TABLE OF CONTENTS

CHAPTER 1: ORIENTATION AND OVERVIEW

CHAPTER 2: SOCIAL COGNITIVE THEORY AND SELF-EFFICACY THEORY

CHAPTER 3: ADOLESCENCE SUBSTANCE ABUSE

TABLES

FIGURES

CHAPTER 1

ORIENTATION AND OVERVIEW

1.1 INTRODUCTION AND BACKGROUND

The use and abuse of drugs among adolescents is a worldwide problem. For example, David, Rao and Robertson (2003:10), and Wicks-Nelson and Israel (2003:200) indicated that the use of drugs in the United States of America (USA) was alarmingly high. At the time of their research nearly two-thirds of adolescents had tried cigarettes by twelfth grade; and 31 percent of twelfth graders, and 15 percent of eighth-graders reported that they were current smokers. The United States Bureau of the Census (in Wicks-Nelson & Israel, 2003:201) stated that alcohol was the most widely used harmful substance among all age groups. Moreover, approximately seven percent of adolescents aged 12 to 17 met criteria for abuse, but only about 10 percent of youth with drug abuse problems received treatment. The USA's Centres for Disease Control and Prevention's Youth Risk Behaviour Surveillance System (Wisdom, 2008) also surveyed youth behaviours. Their 2004 to 2006 results indicated an alarming use of alcohol, marijuana, and cigarettes during the 30 days preceding a survey.

Adolescent substance abuse is also a reality amongst South African youth. According to Calder (2009:1-161) and Zervogiannis (2003:110) South Africa has been witnessing an escalation in drug use amongst adolescents in high school, in confirmation of other authors (Burger, Gouws & Kruger, 2000:182). Adolescents are experimenting more than their predecessors. Caldwell, Flisher, Smith, Vergnani and Wegner (2007:1085-1086) state that risk behaviour among adolescents is a major public health concern in South Africa: a national survey of risk behaviour among students in Grades eight to 11 at public high schools shows that the prevalence rates for ever having used a substance were 49.1 percent for alcohol, 30.5 percent for cigarettes and 12.8 percent for cannabis. A study of Grade eight and Grade 11 public high school students (n = 2930) in Cape Town, South Africa, by Flisher, Parry, Evans, Muller, Lombard (2003:58-65) reported substance use prevalence rates of 31 percent for alcohol, 27 percent for cigarettes and seven percent for cannabis. The

South African Community Epidemiology Network on Drug Use (SACENDU)(2011a) also reports in their latest findings that cannabis is the primary drug of abuse among the under 20 years of age group in KwaZulu-Natal (KZN), the Western Cape, the Eastern Cape, Gauteng, and in the Northern and Southern regions of South Africa. Alcohol is reported as a secondary drug of abuse in, for example, KZN and Gauteng.

There are a number of reasons that appear to be contributing factors to the increasing level of drug use in this country. The high stress and anxiety levels in general are psychological contributing reasons as South Africa is in a transitional phase. Insecurity about the future is also a predisposing factor. In addition, illegal drugs have flooded the South African market resulting in them being more freely available than in the past. Adolescents are therefore more frequently exposed to drugs than before.

As a result of the above, teachers in South African secondary schools face numerous challenges associated with adolescent substance abuse on the part of students, as indicated by a number of authors (Calder, 2009:1-161; Donald, Lazarus & Lolwana, 2000:210-211; Flisher *et al*., 2003:58–65). Social Development Minister Dlamini stated in her Inter-Ministerial Committee address in the National Assembly on 10 March 2011, that substance abuse undermines our ongoing efforts to build safe and healthy communities and that dealing with this problem had been prioritised by the government (SOUTH AFRICA, 2011b), as also pointed out by Modiba (2011).

It is extremely important to prevent drug use in adolescents for the following reasons (Zervogiannis, 2003:113):

- Underachievement and deterioration in scholastic performance can be prevented.
- Memory and concentration problems can be avoided.
- Learning problems can be averted.
- Increase in emotional, behavioural or social difficulties can be prevented.
- Neuropsychiatric disorders or physiological ailments that are drug related can be avoided.
- The forming of positive and constructive interpersonal relationships can be fostered.
- General mental health can be promoted.

To the above, Wisdom (2008) adds that adolescents who use drugs are at higher risk than non-drug-using adolescents for physical and mental health problems and criminal involvement. The social costs of adolescent drug abuse include crime, economic loss, academic disruption, and familial distress (Sambrano, Schwartz, Szapocznik & Tolan, 2007:4).

Due to the prevalence of *adolescent* substance abuse in South Africa, SACENDU (2011a) emphasises that an important implication for policy or practice is that drug prevention programmes should start at primary school level and continue to secondary school level. According to the National Drug Master Plan (NDMP) (2006-2011), although coordinating structures for adolescents exist in South Africa, their effectiveness in relation to substance abuse has to be improved. The NDMP (2006-2011:15) also states that proper adolescent programmes should be established that are accessible to all young people in South Africa.

Prevention programmes should draw on youth's knowledge rather than be general educational programmes (Botvin, 2010). In reviews and policy documents by various authors (in Buckley & White, 2007:43) it was concluded that: approaches based on life skills appear to be more effective than others; projects should seek to involve parents and communities; peer approaches are promising; interactive approaches are more effective than didactic ones; and long-term, intensive programmes are most likely to be effective.

Although some students may need professional help, not all parents can afford such support, nor are all parents willing to consult professionals. This study is aimed at assisting school teachers and parents to deal with and try and prevent drug use by means of special programmes. To this end, SACENDU (2011a) recommended that the *perceptions* and *experiences* of youth of substance abuse programmes be explored. This recommendation has particular relevance for this research.

Adolescent learners are in the formal operational stage of cognitive development, which influences their moral development. Cognitively they have the ability to think critically and logically, make decisions, and plan ahead. Other characteristics include egocentrism, causing heightened self-consciousness, and greater perspective-taking

ability, which can result in an interest in societal issues (Atkinson, 2006:5; Cockcroft, 2002:187–188; Jacobs & Klaczynski, 2002:145). This implies that adolescent behaviour could be modified through the adoption of a cognitive approach. The cognitive approach implies that students' behaviour is influenced by their intellectual abilities, among others. According to the model of Piaget and others (in McCown, Driscoll & Roop, 1996:31–40), students' behaviour and emotions are determined by their cognitive abilities. Kohlberg, too, identified a link between cognition and moral judgements (Grant, 2002:297-303).

In view of the above, problem behaviour may be modified effectively by approaches that are in accordance with Social Cognitive Theory (SCT), Self Efficacy Theory (SET), and the concept of triadic reciprocality as explained by Bandura (in Pajares, 2002a, 2002b). From this perspective human functioning is viewed as the product of a dynamic interplay of personal, behavioural and environmental influences. How adolescents interpret the results of their own behaviour informs and alters their environments and the personal factors they possess which, in turn, inform and alter subsequent behaviour. According to Bandura (1986:21), among the types of thoughts that affect action, none is more central or pervasive than adolescents' judgements of their capabilities to deal effectively with different realities. It is partly on the basis of self-perceptions of efficacy that they choose what to do, how much effort to invest in activities, how long to persevere in the face of disappointing results, and whether tasks are approached anxiously or self-assuredly.

Some authors have found that adolescents with substance abuse problems can be helped and supported through the use of audio-visual and social media (Botvin, 2010; Center for Substance Abuse Prevention [CSAP], 2011; Discovery Education, 2008; National Clearinghouse for Alcohol and Drug Information [NCADI], 2010; Pond, 2011; Substance Abuse and Mental Health Services Administration [SAMHSA] Blog, 2011; SAMHSA on Facebook, 2011; SAMHSA on Flickr, 2011; SAMHSA Store, 2011; SAMHSA on Twitter, 2011; SAMHSA on YouTube, 2011; SAMHSA, 2011a, 2011b, 2011c, 2011d, 2011e; Teachers TV, 2008). This approach is in accordance with SCT, SET and the principle of triadic reciprocality (Pajares, 2002a, 2002b), because media can be used as an effective instructional tool and as a centrepiece for facilitating dialogue and increasing adolescents' self-efficacy beliefs about their own capabilities. This approach to learning can be particularly effective especially when

the visuals include a model whose attributes are similar to those of the adolescent, and when accompanied by teachers' verbal persuasions and coaching (see section 2.2).

Findings from an exploratory investigation with adolescents (Calder, 2009:1-161), indicate favourable results after viewing suitable audio-visual media content. It was found that group discussions facilitated by teachers can stimulate cognitive skills (including problem solving and critical thinking) relating to acceptance of responsibility, positive attitudes and respect for authority, among other important life skills. This finding was confirmed by Botvin (2010). It is concluded that audio-visual media which are selected in terms of specific criteria, can be used by teachers to support and develop positive thinking and positive behaviour that may prevent drug abuse (Botvin, 2010; Calder, 2009:1-161; CSAP, 2011; Discovery Education, 2008; National Youth Anti-drug Media Campaign, 2011a, 2011b, 2011c; NCADI, 2010; SAMHSA Blog, 2011; SAMHSA on Facebook, 2011; SAMHSA on Flickr, 2011; SAMHSA Store, 2011; SAMHSA on Twitter, 2011; SAMHSA on YouTube, 2011; SAMHSA, 2011a, 2011b, 2011c, 2011d, 2011e; Spencer, 1999:1-24).

In the USA, Botvin (2010) developed a *Life Skills Training programme (LST)*, which has been widely peer-reviewed and accredited by their local national bodies. The Botvin LST programme is a highly effective, well-respected, evidence-based audio-visual substance abuse prevention programme with more than 25 years of peer-reviewed research behind it, developed at Cornell University (Botvin, 2010; Caine, Cummings, Muegge, Saywell, Wooldridge & Zollinger, 2003:338-346; Caldwell *et al.,* 2007:1085-1096; Clair, Redmond, Shin & Spoth, 2006:876-882; Fraguela, Martin & Trinanes, 2003:29-38; Lillehoj, Redmond, Spoth, Trudeau, & Wickrama, 2003:109-122; Randall, Redmond, Shin, Spoth & Trudeau, 2008:57-68; Redmond, Shin, Spoth & Trudeau, 2002:129-134). Studies testing its effectiveness have found that the Botvin LST programme can reduce the prevalence of tobacco, alcohol, and illicit drug use by as much as 80 percent (Botvin, Griffin & Nichols, 2006:403-408).

A number of authors have reported on psycho-educational interventions in which audio-visual media were used in other parts of the world to prevent adolescent substance abuse (Bouman & Buwalda, 2008:231-243; Brendtro & Long, 2005:157; Calfas, Taylor, Wilfley, Winzelberg & Zabinski, 2004:914-919; Hayes & Morgan,

2005:111; McClendon, Miletic, North, Reid & Pollio, 2006:31-38; Reynolds, Rodman, Sells & Smith, 2006:105-115; Rosenfarb & Smerud, 2008:505-510). However, it appears that little research has been completed in *South Africa* on the development of a psycho-educational programme using audio-visual media for students to prevent substance abuse. In one South African study, Schuld (2006:1-341) researched a substance abuse resilience prevention programme for Grades 7, 8 and 9 wherein risk and protective factors, peer pressure, and the peer cluster were emphasised.

The exploratory investigation referred to above by Calder (2009:1-161), was completed with adolescent participants without behavioural problems. This study, however, will be done over a more extended period with a sampling of adolescents who abuse substances or are at risk for substance abuse disorders. A psycho-educational programme will be developed in the course of the investigation. It is considered that the use of *criterion selected* audio-visual media could improve the experience of participants in the psycho-educational programme – see criteria for the evaluation of audio-visual media in section 4.9 (e.g. by Botvin, 2010; Discovery Education, 2008; NCADI, 2010; Office of National Drug Control Policy [ONDCP] 2011; SAMHSA 2011c). Thus, the use of audio-visual media will be investigated in this study. Details of this investigation are described in chapter five.

1.2 PROBLEM FORMULATION

There are numerous quality audio-visual supporting resources available for supporting students with substance abuse problem behaviour (Botvin, 2010; Discovery Education, 2008; Dr. Phil, 2008; National Youth Anti-drug Media Campaign, 2011a, 2011b, 2011c; NCADI, 2010; ONDCP, 2011; Oprah, 2008; SAMHSA Blog, 2011; SAMHSA on Facebook, 2011; SAMHSA on Flickr, 2011; SAMHSA Store, 2011; SAMHSA on Twitter, 2011; SAMHSA on YouTube, 2011; SAMHSA, 2011a, 2011b, 2011c, 2011d, 2011e; Teachers' TV, 2008). Some of these resources have been well-researched and reviewed, mostly in the American context. From my review of the literature, there appears to be a small number of programmes proven to be effective in adolescent substance abuse prevention, as mentioned. However, there are certain difficulties with implementing most of these resources in *South Africa* for the following reasons:

- These resources have been evaluated as effective mainly or exclusively within the USA, and are produced there.
- They are sometimes costly to purchase, due to unfavourable monetary exchange rates.
- In some instances there are copyright and other restrictions imposed on their usage outside of the USA or in some cases the United Kingdom (UK). In other instances quality audio-visual material covering identified evidence-based principles may be sourced without restriction (see chapters 4 and 5 for details).
- Their didactic content is sometimes culturally specific to American or British society and may not be equally relevant here in South Africa in their present forms. Some adaptation to the South African educational and cultural context is needed to be more culturally relevant.
- There are few studies found in the literature that have investigated their usefulness or applicability outside of the USA or the UK.

