started the focus group discussion by explaining the topic and main aim of research. This was done to gain participants' trust and cooperation. As in all other focus group discussions, the researcher started the focus group discussion with the same question, that is, what are your perceptions of resilience as a protective factor in illegal substance use prevention programme and what are your perceptions of how illegal substance use can be prevented among adolescent learners by focusing on resilience as a protective factor? Most of the participants seemed relaxed during the focus group discussion and were open to talk about their perceptions of how illegal substance use could be prevented among adolescent learners by focusing on resilience as a protective factor in the NWP of SA. The first question was challenging for most of the participants. Most of them were quiet when we were talking about their perceptions of resilience as a protective factor in illegal substance use prevention programme. But, generally participation was good. Logistically, the researcher used two recording tapes and he had enough batteries for the voice recorder that are adequate to record the entire focus group discussion. To encourage all the participants to talk more freely and in a relaxed manner during focus group discussions, the researcher used most common advanced verbal response skills as explained by Okun and Kantrowitz (2008:75-79) such as making minimal verbal response, paraphrasing, reflecting, using questions, clarifying, interpreting, confronting, informing and summarising. Before termination of the focus group discussion, one participant thanked the researcher for an opportunity given to them to contribute to the illegal substance use prevention programme for adolescent learners in the NWP of SA. Participants verbalised that they had learnt a lot from each other.