There is thus a lack of available criteria on how to select and implement a suitable audio-visual resource in a psycho-educational programme within the *South African* environment. This study is motivated by a lack of such programmes in this context.

1.3 RESEARCH QUESTION AND AIMS OF THE RESEARCH

In view of the above, the main research question is: *How can a psycho-educational programme, using a selected audio-visual media resource, be designed to assist teachers and parents in an effort to prevent adolescent students' substance abuse problem behaviour?*

Therefore, the general aim of the study is to design, implement and evaluate a psycho-educational programme, using a selected audio-visual media resource, to aid the prevention of adolescent substance abuse. The focus is on at-risk students. I should emphasise that, with regards to alcohol use, the focus will be on prevention of 'hard drinking' that may lead to alcoholism. Alcoholism should be handled by trained and registered (with the medical council) professionals. The same goes for drug abuse. Teachers can only try to prevent and address mild cases of cigarette, alcohol and drug use, before these become addictions.

As aforementioned in section 1.1, the value of these resources cannot be underestimated, as South Africa is experiencing many problems as a result of adolescent substance abuse. Nevertheless, as explained in more detail in chapter four, there are certain agreed *evidence-based principles* for implementation of a successful prevention programme (section 4.5). In view of this, in the selection phase of this research, I will investigate how these principles may be adapted for usage here in South Africa. I believe that these complications may be addressed effectively by utilising evidence-based principles.

In view of the above, this research specifically aims to:

1. *Select* a suitable audio-visual media resource that will adhere to the main principles of proven evidence-based resources (David *et al.,* 2003:1-41). In particular, the aim is to use a cost-effective, directed, interactive, audio-visual training resource for South African teachers (and perhaps parents), to aid the prevention of substance abuse in South Africa;
2. *Design* a psycho-educational programme using the above-mentioned selected resource to prevent adolescent substance abuse (see Chapter 4, section 4.12);
3. *Implement* the designed intervention programme with a group of at-risk South African adolescents.
4. *Evaluate* qualitatively the impact of the intervention programme in terms of its feasibility.

A literature study provides the theoretical background to the relevance and development of the programme. The conceptual framework of the study is based on SCT and SET. The emphasis is on the selection of a resource, and its implementation and evaluation within a psycho-educational programme to assist teachers in preventing adolescent drug abuse.

The *significance* of the study is that it aims to select and implement a suitable resource within a psycho-education programme that can assist teachers to prevent and address mild adolescent substance abuse in the future. In addition to contributions to theory, it hopes to contribute to practice by providing detailed

descriptions and an accumulation of case study evidence. Also, this research hopes to aid policy-makers in South Africa with formulating future prevention programmes.

1.4 RESEARCH PARADIGM

A *paradigm* is like a pair of glasses – the way one perceives something, one's frame of reference or belief. For the purposes of this study, according to Neuman (2000:515), a paradigm is a general organising framework for social theory and empirical research, which includes basic assumptions, major questions to be answered, models of good research practice and theory, and methods for finding the answers to questions. In order to clarify my understanding of the concepts related to this research, I now briefly discuss the relevant meta-theoretical assumptions, theoretical paradigms and methodological assumptions in this study.

1.4.1 Meta-theoretical perspective/assumptions

A meta-theoretical perspective refers to the researcher's personal assumptions regarding the field of study or subject area. In responding to adolescents with emotional or behavioural problems, I believe that the most fundamental principle to bear in mind as a teacher or parent is that a sense of self-worth *(self-esteem)* is absolutely essential for emotional health and well-being (Page & Page in Donald *et al.,* 2000:298). In responding to adolescents, this has to be the basis of dealing with their temporary or more permanent emotional and behavioural difficulties. In cases when an emotional difficulty is more complex, I consider it important to understand and to be tolerant of the difficulty the adolescent is going through (Donald *et al.,* 2000:299). From experience and observation I believe that punishment for troubling behaviour generally does not work in the long term, and can make the behaviour worse. Instead, one should rather try to find ways of reducing the adolescent's stress and reward positive engagement. In general, a positive and affirming environment can facilitate improvements. It is a well-established principle that behaviour is altered far more effectively by providing better alternatives than by imposing prohibitions (Bandura, 1986:46). If a problem is severe or persistent, it is important to refer the adolescent for specialist assistance.

The principle of *self-actualisation* is another important principle I support, this being a situation in which students can continue to learn and grow their abilities all through life towards greater actualisation of their potential. In terms of this, human development is seen as an ongoing process of learning and striving for increased efficacy and fulfilment.

1.4.2 Theoretical perspectives

This research is most significantly influenced by SCT and SET in terms of its conceptual foundation. These concepts are explained fully in chapter 2 and their relevance for this study indicated. They are briefly explained as follows:

1.4.2.1 Social Cognitive Theory

SCT is a learning theory based on the idea that people (adolescents) learn by observing what others do and that human thought processes are important in understanding personality. The proponents of SCT agree on the influence on development generated by learned behaviour displayed in the environment in which one grows up; however, the individual person and cognition are regarded as the most important factors in determining moral development. Bandura (2008:93-96) and Pajares (2002a & 2002b) emphasise an *agentic* socio-cognitive perspective, whereby individuals are seen as self-organising, proactive, and self-regulating.

As stated, adolescents learn by observing others, with the environment, behaviour, and inner factors (such as cognition) all as the key factors in influencing development. These three factors are not static or independent; rather, they are all reciprocal. For example, each form of behaviour witnessed can change a person's way of thinking and cognition. Similarly, the environment one is raised in may influence later behaviours. These mutually interacting influences constitute the components of the principle of triadic reciprocality (Bandura, 1986:23-25; Bandura, 2008:93-96; Pajares, 2002a).

1.4.2.2 Self-Efficacy Theory

Self-efficacy beliefs are people's (adolescents') judgements of their capabilities to organise and execute courses of action required to attain designated types of performances which, according to Hays and Ellickson (in Bandura, 1997:358), stand at the very core of SCT. Self-efficacy beliefs determine how adolescents feel, think, motivate themselves and behave. Such beliefs produce these diverse effects through four major processes. They include cognitive, motivational, affective and selection processes (Pajares, 2002a). Self-efficacy beliefs provide the foundation for human motivation, well-being, and personal accomplishment. This is because, unless adolescents believe that their actions can produce the outcomes they desire, they have little incentive to act or to persevere in the face of difficulties. A strong sense of efficacy enhances human accomplishment and personal well-being in many ways. Adolescents with high assurance in their capabilities approach difficult tasks as challenges to be mastered rather than as threats to be avoided.

1.4.2.3 Other paradigmatic perspectives

Adolescent developmental and personality theories describing physical, cognitive, moral and psycho-social development are also particularly relevant in this study, for example Piaget's theory of cognitive development and Kohlberg's theory of moral development (Burger *et al.,* 2000:38-46, 103-115). These theories are important because they identify the stage at which adolescents are in their development. Such stages need to be considered in the selection of any prevention resource.

1.5 RESEARCH DESIGN AND METHODOLOGY

1.5.1 Ethical principles

According to McMillan and Schumacher (2010:338) qualitative research is more likely to be personally intrusive than quantitative research. Therefore ethical principles have to include policies regarding consent, deception, confidentiality, anonymity, privacy and caring. Detailed information on ethical principles is given in chapter five.

1.5.2 Method

This research uses a case study design. Such designs may vary to include both single and multiple-case studies, and can be based on any mix of quantitative and qualitative evidence (Yin, 2003:14-15). However, in this research the approach is qualitative (see also McMillan & Schumacher, 2010:23-24, 344-345). This is influenced by a constructivist perspective where understanding the dynamics and multiple perspectives of participants is important. The emphasis in the study is on what individuals can do to better influence and control their lives.

A qualitative evaluation research approach is used to describe and evaluate psycho-educational programmes in their natural settings, focusing on the *processes* during implementation rather than on quantifiable outcomes (Mouton, 2001:149-150; 161-162). A brief account of the research methods employed is now given, which include: sampling, data collection and data processing methods. All detail of this is described in chapter five.

1.5.2.1 Sampling

Qualitative research requires data that is rich in description of people and places. Thus purposive sampling methods are used. Information-rich participants are carefully selected (Strydom, 2005:328-329) from adolescent secondary school students who are at-risk or have substance abuse problem behaviour, living in the city of Pietermaritzburg, KwaZulu-Natal for in-depth study. As more insight into the phenomenon being investigated is gained, sampling is redefined on an ongoing basis. Thus the data collection and sampling is emergent.

1.5.2.2 Data collection methods

Data is collected using an instrumental or a collective case study (Fouché, 2002:275-276; McMillan & Schumacher, 2010:344-346). The exploration and description of the case(s) take place through in-depth data collection methods, involving multiple sources of information that are rich in context such as interviews, documents and observations to provide as complete an understanding of an event or situation as possible. Recordings of all the interviews are made which are transcribed in

preparation for data processing. Working hypotheses are formed during the empirical investigation to identify patterns. The design is emergent and evolves in the course of the study. It often results in changes in the questions asked, the sites in which observations take place, and the documents that need to be reviewed (McMillan & Schumacher, 2010:323). All details of the methods used in the implementation and evaluation phases are explained in chapter five.

1.6 CLARIFICATION OF CONCEPTS

Herewith follows a definition of key concepts not already defined that are relevant to this research:

1.6.1 Psycho-educational programme

McIntyre (2008) defines a psycho-educational programme as a humanistic approach to changing the behaviour patterns, values, interpretation of events, and life outlook of individuals who are not adjusting well to their environment(s), for example home, school or workplace. Inappropriate behaviour is viewed as an adolescent's maladaptive attempt to cope with the demands of that environment. Appropriate behaviours are developed by helping that student to display better behaviour choices. Psycho-education necessitates empathic understanding of the individual student, and involves the use of interventions and resources to foster cognitive, affective and social development in a proactive way.

Kerr (2009:11) explains that psycho-educational programmes are based on the premise of learning through self-discovery, with participants being encouraged to find their own answers and solutions. Although these interventions are educational in nature, in which certain information and skills are presented, the emphasis is on a process, whereby individuals move from an awareness phase through an exploration phase and then to a personalisation phase (also mentioned by Steyn, 2006:1-280). Details of this are described fully in chapter five.

Web4Health (2010) explains that psycho-education can be offered in different forms such as lectures, psycho-educative groups, single consultation and counselling. This can be done using brochures, books, videos or other media resources. It is important

to take note that some ‘programmes’ are also ‘resources’ that are used within extended programmes, for example a DVD video resource. In the psycho-educational programme of *this* research, a selected audio-visual programme, which is then used as a resource, is used within a broader programme that is implemented over a couple of weeks (see section 4.12 for the programme that was designed).

1.6.2 Audio-visual media resources

According to the American Heritage Dictionary of the English Language (2007), audio-visual (adj.) is defined as that which is both audible and visible (*abbr.)* **AV,** of or relating to materials, such as films and tape recordings, that present information in audible and pictorial form (*n.),* an aid, other than printed matter, that uses sight or sound to present information: videocassettes, and other audio-visuals. For the purposes of this study audio-visual media resources in particular refer to teaching methods using both sight and sound and include video, television, radio and the web.

Also, for purposes of this research, audio-visual media resources include the use of television, radio, video/DVD/music, the web, and how they are integrated into a psycho-educational programme. The independent use of a selected audio-visual medium as a psycho-educational resource is evaluated (see conclusions and recommendations in chapter seven). The utilisation of information or education technology in alternative forms of educational provision is evaluated, i.e. especially by parents and teachers, to empower them in supporting and assisting their adolescents. Important concepts regarding audio-visual media are the following:

- *Video resources* – the American Heritage Dictionary of the English Language (2007) defines *video (adj.)* of or relating to television, especially televised images, of or relating to videotaped productions or videotape equipment and technology, of or relating to the production of images on video displays. In *noun* form; the visual portion of a televised broadcast, a videocassette or videotape, especially one containing a recording of a movie, music performance, or television programme.
- *Television* – According to the American Heritage Dictionary of the English Language (2007) *television (n.)* is defined as (a) The transmission of dynamic or sometimes static images, generally with accompanying sound, via electric

or electromagnetic signals; (b) An electronic apparatus that receives such signals, reproducing the images on a screen, and typically reproducing accompanying sound signals on speakers; and (c) The visual and audio content of such signals.

- *Radio* – the transmission and reception of sound messages by electromagnetic waves of radio-frequency (*cf.* wireless). Transmission of programmes for the public by radio broadcast, a station for radio transmitting, a radio broadcasting organisation or network of affiliated organisations, the radio broadcasting industry, a message sent by radio (The American Heritage Dictionary of the English Language, 2007).
- '*The web'* resource or *World Wide Web* is a part of the Internet. The web consists of millions of information sites displayed in hypermedia format or web pages; it supports formatted text, graphics, animations, and even audio and video (Newby, Stepich, & Lehman*,* 2000:58). According to the Collins English Dictionary (2005), the *World Wide Web (noun*) is a vast network of linked hypertext files, stored on computers throughout the world that can provide a computer user with information on a huge variety of subjects. The *(abbreviation)* **WWW** is defined by the American Heritage Dictionary of the English Language (2007) as the complete set of documents residing on all Internet servers that use the hypertext transfer protocol (HTTP), accessible to users via a simple point-and-click system.

For this study a resource is, for example, an online resource called "Above the Influence" (ATI) (ATI campaign, 2011). This resource was created by the Office of National Drug Control Policy (ONDCP, 2011) with the aim of preventing adolescent substance abuse.

1.6.3 Adolescence

Gouws and Kruger (in Zervogiannis, 2003:11) as well as Wisdom (2008) define the concept of adolescence as the developmental phase between childhood and the achievement of adulthood. Adolescence is derived from the word "adolescentia" which implies growth toward adulthood. The onset of adolescence is a physiological phenomenon (puberty) while the end is culturally determined (adulthood). Although it is difficult to delimit the adolescent phase in terms of chronological age, it is generally

accepted that it starts between the ages of 11 and 13 years, and usually ends between 17 and 22 years.

The adolescent years are characterised by substantial physical, social, and emotional growth, as well as an increasing focus on independence. Ghodse (2004:3-5) and Wisdom (2008) emphasise that due to the presumed vulnerability, impulsivity, rebelliousness, and awkwardness of adolescents, conflicts frequently develop between them and their parents or other authority figures. The substantial changes experienced in adolescence give rise to individuals' experimentation with different identities and, frequently, with alcohol and other illicit substances (Wicks-Nelson & Israel, 2003:201-203).

For this study the focus will be on adolescents in a secondary school environment in Grades 10 and 11. These students will be mainly between the ages of 16 and 20.

1.6.4 Substance abuse

According to Wisdom (2008), and Wicks Nelson and Israel (2003:200-204), the diagnostic criteria for drug abuse are similar for all types of substances and across all ages. A diagnosis of substance dependence includes increased behavioural, cognitive and physiological symptoms that indicate decreased control over substance use. The diagnostic criteria focus on psychosocial dysfunction and reduce the focus on specific behaviours or time periods. The term *abuse,* however, is sometimes used to refer to any use at all, particularly of illicit drugs, or can refer to any non-medical or unsanctioned patterns of use, regardless of consequences. The International Classification of Diseases (ICD) and the World Health Organization (WHO) (in Wisdom, 2008) do not use the term *abuse* and instead address harmful use and hazardous use of drugs.

According to the medical dictionary of MedicineNet (2010) substance abuse is the excessive use of a substance, especially alcohol or a drug. A definition of substance abuse that is frequently cited is that in DSM-IV, the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM) issued by the American Psychiatric Association (2000). The DSM-IV definition is as follows:

- **A**. A maladaptive pattern of substance use leading to clinically significant impairment or distress, as manifested by one (or more) of the following, occurring within a 12-month period:

    1. Recurrent substance use resulting in a failure to fulfil major role obligations at work, school, or home (e.g., repeated absences or poor work performance related to substance use; substance-related absences, suspensions or expulsions from school; neglect of children or household).
    2. Recurrent substance use in situations in which it is physically hazardous (e.g., driving an automobile or operating a machine when impaired by substance use).
    3. Recurrent substance-related legal problems (e.g., arrests for substance-related disorderly conduct).
    4. Continued substance use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the substance (e.g., arguments with spouse about consequences of intoxication, physical fights).

- **B**. The symptoms have never met the criteria for Substance Dependence for this class of substance.

David *et al.* (2003:10) and Wicks-Nelson and Israel (2003:204) explain that addiction is a chronic, often relapsing brain disease that causes compulsive drug seeking and use despite harmful consequences to the individual who is addicted and to those around them. The structure and function of the brain is changed as a result of the abuse of drugs, causing the brain to become diseased. Over time the changes in the brain caused by repeated drug abuse can affect a student's self control and ability to make sound decisions, and at the same time send intense impulses to take drugs.

1.7 RESEARCH PROGRAMME – DIVISION OF CHAPTERS

The research comprises seven chapters that are as follows:

- Chapter one provides the background and rationale for the study, the research question, aims of the research, paradigmatic perspective, a brief description of the research design and an explanation/clarification of concepts.

- Chapter two describes the conceptual framework, *i.e*. Social cognitive theory (SCT) and Self-efficacy theory (SET) and their role in changing problem behaviour.

- Chapter three presents a literature review on adolescent substance abuse in terms of its causes, manifestations and psychological learning theories on the behaviour of adolescents in terms of substance abuse. Approaches to educational support are also briefly reviewed.

- Chapter four consists of a literature study of recent research on the role of audio-visual media to address adolescent problem behaviour, with a particular focus on substance abuse and in accordance with SCT and SET.

- Chapter five describes the research design and methods of data collection and analysis.

- Chapter six presents the findings and a discussion of the research findings from the empirical investigation.

- Chapter seven consists of the conclusions, recommendations and limitations of the study.

1.8 CONCLUSION

This chapter commences with an introductory background and rationale for the study. The problem formulation and research aims are elucidated. My paradigmatic perspective is described, research design and methodology explained, relevant concepts clarified and the planned programme of research outlined.

In Chapter two I explain the conceptual framework of the study, namely SCT and SET. The implications of SCT and SET for adolescents with substances abuse problems are indicated.

CHAPTER 2

SOCIAL COGNITIVE THEORY AND SELF-EFFICACY THEORY

2.1 INTRODUCTION

In the previous chapter a background to this study was given. Among other aspects, the research problem of the thesis was stated and justified.

This chapter presents a literature review on the conceptual framework of the research, namely SCT and SET and their role in enabling individuals to change or prevent their problem behaviour. The aim is to discover how and why SCT and SET may assist parents, teachers and adolescents in preventing or addressing adolescent substance abuse, such as smoking (alcoholism and drug addiction need to be addressed by professionals). Firstly, the key aspects of SCT are briefly described with reference to the related concepts of reciprocal determinism and triadic reciprocality. Secondly, an overview of SET is given, including: sources of SET; the agentic perspective; dimensions of SET; an explanation of how self-efficacy beliefs influence human behaviour; and factors affecting the strength of the relationship between self-efficacy and behaviour. Finally, the effects of SET on addictive behaviours are described. These effects include relapse, initiation, and intervention perspectives.

2.2 SCT KEY ASPECTS

In his review of Bandura's (1986) work, Pajares (2002a) emphasises that SCT makes it possible for health promoting efforts to be directed at personal, environmental or behavioural factors that influence human behaviour. The interaction of these mutually influencing factors creates a *triadic reciprocality* which is the most important principle of SCT (Bandura, 2008:93-96). Strategies for increasing well-being can be aimed at improving emotional, cognitive, or motivational processes, increasing behavioural competencies, or altering the social conditions under which people live and work.

According to Maddux (1995:4) and Pajares (2002a), one of the key aspects of Bandura's social cognitive perspective is that human beings have certain fundamental capabilities. These primary human capabilities provide the cognitive means by which adolescents are able to influence their own destiny. These are the capabilities to symbolise, plan alternative strategies (forethought), learn through vicarious experience, self-regulate and self-reflect.

The implications of SCT for adolescents and for the aims of this study are (Bandura, 1986:18-21; Bandura, 2008:87-88; Pajares, 2002a) as follows:

- Adolescents possess an extraordinary capability to *symbolise*, whereby they can extract meaning from their environment, construct guides for action, support forethoughtful courses of action, solve problems cognitively, gain new knowledge by reflective thought, and communicate with others at any distance in time and space.
- Through the use of symbols adolescents can engage in *forethought*, intentionally plan courses of action, anticipate the likely consequences of their actions, and set goals and challenges to regulate their activities.
- Adolescents can learn by observing the behaviour of others. *Vicarious learning* allows them to learn a novel behaviour and its consequences without having to perform it through trial and error.
- Adolescents are capable of *self-regulation* which provides them with the potential for self-directed or self-reactive changes in their behaviour.
- The capability of meta-cognitive *self-reflection* allows adolescents to make sense of their experiences, engage in self-evaluation, and change their thinking and behaviour.

In this investigation on which the thesis is based, use is made of Bandura's conception of *self-belief* as a main ingredient to examine how to facilitate positive changes and address adolescents' substance abuse, such as smoking or hard drinking. According to Bandura (1986:25), among other personal factors, individuals' self-beliefs enable them to proactively exercise a measure of control over their thoughts, feelings, and actions. What adolescents think, believe and feel affects how they behave. Among the types of thoughts that affect action, none is more central or pervasive than people's judgements of their capabilities to deal effectively with

different realities. These capabilities provide humans with the cognitive means by which they are influential in determining their own destiny (Bandura, 1986:18-21; Maddux, 1995:4-5; Pajares, 2002a).

2.3 SET OVERVIEW

Bandura (1986:391) states that of all the thoughts that affect human functioning, and standing at the very core of SCT, are *self-efficacy beliefs*. These beliefs are people's judgments of their capabilities to organise and execute courses of action required to attain designated types of performances. Self-efficacy beliefs provide the foundation for human motivation, well-being and personal accomplishment. In Table 2.1 below a brief overview of SET and the factors influencing self-belief are provided.

Table 2.1 SET overview
Adapted from Bandura (1986:399-401) as well as Pajares (2002a), Pajares (2002b)

Sources of self-efficacy		**Self-regulatory skills**
Mastery experience		Adolescents can set reachable goals
Vicarious experience	**Self-efficacy beliefs**	Adolescents can use coping strategies
Social persuasions		Adolescents can create motivating incentives
Physiological and emotional states		Adolescents can apply multi-faceted self-influence
Self-efficacy influences	**Dimensions of self-efficacy expectations**	**Self-efficacy in relation to behaviour**
Adolescents' choice of behaviour	Performance self-confidence	Incentives for adolescents to act in accordance with their beliefs
Adolescents' effort expenditure and persistence	Strength and persistence	Predictability between self-referent thought and action
Adolescents' cognitive thoughts, emotions and proactivity	Generality	Precise nature of skills required

In Table 2.1 above the sources of self-efficacy, self-regulatory skills, self-efficacy influences, dimensions of self-efficacy expectations, and self-efficacy in relation to behaviour are highlighted. All these influencing factors interact in terms of the principle of triadic reciprocality to produce self-efficacy beliefs. In sections 2.3.1 to 2.3.8 each of these sources, factors, dimensions, or influences on self-efficacy are further explained.

According to Bandura (1986:399-401), as well as Pajares (2002a), self-efficacy is developed through four major sources:

- *Authentic mastery experience:* This is the most influential source of efficacy information. Successes raise efficacy appraisals and expectations whereas failures lower them.
- *Vicarious experience:* Vicarious experiences can enhance perceived self-efficacy. Observing others perform successfully can contribute to the adolescents' beliefs about their own capabilities, especially when the model's attributes and qualities are similar to their own.
- *Social persuasions:* Verbal persuasions, coaching, and encouragement, can lead adolescents to believe that they are capable of performing tasks.
- *Physiological states:* States of positive or negative somatic or emotional arousal can influence perceived self-efficacy.

The above mentioned sources are now explained in more detail and the relevance for this study explained.

2.3.1 Mastery experience

The most influential and reliable source that influences self-efficacy is the interpreted result of one's own previous performance, or authentic mastery experience. Performance experiences are the most powerful sources of self-efficacy information (Bandura, 1977:364; 1999:215; Institute for Dynamic Educational Advancement, [IDEA], 2011; Meece & Schunk, 2005:73). Success at a given task, behaviour, or skill strengthens self-efficacy expectations for that particular task, behaviour or skill. For example, an adolescent who was able to go for a full day without smoking may hold

strong self-efficacy expectancies for abstaining for another day (Bandura, 1999:214; Maddux, 1995:10).

According to Bandura (1997:363-364) individuals who have difficulty in controlling their drinking behaviour can develop self-regulative skills and rehearse flexible plans of action. They carry out mastery assignments in which they deal with progressively more risky drinking situations in their natural environment. In this way individuals can learn to remedy their vulnerabilities. They can then manage without recourse to alcohol by developing these skills.

2.3.2 Vicarious experience

Adolescents also form their self-efficacy beliefs through social comparisons and the vicarious experience of observing others perform tasks and noting the consequences (Bandura, 1986:399-400; Meece & Schunk, 2005:73; Pajares, 2002a). The effects of modelling are particularly relevant, especially when the individual has little prior experience with the task. Even experienced individuals, however, will raise their self-efficacy still higher if models teach them better ways of doing things. Adolescents tend to seek out models who possess qualities they admire and capabilities to which they aspire. A significant model in one's life can help instil self-beliefs that will influence the course and direction that life will take.

According to Bandura (1997:100), effective ways of coping can be demonstrated by recounting previous experiences, rather than enacting them presently. In this approach models can describe, and even show, how they had previously suffered from similar problems but overcame them by determined effort. Bandura (1997:100) emphasises that this approach is a common rehabilitative practice especially in self-help groups. Recovered alcoholics, for example, need not become inebriated and then model regained sobriety to convey self-regulatory skills to recovering alcoholics. Modelling influences can be enhanced by recounted historical similarity of progressive mastery combined with proficient modelling.

2.3.3 Social persuasions

Social persuasions, including verbal persuasions and encouragement received from others, play an important part in the development of an individual's self-beliefs (Meece & Schunk, 2005:73). According to Bandura (1997:101; 1986:400) adolescents who are persuaded verbally that they possess the capabilities to master tasks (e.g. curb their smoking) are likely to mobilise greater effort and sustain it when difficulties arise. The envisioned success cultivated must be realistic and attainable.

In research by Reilly *et al.* (in Bandura, 1999:216) changes in self-regulatory efficacy were examined during various phases of in-patient methadone detoxification. The participants in this treatment were urged to seek after-care activities in their communities to motivate them to alter their detrimental habits. Bandura (1997:367) emphasises that if significant others express faith in one's capabilities this can bolster self-change and a sense of personal efficacy.

2.3.4 Physiological and emotional states

Bandura (1986:401) records that anxiety, stress, arousal, and mood states also provide information about efficacy beliefs. Adolescents can gauge their degree of confidence by the emotional state they experience as they contemplate an action, for example, their heart rate or feelings of anxiety (Meece & Schunk, 2005:73). Strong emotional reactions to a task provide clues about the anticipated success or failure of the outcome. One way to raise self-efficacy beliefs and to feel more self-efficacious is to improve physical and emotional well-being and reduce negative emotional states. Because individuals have the capability to alter their own thinking and feeling, enhanced self-efficacy beliefs can, in turn, powerfully influence the physiological states themselves.

Meece and Schunk (2005:73) state, however, that no amount of self-efficacy will produce a competent performance if requisite knowledge and skills are lacking. Whether or not adolescents turn to drugs and alcohol is governed by positive enabling factors as well as by negative instigators to substance abuse. For example, aversive emotional states and interpersonal conflict are common precipitants of drinking bouts.

According to Bandura (1977:367), in the case of social inefficacy causing despondency which prompts drinking, state of despondency is a proximal instigator. Development of a strong sense of social efficacy will predict reduction in drinking behaviour by removing the proximal emotional instigator for it. The highest self-efficacy predictability will be achieved by matching the self-efficacy assessment to the set of determinants of substance abuse operating in any given case.

2.3.5 Agentic perspective

According to Bandura (2008:87), in his discussion of free will from the agentic perspective of SCT, to be an 'agent' is to intentionally influence one's functioning and the course of environmental events. From the agentic perspective, adolescents can contribute to their life circumstances and are not just products of them. Personal influence is part of the determining conditions governing self-development, adaptation and change. Bandura (2008:87-88) explains that there are four core properties of human agency. One such property is *intentionality.* The second feature involves *forethought.* The third agentic property is *self-reactiveness* or self-regulation. The fourth agentic property is *self-reflectiveness* (*cf.* also section 2.2 above for details).

Bandura (1986:392-394) emphasises that individuals are typically guided by their beliefs when they engage the world. As a consequence, adolescents' accomplishments are generally better predicted by their self-efficacy beliefs, intentionality and goals than by their previous attainments, knowledge, or skills. According to Bandura (1977:2) as well as Graham, Valach, Wood and Young (2008:121-133), level of motivation, affective states, and actions are based more on what adolescents believe than on what is objectively true. Bandura (1999:214; 2001:1-26) also states that the exercise of self-regulatory agency plays a central role in a SCT of substance abuse.

In this agentic perspective, successful self-regulators are seen as highly skilled in proactively tracking their behaviour and in the cognitive and situational conditions under which they engage in it as follows (Livestrong, 2011):

- They set *proximal goals* for exercising control over their behaviour in the here and now. A proximal goal is a reachable, short-term goal, which could be, for a cigarette smoker, the goal of stopping smoking for just one day.
- They draw from an array of *coping strategies* rather than relying on a single technique. These coping strategies might include: problem-solving, peer - support seeking, joining in with others who have the same concerns, distancing or withdrawal, internalising strategies including using positive thinking, and externalising strategies, for example, letting off steam and keeping fit and healthy, or to ask a professional person for help.
- They create *motivating incentives* to sustain their efforts. For instance, when it comes to smoking, they remind themselves of the health risks, such as emphysema, heart disease, cancer, asthma-related conditions and frequent respiratory infections; as well as the monetary costs of funding the habit.
- They apply *multifaceted self-influence* more consistently and persistently. This involves them in monitoring their behaviour and the complex interaction of cognitive and situational conditions under which they engage in it. To do this they find information on the problem and learn new skills to manage.
- Successes achieved through perseverant effort strengthen belief in one's self-regulatory efficacy, which enables one to stick it out through tough times.

In his research Pajares (2002a) emphasises that adolescents cognitively interpret the results of events, and these interpretations provide the information on which judgments are based. The types of information adolescents attend to and use to make efficacy judgments, and the rules they employ for weighting and integrating them, form the basis for such interpretations. Thus, the selection, integration, interpretation, and recollection of information influence judgements of self-efficacy.

2.3.6 Dimensions of self-efficacy

According to Bandura (in Maddux, 1995:9), self-efficacy expectancies vary along three dimensions: *magnitude*, *strength*, and *generality*. This is addressed next.

2.3.6.1 Magnitude of self-efficacy

Magnitude of self-efficacy refers to the number of steps of increasing difficulty persons believe they are capable of performing. For example, an adolescent who intends abstaining from smoking, might believe that abstinence is feasible in relaxed conditions where other people are not smoking. However, if in the presence of other smokers, the adolescent may have doubts about abstaining under conditions of higher stress.

In one study on smoking behaviour among Gambian adolescents, Joof, Kremers, Maassen and Mudde (2004:551-560) found a significant difference for *emotional self-efficacy* between smokers and non-smokers. Non-smokers were more definite in their self-expectancies and in their intention not to smoke in the following year than smokers. Smokers had significantly less confidence in their ability not to smoke when they felt nervous or upset.

2.3.6.2 Strength of self-efficacy

Strength of self-efficacy refers to a person's resoluteness and convictions about being able to perform a particular behaviour in question. Strength of self-efficacy expectancy has been related to persistence against circumstances of adversity and barriers to performance. For example, two individuals may believe themselves capable of abstaining from drinking alcohol at a party, but one may hold this belief with more conviction than the other.

In their research on self-expectancies related to smoking behaviour in Portuguese adolescents, De Vries, Kremers, Mudde, Pais-Clemente and Vitoria (2006:531-540) found that non-smokers were less convinced of the advantages and more convinced of the disadvantages of smoking. Non-smokers encountered more social norms against smoking, perceived less smoking in others, experienced less pressure from peers to smoke, refused cigarettes with more confidence, and had a lower intent to smoke in the next year. On the other hand, adolescents' intention and self-efficacy expectations to smoke, social influence and alcohol consumption were the most relevant variables associated with smoking behaviour. De Vries *et al.* (2006:531-

540), found that smoking prevention resources should help adolescents deal with peer pressure to smoke by improving self-efficacy expectations to refuse cigarettes.

2.3.6.3 Generality of self-efficacy

Generality of self-efficacy expectancies refers to the extent to which success or failure influence self-efficacy expectancies. These expectancies may be influenced in a limited, behaviourally specific manner, or can extend to other similar behaviours and contexts. For example, successful abstinence in the company of other smokers may also extend to other contexts of self-control, such as eating or an exercise regimen.

2.3.7 How self-efficacy beliefs influence human behaviour

Self-efficacy beliefs influence human behaviour in many respects as indicated by different authors (Bandura, 1978:237-269; 1982:122-147; 1994:71-81; 1999:214-217; Botvin, Diaz, Griffin & Scheier, 2001:194; Fen & Hong, 2009:147; Haegerich & Tolan, 2008:47-60; Hessling & Jerusalem, 2009:330; Maddux, 1995:12-14; Pajares, 2002a; Whitehead, 2005:214):

2.3.7.1 Choice behaviour

Self-efficacy beliefs influence the choices adolescents make and the courses of action and goals they pursue. Adolescents tend to select tasks and activities in which they feel competent and confident and avoid those in which they do not (Bandura, 1999:214; Maddux, 1995:12; Pajares, 2002a). For example, according to Fen and Hong (2009:147) health conscious adolescents will choose strategies to live a healthy lifestyle. These strategies could include a variety of behaviours such as a healthy diet, a tobacco-free lifestyle, regular exercise, cautious preventive practices and substance use, weight control and a supportive environment. According to Wood (in Fen & Hong, 2009:147), perceived self-efficacy has been consistently the most common factor in motivating exercise participation.

The findings of Whitehead (2005:214) conclude that many health teachers already accept that young people are not all alike in their motivation and choices towards

adopting health-related behaviour. This means that a wide range of strategies needs to be employed. Crossley (in Whitehead, 2005:214) states that health education strategies must take into account the meaning of the targeted behaviour for the young person. Health teachers should acknowledge that what happens is largely the result of the interaction that takes place and the context within which the encounter takes place.

Bandura (1999:214) shows that the human mind is generative, creative and proactive, not just reactive. Bandura (1986:395) observes that people who regard themselves as highly efficacious act, think, and feel differently from those who perceive themselves as inefficacious. They produce their own future. Self-efficacy beliefs determine adolescents' selection of activities and situations, which greatly influences the continued development of these beliefs (Maddux, 1995:14; Bandura, 2008:86-127; Pajares, 2002a). For example, adolescents who are confident of their social skills anticipate successful social encounters, which contribute to their social success.

2.3.7.2 Effort expenditure and persistence

The strength of adolescents' self-efficacy beliefs also help determine how much effort they will expend on an activity, how long they will persevere when confronting obstacles, and how *resilient* they will be in the face of adverse situations (Bandura, 1999:214; Maddux, 1995:12-13; Pajares, 2002a). The higher the adolescents' sense of efficacy, the greater their effort and persistence. Adolescents with a strong sense of personal competence approach difficult tasks as challenges they could surmount rather than as threats to be avoided (Haegerich & Tolan, 2008:47-60).

2.3.7.3 Cognitive thought patterns and emotional reactions

Cognitive thought patterns and emotional reactions are also influenced by adolescents' self-efficacy beliefs (Bandura, 1999:215). High self-efficacy helps create feelings of serenity in approaching difficult tasks. Self-efficacy beliefs influence the strategies adolescents envision for attaining the goals they set. These beliefs also affect the development of rules for predicting and influencing events. Training in cognitive self-regulatory coping strategies increases enduring abstinence. Hessling

and Jerusalem (2009:330) state that self-efficacy is the core prevention criterion of mental health since it positively influences coping with stress and conflict. It is also a health protective factor, and its establishment is part of prevention as well as of treatment of physical and mental problems. The perseverance associated with high self-efficacy is likely to lead to increased performance, which, in turn, raises one's sense of efficacy (Maddux, 1995:13-14; Pajares, 2002a). Adolescents with personal competence skills, who used a variety of cognitive and behavioural self-management strategies reported greater subsequent well-being (Botvin*, et al.,* 2001:194). This in turn predicted less subsequent substance abuse. Emotional well-being was found to fully mediate the relation between early competence and later substance use.

2.3.8 Factors affecting the relationship between self-efficacy and behaviour

A number of important factors can affect the relationship between self-efficacy judgements and action (Bandura, 1986:396-398; Maddux, 1995:15; Pajares 2002a). It is important for teachers and parents to be knowledgeable about these factors to facilitate healthy behaviour. This might be achieved through a psycho-educational resource, as envisaged by this research.

2.3.8.1 Incentives

Adolescents with high efficacy may lack the incentive to behave in accordance with their beliefs, e.g. to lead a healthy lifestyle, due to real or imaginary constraints. They may over- or underestimate their abilities and suffer the consequences of misjudgement. Accurate self-appraisals serve as valuable guides for action.

2.3.8.2 Time

Self-efficacy must also be checked periodically to assess the effect of experiences. The relationship between self-referent thought and action is most accurately revealed when they are measured in close temporal proximity. As strong self-efficacy beliefs are generally the product of time and multiple experiences, they are highly resistant and predictable.

2.3.8.3 Self-precepts

Self-efficacy beliefs should be measured relevant to the behaviour in question in terms of particular activities and circumstances. Measures of self-precept must also be tailored to the domain of psychological functioning being explored. It is important to know the precise nature of the skills required to successfully perform a particular behaviour.

2.3.8.4 Aims

If adolescents are uncertain about the nature of the task, their efficacy judgements can mislead them. The aims of a task and the performance levels required for successful execution must be clearly and accurately appraised for self-efficacy judgments to serve as useful regulators of performance. There is a difference between self-efficacy beliefs and judgements of the consequences that behaviour produces. Self-efficacy beliefs typically help determine the outcomes one expects. In contrast to uncertain adolescents, those that are confident anticipate successful outcomes.

2.4 SELF-EFFICACY AND THE ADDICTIVE BEHAVIOURS

By definition, *addictive behaviours* are those behaviours that are experienced by the individual and viewed by society as being difficult to keep under personal control (DiClemente, Fairhurst & Piotrowski, 1995:110). Through the exercise of self-regulatory influence, adolescents have a say in which environments they get into. They can create supportive environments by seeking out beneficial social networks. They can also do things that help them to override desires for addictive substances (Bandura, 1999:215).

According to Livestrong (2011) as well as Haegerich and Tolan (2008:47-60) adolescents are less likely to use substances when they have:

- a positive future orientation;
- a belief in the ability to resist substances;

- emotional and behavioural control;
- sound decision-making;
- a belief that substance use is wrong; and
- strong bonds to pro-social peers and family.

The findings of Bandura (1999:214) show that perceived self-efficacy exerts its effects on every aspect of personal change. This includes the initiation of efforts to overcome substance abuse, achievement of desired changes, recovery from relapses, and long-term maintenance of a drug-free life. In their research, DiClemente *et al.* (1995:109) record that many studies have used the construct of self-efficacy with smoking, alcohol problems, drug abuse, and eating disorders. SET proposes that efficacy evaluations will modulate effort and coping behaviours. These evaluations are understood to be behaviour specific and related to past performance, verbal persuasion, vicarious experience, and emotional arousal.

2.4.1 Relapse perspective, addictive behaviours and self-efficacy

According to Bandura (1999:215), millions of people stop smoking and maintain abstinence despite bouts of negative effect. Their perceived self-regulatory efficacy mediates the behavioural effects of negative effect. A decreased efficacy to cope with these situations contributes to the probability of relapse (DiClemente *et al.,* 1995:112).

If adolescents are to be spared relapses, they must learn how to deal with troublesome situations, develop strategies for dealing effectively with situations that stress their self-regulatory capabilities, and learn how to recover from setbacks. Major personal changes require an enabling sub-community that promotes the diverse competencies needed to change one's life around (Bandura, 1999:216). The family, school and peer sub-community contexts may have profound motivational effects on adolescents' beliefs about their capabilities (Meece & Schunk, 2005:74-75). When adolescents are taught strategies that they can use to overcome challenges, their self-efficacy will be enhanced.

The role of self-efficacy in Marlatt's model of relapse is described in Figure 2.1 (Gordon & Marlatt, in DiClemente *et al.,* 1995:111).

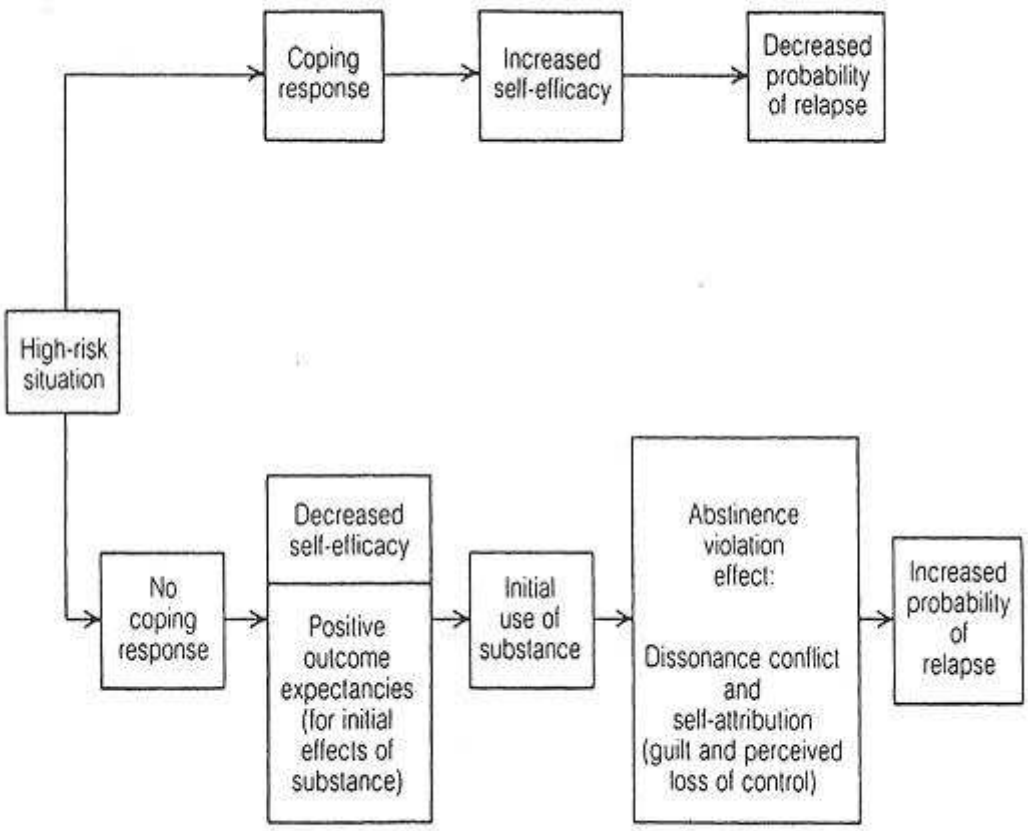


Figure 2.1 The role of self-efficacy in Marlatt's model of relapse

In their model of relapse (Figure 2.1) Gordon and Marlatt (in DiClemente *et al.,* 1995:110-111) emphasise that risky situations that cue addictive behaviour and precipitate relapse may be modified by self-efficacy. When faced with high-risk situations like anger, anxiety, or social pressure to use drink or use drugs, individuals can successfully perform adaptive coping behaviours or fail to cope. Self-efficacy for coping with each particular situation increases with success and decreases with failure.

Marlatt and Witkiewitz (2009:413-416) recently reconceptualised the relapse process as a multidimensional, complex system which is illustrated in Figure 2.2.

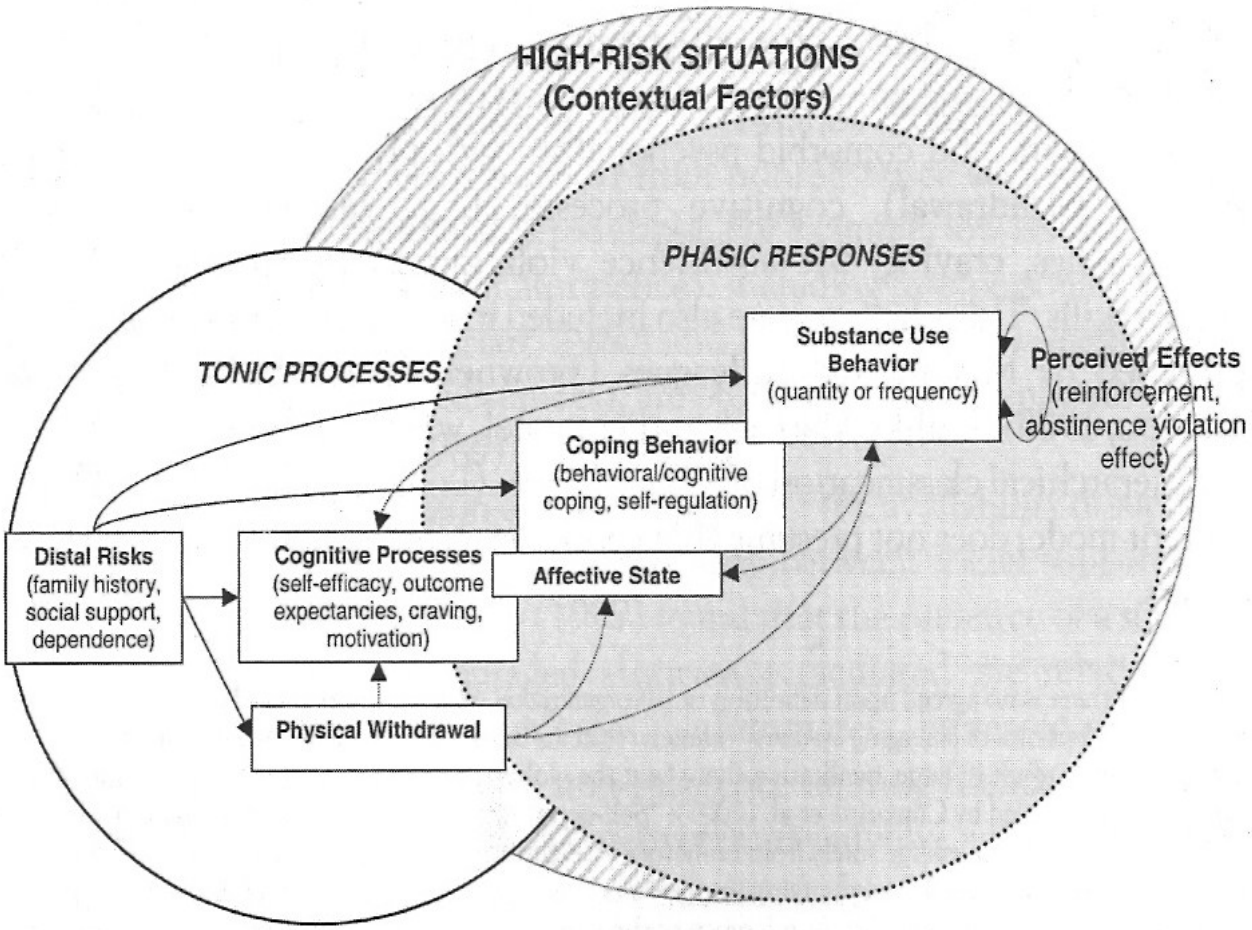


Figure 2.2 Dynamic model of relapse

In their dynamic model of relapse (Figure 2.2), Marlatt and Witkiewitz (2009:413-416) focus on the interrelationships between dispositions, contexts, and past and current expectancies. However, unlike previous models, the proposed model of relapse focuses on situational dynamics rather than developmental changes. Adolescents are often faced with the challenge of balancing contextual cues and potential consequences, for example, when they are attempting to maintain new health behaviours. Marlatt and Witkiewitz (2009:413) propose that multiple influences trigger and operate within high-risk situations to influence the global functioning of the system.

Bradley, Gossop, Green and Phillips (in Bandura, 1999:216) state that the significant predictors of whether former opiate users remain drug free are:

- perceived efficacy to manage inducements for drug use,
- a supportive network of associates, and

- involvement in purposeful occupational activities.

2.4.2 Initiation perspective, addictive behaviours and coping efficacy

DiClemente *et al.* (1995:112) state that addictive behaviours are thought to begin as a coping response that is successful in the short term, but ultimately maladaptive. An adaptive coping repertoire would be needed to avoid short-term behavioural solutions that could develop into an addictive behaviour. This is the aim of the psycho-educational programme selected in this study.

2.4.3 Intervention perspective, addictive behaviours and related efficacy

This view of self-efficacy concentrates on the role of efficacy evaluations in the control, modification, or cessation of a particular addictive behaviour (DiClemente *et al.,* 1995:112). This means, for example, that an adolescent may be confident and self-efficacious about coping with social pressure to start smoking, but less self-efficacious in coping with social pressure to drink alcohol. The implication of this perspective is that self-efficacy for a particular addictive behaviour could depend on the adolescent's specific efficacy evaluation of a particular substance (Bandura, 1999:215).

2.4.4 Assessment and application of self-efficacy across the addictive behaviours

According to DiClemente *et al.* (1995:112-113) self-efficacy can play a multi-faceted role in the addictive behaviours. Initiation, intervention and relapse perspectives focus on different types of efficacy evaluations. The challenge is to define the target behaviour for which self-efficacy is to be assessed:

- *Coping* self-efficacy focuses on an adolescent's confidence to successfully cope with specific situations, for example, being assertive with friends or talking with someone when emotionally distressed instead of using drugs.
- *Treatment behaviour* self-efficacy involves adolescents' belief in their ability to perform treatment-relevant behaviours, such as self-monitoring or stimulus control.

- *Recovery* self-efficacy concentrates on adolescents' belief in their power to recover from a temporary return to the addictive behaviour.
- *Control* self efficacy focuses on adolescents' confidence in the capability to control their behaviour in a variety of provocative situations, for example, the ability to resist drinking heavily.
- *Abstinence* self-efficacy involves adolescents' confidence in their ability to abstain from engaging in the addictive behaviour in the various situations that are cues or triggers to perform that behaviour.

2.4.5 Efficacy versus outcome expectations and changing addictive behaviours

According to DiClemente *et al.* (1995:113), it is important to review the distinction between efficacy expectations and outcome expectations for addictive behaviours. Adolescents with high efficacy expectations benefit more from intervention programmes. They develop self-regulatory skills and try to succeed (Bandura, 1999:215). Outcome expectations relate to sobriety, a drug free life and beliefs on the positive and negative consequences of these states (Meece & Schunk, 2005:73).

Expectations of what alcohol and drugs will do for an individual represent another type of outcome expectancy, for example decreasing anxiety. Expectations about the future may combine outcome success and efficacy expectations, for example, to be able to abstain from smoking or drinking on some future date. Adolescents might base their estimates on current performance and efficacy when predicting future efficacy (DiClemente *et al.,* 1995:114).

2.4.6 Efficacy evaluations and the process of change

Efficacy evaluations represent individuals' confidence in their ability to reach a particular target behaviour (DiClemente *et al.,* 1995:114). In the addictive behaviour-change perspective, the goal behaviour is either abstinence or control of the particular substance, such as cigarettes or alcohol. Efficacy evaluations must be relevant for entry into and active participation in intervention.

Perceived self-efficacy affects every phase of change in substance abuse. This includes the initiation of changes, their achievement, recovery from relapse, and long-term maintenance (Bandura, 1999:215). In the view of Bandura (1999:215-216), perceived efficacy to resist the urge to drink or use drugs predicts the level of self-control over follow-up periods, regardless of how dependent adolescents had become. Self-regulatory efficacy at the end of intervention predicts relapse and the situations in which this is likely to occur. Individuals of high perceived efficacy regard a relapse as a temporary setback and increase their efforts to reinstate control.

The process of modifying an addictive behaviour follows a sequence of stages according to DiClemente and Prochaska (in DiClemente *et al.,* 1995:114-116). In Figure 2.3 below stages of change perspective on self-efficacy are introduced (DiClemente *et al.,* 1995:115).

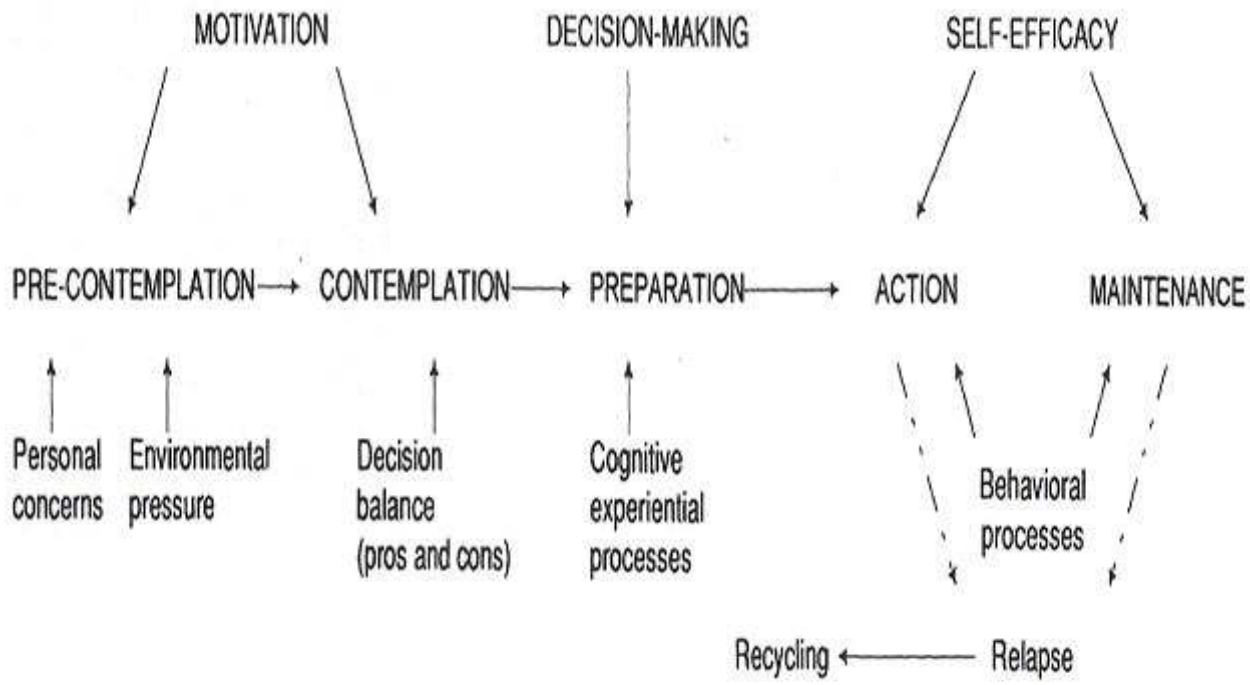


Figure 2.3 Stages of change perspective on self-efficacy: theoretical and practical considerations related to movement through the stages of smoking cessation

Figure 2.3 shows that there is *pre-contemplation* in which the individual (e.g. the adolescent) is not seriously considering change. *Contemplation* may follow which involves an evaluation of advantages and disadvantages of the behaviour, as well as addressing the ambivalence about change. Outcome expectancies may be more relevant as predictors of drug use cessation in these early stages. In the *preparation* phase adolescents assess their resources and devise a plan of action. In the *action* phase, the plan is implemented and revised to reach new challenges. It takes time and energy to change addictive behaviours. The action phase can continue for some months before the adolescent enters the *maintenance* phase of change, where the challenge is to sustain behaviour change. Efficacy expectations related to behaviour change are most relevant in the preparation and action stages. In the maintenance phase these expectations would be expected to even out (DiClemente *et al.,* 1995:114).

DiClemente *et al.* (1995:116) point out that the relationship between self-efficacy and the stages of behaviour change helps explain interactions between efficacy and intervention participation. The level of efficacy upon entry could have an impact on attendance or drop out. A quick rise in efficacy might indicate appropriate or inappropriate confidence in the ability to conquer the abuse, which might prompt early termination. Extremely low self-efficacy continuing through intervention might lead to discouragement and drop out.

In terms of the reciprocal determinism principle of SCT, intervention and change should, in turn, influence the adolescents' efficacy evaluations (Bandura, 2008:93-96). Enactment experiences are possibly the most powerful source of self-efficacy.

2.4.7 Self-efficacy and smoking behaviour

2.4.7.1 Efficacy as a mediator of behaviour change

According to DiClemente *et al.* (1995:116), abstinence self-efficacy for cigarette smoking has been widely studied. Smokers are generally less defensive than alcohol or drug dependent individuals in answering questions about their habit. Assessments can evaluate the individual's *abstinence*, *control*, or *resistance* self-efficacy.

Abstinence self-efficacy assessment is a better predictor of successful cessation than past smoking behaviour (DiClemente *et al.,*1995:118).

2.4.7.2 The proposed predictors of self-efficacy

Predictors of smoking abstinence self-efficacy vary according to the subject's *phase of change*. Perz *et al.* (in Dino, Gao, Horn & Momani*,* 1999:194) classified smokers into stages involving initiation, experimentation and eventually regular use. Stages of change involved *pre-contemplation* (no intention of quitting); *contemplation* (thinking about quitting); *preparation* (planning to quit); *action* (remaining smoke free for six months or less); and *maintenance* (remaining smoke-free after six months).

A group of researchers examined a group of 929 smokers in Germany who were classified as being in the pre-contemplation stage of change (Baumeister, John, Meyer, Ruge, Rumpf, Schmidt, Schorr, Schumann & Ulbricht, 2008:840-851). Based on smoking behaviour and processes of change, three subtypes were distinguished, labelled as progressive, immotive, and disengaged pessimistic. The findings of this study highlighted the importance of tailoring interventions for smoking behaviour change to the needs of different subgroups of smokers.

Anatchkova, Prochaska and Velicer (2005:915-927) suggested the existence of four distinct sub-types for smoking cessation within the contemplation stage of change (classic contemplators, progressing, early contemplators, and engaged). The implication of these sub-types would permit the development of tailored interventions focussing on the different types.

In another study among smokers in contemplation, De Vries, Hoving and Smit (2010:61-73) implemented a computer-tailored smoking cessation programme. Three clusters were identified: early, progressing and disengaged contemplators. In this study, the disengaged smokers were significantly less addicted than early contemplators. The 'disengaged smoker' is one that might be able to change, but is not interested in changing. According to De Vries *et al.* (2010:61-73) these smokers might benefit most from an intervention aimed at highlighting the advantages of quitting. These findings also emphasised the importance of a phase of change understanding of the predictors of self-efficacy.

2.4.7.3 The relationship of self-efficacy to outcome expectations and other important change constructs

Several studies have found that outcome expectations and efficacy expectations for smoking cessation are correlated but not identical (in DiClemente *et al.,* 1995:119-120). In addition, the predictive ability of self-efficacy evaluations for smoking behaviour have been found to be the most significant predictor of smoking cessation intervention outcome.

2.4.8 Self-efficacy and treatment of heavy drinking

In the area of self-efficacy and treatment of heavy drinking, strategies must be tailored to the particular constellation of determinants operating in any given case (Bandura, 1997:357). Whatever intervention is selected, its implementation must address adolescents' sense of efficacy to control their drinking and outcome expectations. The treatment must address how adolescents weigh the benefits of sobriety against the costs of severing activities and friendships associated with their drinking lifestyle.

2.4.8.1 Alcohol control self-efficacy

As mentioned in section 1.3 (in Chapter 1), with regards to alcohol use, the focus will be on prevention or on 'hard drinking' that may lead to alcoholism. Alcoholism and drug abuse should be handled by trained and registered professionals. Teachers can only try to prevent and address mild cases of cigarette, alcohol and drug use to try and prevent addictions.

Crook, Oei and Young (in Bandura, 1997:358) found that a low sense of efficacy to regulate drinking in situations of social pressure is a strong predictor of alcohol consumption. A low sense of resistance efficacy also differentiates heavy problem drinkers from light drinkers. Adolescents who frequent social settings that may facilitate drinking, should have a strong sense of self-regulative efficacy if they are to be spared alcoholism (Bandura, 1997:358).

Jason, Majer and Olson (2004:57-63) examined the relationship between optimism, abstinence self-efficacy, and self-mastery among recovering substance abusers resident at an Oxford House treatment facility. Their findings were that participants' levels of optimism were significantly and positively related to both abstinence self-efficacy and self-mastery scores. Participants who reported having more than 180 days abstinent reported significantly higher levels of *abstinence self-efficacy*.

2.4.8.2 Abstinence self-efficacy

The types of treatment that have been shown to contribute to successful outcomes include training in interpersonal skills; how to counteract social pressures to drink; stress management and the development of efficacious ways of managing marital discord (in Bandura, 1997:360). Abstinence self-efficacy was found to be affected by performance accomplishments or length of abstinence in studies by Emmerson, Miller, Ross and Todt (in DiClemente *et al.,* 1995:121-122).

According to Bandura (1999:215), training in cognitive self-regulatory coping strategies predicted enduring abstinence to resist drinking alcohol. In a multifaceted programme the treatment strategies that were used included self-instruction in delay tactics, because the urge to drink subsides over time; using imagery to weaken the urge to drink; visualising the negative consequences of drinking; visualising the positive consequences of sobriety and substituting competing activities for drinking (Bandura, 1997:362).

Ilgen, McKellar and Tiet (2005:1175-1180) indicate that it is important for researchers to better understand the relationship between abstinence self-efficacy and treatment outcomes in substance use patients. In their study, the ability of different measures of self-efficacy to predict one year of abstinence was compared. A maximal level of abstinence self-efficacy and confidence measured at discharge was found to be the strongest predictor of one year abstinence.

Treatment providers in substance abuse programmes should therefore aim to attain high levels of abstinence self-efficacy with the goal of achieving a 100 percent confidence in abstinence. Self-convincing early experiences of progress in treatment

can encourage individuals to persevere, maintain and sustain the effort needed to succeed (Bandura, 1997:367).

According to Bandura (1997:360), preventive peer-oriented programmes can also be implemented. Such resources teach adolescents social communication and assertion skills for developing positive peer relationships, and cognitive skills for managing stressors, among others. This type of resource, importantly, changes attitudes, enhances socio-cognitive competencies, reduces alcohol and drug use, decreases transgressive behaviour, and fosters involvement in academic activities. Resources that merely convey information about addictive substances increase knowledge but achieve little else. Those that focus on building self-esteem and self-awareness and clarifying feelings and values achieve little if anything. However, development of personal efficacy is likely to foster sobriety, self-esteem, good feelings and positive self-awareness (Bandura, 1997:360).

Cismaru, Lavack and Markewich (2008:282-296) examined social marketing resources aimed at preventing or moderating alcohol consumption among adolescents. This study indicated that future adolescent alcohol prevention initiatives should include self-efficacy messages to increase confidence among young consumers that they are able to carry out the recommended actions.

In accordance with the above, Litt, Kabela-Cormier, Kadden and Petry (2009:229-242) designed a treatment to see whether patients could be led to change their social network from one that supports drinking to one that supports sobriety. It was found that the Network Support condition yielded up to 20 percent more days abstinent than other treatment two years after therapy had stopped. Network Support treatment also resulted in greater increases at 15 months in social network support for abstinence, as well as in Alcoholics Anonymous (AA) involvement. The findings of this study suggest that social network changes were accompanied by increases in self-efficacy and coping that were strongly predictive of long-term drinking outcomes.

2.4.9 Self-efficacy and drug abuse

2.4.9.1 Prevention programmes

Dusenbury and Hansen (2004:371-381) point out that there is extensive literature to suggest that developing competencies in decision making, goal setting, resistance, and social competence skills may contribute most effectively in drug abuse prevention programmes. Several reviews have demonstrated this, including that of *Life Skills Training (LST)* by Botvin and Botvin (in Dusenbury & Hansen, 2004:372).

The qualities that protect adolescents from engaging in risky behaviour mediate how a programme achieves its goals. The *All Stars Core programme* (Dusenbury & Hansen, 2004:371-381) targets five qualities:

- Recognising that high-risk behaviours will interfere with an adolescents' desired lifestyle *(lifestyle incongruence).*
- Correcting erroneous beliefs that drug use is common and acceptable among the peer group *(normative beliefs)*.
- Building strong personal intentions to stay drug free *(commitment).*
- Increasing attachment between adolescents and the school *(bonding).*
- Increasing qualities of parenting including communication, supervision, and setting clear standards for behaviour *(positive personal attention).*

Research explored how coaching affects student outcomes (Dusenbury, Giles, Hansen, Jackson-Newsom, Nelson-Simley, Pankratz, Pittman, Ringwalt & Wilson, 2010:43). Many of the topics were found to mediate changes in student behaviour. The findings by Dusenbury *et al.* (2010:43) suggested that *coaching topics* should address fundamental teaching skills; mechanics of programme delivery; development of an interactive teaching style; effective response to student input and effective tailoring and adaptation. The practical implication of this study is that teachers should develop the skills required by prevention programmes. Coaches can train teachers in social persuasion, encouragement and positive feedback approaches.

2.4.9.2 Telephonic support

In a trial with alcohol addicts who had completed an initial phase of treatment it was indicated that telephone-based continuing care yielded high abstinence rates (Lynch, McKay, Mensinger & Tenhave, 2007:775-784). The treatment effect results suggested that self-help involvement, self-efficacy and commitment to abstinence three months after treatment mediated subsequent abstinence outcomes. This support can also be considered by teachers with adolescents who stopped their hard drinking.

2.4.10 Current trends in substance abuse education

In this section I briefly report on some current trends in substance abuse education. Evidence-based effective education is emphasised. Then the important role of life-skills training is mentioned. After this, collective, multifaceted, social, and holistic approaches are described.

In their research, Buckley and White (2007:43) systematically reviewed the role of various external contributors to school substance use education. According to these authors there is a growing evidence base indicating what appears to be effective in drug education. All drug prevention teachers, teachers and external contributors alike, should acknowledge this evidence base in developing their practice (see also section 1.1).

Regarding *Life-Skills training,* Botvin and Griffin (2002:41-48), as well as Buckley and White (2007:43), point out that the most successful resources have focused upon training in the following interpersonal skills: decision-making skills; self-esteem enhancement; resistance skills training; general life skills training; norm setting and assistance training in obtaining help from others.

Bandura (1999:216) emphasises that reducing substance abuse requires policy and social remedies for conditions that drive people to drugs. Collective efficacy and multifaceted interventions can assist better than individualistic approaches when trying to bring about behavioural, environmental or social-related change (Godley *et al.,* in Bandura, 1999:216; Moon, 2000:237).

Social-influence based approaches are also more effective than traditional information giving approaches. Active methods, such as group discussion and role-play are particularly effective (Buckley & White, 2007:43; Mallin, 2002:1107-1115). In the empirical investigation, the use of group discussion, interviews and related approaches will be used (see chapter 5).

In recent years, the concept of health has been broadened, from a focus on specific individual behaviours in a personal and social vacuum to a holistic one. A holistic approach incorporates lifestyle and examines the influences of home, school, the media, the community and the workplace. Adolescents' shared beliefs in their efficacy to improve life circumstances through unified effort are a crucial ingredient of collective agency.

2.5 CONCLUSION

The aim of this chapter was to concentrate on all important aspects of SCT and SET and their role in addressing substance abuse problem behaviour. This forms the conceptual framework of the study. From the literature review it may be concluded that the SCT/SET conceptual framework may indeed support and assist adolescents, teachers, and parents in addressing and facilitating positive changes.

In chapter three I report on adolescent substance abuse.

CHAPTER 3

ADOLESCENCE SUBSTANCE ABUSE

3.1 INTRODUCTION

In the previous chapter a literature review on the conceptual framework of the study was presented. It was indicated that consideration of SCT/SET in programmes to prevent or address adolescent substance abuse may be useful in cases where adolescents do not need professional treatment.

It is important that teachers be well-informed about drugs and drug abuse, and the reasons why adolescents turn to drugs in order to select prevention resources that can address the mild use of drugs. Thus, this chapter highlights these issues. Adolescent substance abuse epidemiology is discussed with a focus on alcohol, cannabis, and study drugs in particular, considering the aims of this study. Various theories and models of substance use and abuse are explained as well as risk and protective factors. Next, the types and effects of adolescents' substance abuse development are described. Finally, the role of the teacher in supporting adolescents is elucidated.

3.2 EPIDEMIOLOGY OF SUBSTANCE USE AND ABUSE

In chapter one, section 1.1, adolescent substance abuse epidemiology was introduced in general. From a review of the literature it would appear that the most commonly abused substances by adolescents are alcohol, nicotine, marijuana (dagga), 'study drugs' including Ritalin, depressants, inhalants and hallucinogens. In this study, the focus is not on addressing substance abuse for which professional health care is needed. Thus, the focus is on alcohol, nicotine, marijuana and study drugs.

In sections 3.2.1 to 3.2.3, the epidemiology of adolescent substance use and abuse is presented in greater detail with particular reference to findings from the USA (as influential country in the Western world) and South Africa.

3.2.1 Alcohol

The USA's National Survey on Drug Use and Health (NSDUH) report (2007) indicates that *alcohol use* has been linked to delinquent behaviours such as stealing, illicit drug use, and problems in school. Early drinkers are more likely than non-drinkers to engage in delinquent behaviours (Isralowitz & Reznik, 2006:845-849; Lambie & Sias, 2005:266). According to Wisdom (2008) in 2006, 28.3 percent (10.8 million) 12- to 20-year-olds in the USA reported drinking alcohol in the previous month. Heavy drinking (five or more drinks on the same occasion on five or more days in the previous month), including binge drinking (five or more drinks within a couple of hours), are significant concerns because of associated health problems. About 18.8 percent (7.2 million) of 12- to 20-year-olds reported binge drinking and 6 percent (2.3 million) were heavy drinkers.

Drinking and driving is a chief cause of serious and fatal road accidents and is the greatest danger associated with the use of alcohol. In research by Facy and Rabaud (2006:139-149) the mortality rates of young French adults due to alcohol abuse is reported. The risk of accidents was higher for alcohol users, on road accidents in particular. Society and the media encourage the perception that alcohol is used by everyone and that alcohol is an essential for pleasant social interactions. Consequently, it is not surprising that adolescents widely use alcohol.

Burger *et al.* (2000:173) state that alcohol is usually the first drug adolescents try, sometimes before they reach high school. The use of alcohol is so embedded in everyday life that many people do not think of alcohol as a drug. According to Pretorius (in Burger *et al.,* 2000:174) alcohol abuse starts between the ages of 14 and 15. Alcohol and drug abuse has reached crisis proportions in the Cape metropole, with devastating effects on the lives of thousands (City of Cape Town, 2010). The City of Cape Town (2010) reports that the Western Cape has the highest proportion of binge drinkers in high school: 34 percent versus 23 percent for the national average. A third of adolescents aged 11 to 17 from nine districts in Cape Town report having been drunk at least once in their lifetime.

3.2.2 Cannabis

Wicks-Nelson and Israel (2003:201) state that cannabis, including hashish and marijuana, is the most frequently used psycho-active substance by adolescents in the USA other than alcohol. In 2007, the Monitoring the Future survey (Wisdom, 2008) found that 14 percent of 8th graders, 31 percent of 10th graders and 42 percent of high school seniors in the USA reported lifetime use. Cannabis use was then twice that of the early 1990s. The reported use of marijuana by 12 to 17 year-olds declined significantly from 8.2 percent in 2002 to 6.7 percent in 2006. The majority of marijuana possession arrests were composed of young people, with half of arrestees under age 21. It has been estimated that more than one million teenagers in the USA sell marijuana.

In South Africa, according to SACENDU (2011b), marijuana is the most often used illegal drug in this country, and the most primary substance of abuse in adolescents younger than 20 years of age. Cannabis was also the most common primary substance of abuse among patients seen at specialist treatment centres in the Northern Region, accounting for 37 percent of all patients. It was the second most primary substance of abuse in Gauteng (27 percent) and KZN (32 percent).

3.2.3 Ritalin and 'study drugs'

According to Schetchikova (in Miller, Pentz, Spruijt-Metz & Sussman, 2007:136), from 1990 to 2000, use of Ritalin (methylphenidate) increased five-fold in the USA, which consumes approximately 90 percent of all Ritalin. As many as four million Americans take these medications, primarily prescribed by a physician for attention deficit disorders. Johnston, Bachman, O'Malley and Schulenberg (in Miller *et al.,* 2007:136) state that the annual prevalence of use of Ritalin among 8th, 10th and 12th graders has averaged about 2.7 percent, 4.3 percent, and 4.5 percent, respectively, over the period from 2001 to 2004. Amphetamines, which may also be used as study drugs, showed a National annual prevalence of 4.9 percent, 8.5 percent, and 10.0 percent among 8th, 10th and 12th graders, respectively in 2004 (Johnston *et al.,* in Miller *et al.,* 2007:136).

According to Truter (2009:413-417), epidemiological data on the prescribing of methylphenidate (Ritalin) in the private health sector in South Africa is scarce. However, there are numerous claims being made of Ritalin overuse and even abuse in South African adolescents of school-going age. Nevertheless, in this investigation overuse could not be established among adolescents aged 18 years and younger in the private health care sector in South Africa.

3.3 THEORIES AND MODELS OF FACTORS RELATED TO ADOLESCENT SUBSTANCE USE AND ABUSE

A number of research projects have led to theories on factors that are related to adolescent substance use and abuse (Antidrugs Civil Union, 2010; Bethea, 2008; Borsos, 2008; Cavaiola, 2008a; Cavaiola, 2008b; Cook, 2006:145; NIDA, 2010a; Oetting & Beauvais, in Schuld 2006:54; Thombs, 2006:6-8; Wicks-Nelson & Israel, 2003:203).

3.3.1 Gateway theory

The gateway theory suggests that adolescents start using cigarettes and alcohol and then move on to illegal or harder substances. The hypothesis of the gateway drug theory is that the use of less deleterious drugs may lead to a future risk of using more dangerous hard drugs and/or crime. However, according to Wicks-Nelson and Israel (2003:204), as well as Wisdom (2008), drug use in adolescence is not necessarily highly predictive of drug use in adulthood. The view of adult and adolescent drug disorders as fundamentally the same disorder has been questioned as most drug use peaks in late adolescence. There is also controversy regarding whether tobacco and alcohol may be ‘gateway’ drugs that lead to the use of marijuana and other illicit drugs.

In a study identifying Russian and Finnish adolescents’ problem behaviours, the authors (Jokela, Kemppainen, Pantelejev, Puska, Tossavainen, Uhanov & Vartiainen, 2007:81-98) show that a syndrome of problem behaviours, including early substance abuse, school and family problems and sexual promiscuity impairs normal development in adolescents. The findings were that unhealthy dietary habits, use of illegal drugs, psychosomatic disorders and problems with parents were common

among early experimenters. According to Jokela *et al.* (2007:82), the earlier adolescents experiment with alcohol or tobacco, the more likely they are to be involved in risky behaviours. This is in accordance with the gateway theory, as indicated in section 3.3.1 above.

3.3.2 The disease model of addiction

The Antidrugs Civil Union (2010) states that for most of the 20th century addiction as a disease was a favoured viewpoint. It is still in favour and has been adopted by 12-step groups like Alcoholics Anonymous (AA) and Narcotics Anonymous. Addiction is viewed as an illness and the addict is considered as the victim of this disease. The person can have a lifelong remission if they take certain steps, but can never be cured (Borsos, 2008; Thombs 2006:6-8).

3.3.3 The genetic model of addiction

The Antidrugs Civil Union (2010) emphasises that according to this viewpoint, addiction itself is not something that is inherited but the genetic *predisposition* for developing the problem is. A genetic component of addiction is evidence-supported to some extent in that addiction seems to run in families and this may be due to nurture as well as nature (Borsos, 2008).

3.3.4 The moral model of addiction

The Antidrugs Civil Union (2010) views addiction as a choice arising because the addict is morally weak. The medical and scientific community largely do not support this viewpoint although many individuals and groups do (Borsos, 2008; Thombs, 2008). Authors such as Cook (2006:1-221), however, demonstrate that Christian ethics can make a significant contribution to the moral debate. Cook (2006:ix) states that a proper sense of humility can help us to see that some experience of addiction, whether it involves shopping, food, alcohol, sex or drugs is an everyday reality in which each of us experiences a divided self. In addition, he argues that the need for grace is an essential component in any adequate response to addictive disorders, whether it is the explicit Christian concept of God's grace or the notion of the need for the 'Higher Power' of AA. In his commentary on Paul's theology of sin, Cook

(2006:145) explains that the subjective experience of the divided self described in Romans 7:14-25, would together appear to describe subjective phenomena very similar to those experienced as part of the alcohol dependence syndrome.

3.3.5 The opponent-process model

With this model of addiction NIDA (2010a) explains that every psychological event A, will be followed by its opposite psychological event B. For example, the pleasure one experiences from a hard drug is followed by an opponent process of withdrawal. In the nervous system there are many examples of opponent processes including hearing, vision, taste, touch and motor movement. Addiction follows from our wanting to avoid withdrawal symptoms (Antidrugs Civil Union, 2010).

3.3.6 Psychological theory

With emotional distress theory and psychological theory, substances are regarded as a means of coping with depression and anxiety. According to authors such as Borsos (2008) and Cavaiola (2008a), psychological theories tend to focus on compulsive, continual use, whereby substance use is related to personality traits such as low self-esteem.

Pipher (in Zervogiannis, 2003:113) indicates that drug use may sometimes be symptomatic of other problems such as social anxiety, despair, problems with family or friends, a lack of support or guidance, pressure to achieve, a low self-image, negative sexual experiences or difficulty in finding a positive identity (see 3.3.13). Krenek and Maisto (2009:51), Stockwell (2005:20-21) and Wisdom (2008) emphasise the bi-directional causal impact of drug use and co-occurring psychiatric disorders. Adolescents with particular temperamental traits, such as being shy, aggressive, or highly novelty-seeking, may have fewer childhood experiences of success or mastery. Adolescents with these childhood experiences who also have poor social skills, family problems or self-regulation difficulties, may associate with a peer group that is supportive of drug use (found by Wicks-Nelson & Israel, 2003:203). For example, according to Wicks-Nelson and Israel (2003:203) as well as Wisdom (2008), many adolescents experience dysfunctions in the maintenance of a safe environment, which may include poor family communication, poor adult

supervision, a deviant peer group, poor academic performance, and overt conflict or violence. Drug use then contributes to further marginalization of adolescents from potentially positive school or family associations and increased involvement with deviant peers (see 3.3.11).

3.3.7 The cultural model of addiction

In a discussion on this theory, Cavaiola (2008b) states that addiction is seen as arising from the environment in which an individual grows up. For example, alcoholism is rare among Saudi Arabians, where obtaining alcohol is difficult and using alcohol is prohibited (Antidrugs Civil Union, 2010).

3.3.8 Social theory

Social theories are theoretical frameworks which are used to study and interpret social phenomena within a particular school of thought. Substance abuse would be explained in terms of a symptom of underlying social problems (Keel, 2010). Various types of social theories are differentiated, including normative, definitional, structural and process theories.

3.3.9 The social control theory

According to Keel (2010), this theory proposes that exploiting the process of socialisation and social learning builds self-control and reduces the inclination to indulge in behaviour recognised as anti-social. The long-term impact of basic parental values or parental drug use may open up the potential for adolescent substance abuse.

The influence of peers and peer drug use is also a very important factor in social control theory. Adolescents usually associate with each other based on similarities of life styles and are also most likely to share drug using patterns and type of drug use. Thus, peer cluster theory emphasises the role of the peers in convincing adolescents to use substances. According to Oetting and Beauvais (in Schuld, 2006:54) the peer cluster initiates the adolescent into the use of drugs, helps to provide drugs and

models drug behaviour. This helps to shape the adolescents' attitude about drugs and drug using behaviour.

3.3.10 Social cognitive learning theory

This theory of addiction emphasises that adolescents may model the behaviour of significant others. Attitudes in the initiation and development of substance abuse are emphasised. Chassin *et al.* (in Wicks-Nelson & Israel, 2003:203) state that since older siblings and parents are potential models for such behaviour, the child of a parent who is a substance abuser or alcoholic may be at particular risk. When older siblings or parents use alcohol, tobacco or marijuana, adolescents are more likely to initiate use of these substances. The parents' attitude displayed can also affect the young person's behaviour. Adolescents are more likely to use alcohol or other substances when they perceive parental approval for use. According to Lubbers (2005) the cognitive mediators of refusal self-efficacy and outcome expectancies are important determinants of adolescent alcohol use and the more distal influence of anti-social behaviour. Increased refusal self-efficacy beliefs and positive peer group social behaviour were found to be related to decreased drinking.

3.3.11 Psycho-social theory

In his discussion of personality development, Corey (2001:73-81) describes how personal characteristics and social environments may play a role in psycho-social theory. In terms of Erik Erikson's stages of psycho-social development, eight stages are identified through which a healthy human should pass from infancy to late adulthood. In each stage the person confronts, and needs to master, new challenges. Each stage builds on the successful completion of earlier stages. The challenges of stages not successfully completed may be expected to reappear as problems in the future.

Botvin, Diaz, Griffin and Ifill-Williams (2001a:1-13; 2001b:360-365) found that when adolescents have poor social skills this led to increased alcohol use. However, with increased social competency, adolescents are less likely to be pressured into using substances. Causal factors in the psycho-social sphere include peers, family, school, neighbourhood and community influences (Wicks-Nelson & Israel, 2003:203).

3.3.12 The bio-psychosocial model

According to Bethea (2008) the bio-psychosocial model, unlike traditional models of addiction, is a-theoretical in that it does not attempt to explain the causality of addiction. However, this model presents a holistic, systems approach and identifies the influence as well as interaction of various dimensions of the biological, social, psychological, spiritual, and cultural environment on the adolescent. The different causes and stages of drug development are also most significant as these are indicative of the various ages to start with a prevention programme, whom to target, as well as where the focus of the programme should be.

3.3.13 General factors

In addition to the factors related to adolescent drug use (as explained above), McKeown (in Zervogiannis, 2003:112) found that young people may be influenced to use drugs as a result of complex and interrelated factors. These may include advertising, boredom, the need to experiment, and the excitement of risk taking (Wicks-Nelson & Israel, 2003:203).

3.4 RISK AND PROTECTIVE FACTORS OF ADOLESCENT SUBSTANCE ABUSE

3.4.1 The inter-relationship of factors

According to David *et al.* (2003:6) and Stockwell (2005:21) many factors have been identified that help differentiate those more likely to abuse drugs from those less vulnerable to drug abuse. These are termed *'risk'* and *'protective'* factors. David *et al.* (2003:10) as well as Cavell, Ennet and Meehan (in Wicks-Nelson & Israel, 2003:203) suggest that 'risk' factors are associated with a greater potential for drug abuse whereas 'protective' factors are those associated with reduced potential for abuse. Risk factors can affect students in a developmental risk trajectory (David *et al.,* 2003:6). This path captures how risks become evident at different stages of a child's life. Risk and protective factors are characterised in five domains, or settings as shown in Table 3.1 (David *et al.,* 2003:6) below.

Table 3.1 Risk and protective factors for drug abuse

Risk Factors	Domain	Protective Factors
Early Aggressive Behaviour	Individual	Impulse Control
Lack of Parental Supervision	Family	Parental Monitoring
Substance Abuse	Peer	Academic Competence
Drug Availability	School	Anti-drug Use Policies
Poverty	Community	Strong Neighbourhood Attachment

As shown in Table 3.1 above the domains can serve as a focus for prevention. Some risk and protective factors are mutually exclusive, where the presence of one means the absence of the other, as the first two examples suggest. For example, in the Individual domain, early aggressive behaviour, a risk factor, indicates the absence of impulse control, a key protective factor. Helping students to control impulsive behaviour is a focus of some prevention programmes.

David *et al.* (2003:7) explain that other risk and protective factors are independent of each other and not mutually exclusive as in the peer, school, and community domains. For example, in the school domain, drugs may be available, even though the school has anti-drug policies. Hawke and Kaminer (2009:354-355) as well as Sambrano, Szapocznik and Tolan (2007:242) indicate that an intervention might strengthen enforcement so that school policies create the intended school environment. An adolescent's social, emotional, and academic development can be challenged by these risk factors for drug abuse. Depending on the adolescent's attributes, personality traits, phase of development, and environment these risk factors can produce different effects (Hawke & Kaminer, 2009:354-355; Sambrano *et*

al., 2007:242). For instance, poor academic achievement and early aggressive behaviour may indicate that a student is headed toward problem behaviour. Early intervention and treatment, however, can help reverse or reduce these risks and change that student's developmental path (also see sections 3.3.10 and 3.3.12).

According to David *et al.* (2003:7), the more risks a student is exposed to, the more likely the child will abuse drugs. Some risk factors are particularly potent, yet may not influence drug abuse unless certain conditions prevail. Having a family history of substance abuse, for example, puts a student at risk for drug abuse (also see section 3.3.10). In an environment with no drug-abusing peers and strong antidrug norms, that student is less likely to become a drug abuser (also see sections 3.3.7 and 3.3.9). According to this understanding, protective factors can lessen the impact of a few risk factors (David *et al.,* 2003:7; Wicks-Nelson & Israel, 2003:203). For example, strong protection, such as parental involvement and support can significantly reduce the influence of strong risks, such as having substance-abusing peers (see also sections 3.3.4 and 3.3.9).

3.4.2 Intrinsic risk and protective factors

Intrinsic risk and protective factors of substance use involvement include personality and gender. I discuss these briefly here.

3.4.2.1 Personality

According to David *et al.* (2003:8) and Wicks-Nelson and Israel (2003:215) a student's personality traits or temperament can place them at risk for later drug abuse. Aggressive and withdrawn boys, for example, often exhibit problem behaviours in interactions with their families, peers, and others they encounter in social settings. If these behaviours continue, they will likely lead to other risks. These risks can include early peer rejection, academic failure, and later affiliation with deviant peers, often the most immediate risk for drug abuse in adolescence (see section 3.5.1).

3.4.2.2 Gender

According to David *et al.* (2003:8) research on family relationships indicates that adolescent girls respond positively to parental support and discipline, while adolescent boys sometimes respond negatively. Wicks-Nelson and Israel (2003:203) found that aggressive behaviour in boys and learning difficulties in girls are the primary causes of poor peer relationships. These poor relationships, in turn, can lead to a negative school experience, social rejection, and problem behaviours including drug abuse (see section 3.3.12).

3.4.3 Extrinsic risk and protective factors

In this section I briefly report on some of the extrinsic or environmental causes/risk and protective factors of adolescent involvement in substance use and abuse. These may include the media, the family and the community as follows.

3.4.3.1 Media

Burger *et al.* (2000:182) and Zervogiannis (2003:110) reported that attitudes have changed among young people about drug use. Their perception of the risks have diminished, at least in part, as a result of popular media and entertainment portrayals of drugs, drinking and smoking in an acceptable or even in a positive light. The media contributes towards this illusion by linking sophistication with self-destructive and impulsive behaviour (Pipher in Zervogiannis, 2003:112). Characters with self-control and thoughtful reasonable behaviour are often portrayed in a negative light (see also section 3.3.9).

3.4.3.2 Family

Burger *et al.* (2000:174-175) indicate that when parents are inclined to swallow a pill for every minor complaint, their children may become only too ready to resort to some sedative or other to relieve their stress. Barbiturates and sedatives are commonly used among adolescents, although barbiturates are illegal to obtain without a medical prescription. Adolescents sometimes have little difficulty in obtaining supplies of these drugs from their parents' medicine cabinets. The sedatives include alcohol-based barbiturates and tranquillizers that induce a feeling

of relaxation in the user (Cross & Gulmatico-Mullin, 2008a; Cross & Gulmatico-Mullin, 2008b; Gallon, Martino-McAllister & Wessel, 2008; NIDA, 2010a).

In addition to the above, drug-addicted adolescents often come from divided families (Burger *et al.,* 2000:182; Wicks-Nelson & Israel, 2003:203) (see also sections 3.3.7, 3.3.8 and 3.3.9). However, there are also some adolescents who are cared for and cherished by loving parents yet still become addicted to hard drugs. Positive or negative interactions within the family can affect early adolescent development. David *et al.* (2003:8) explains that risk is more likely to be experienced when there is:

- lack of mutual attachment and nurturing by parents or caregivers;
- ineffective parenting;
- a chaotic home environment;
- lack of a significant relationship with a caring adult and
- a caregiver who abuses substances, engages in criminal behaviour or suffers from mental illness.

When parents and other caregivers abuse drugs and other substances this can impede bonding with the family and threaten feelings of security needed for healthy development. According to Sambrano *et al.* (2007:xi-xii) a *protective* function on the other hand, is served when there is:

- a strong family bond and loving support;
- parental involvement and open communication;
- supportive parenting that meets cognitive, emotional, financial, and social needs; and
- clear limits, disapproving of tobacco, alcohol, or drug use, and consistent enforcement of discipline.

In findings by Bellamy, James, Matthew and Wang (2005:531) empirical evidence is provided indicating that family protective factors can significantly influence adolescents' substance use, based on the social ecological model. According to the writers, these factors should be adopted into substance use prevention interventions.

Research by Alvarez-Nemegyei, Nuno-Gutierrez and Rodriguez-Cerda (2006:649) investigated Mexican teenage illicit drug users in rehabilitation to determine their drug use debut. They propose that teenagers' drug use debut may be linked to subjects' emotional vulnerability which originates in the family image (see section 3.3.3 and section 3.3.8). This vulnerability renders the adolescents more susceptible to the influence of others. This kind of reasoning points to a more passive than active, and a more social than personal dynamic in drug use debut. These are important factors for developing preventive measures.

3.4.3.3 Environmental factors

According to Burger *et al.* (2000:182) almost all social environments see the presence of the use of drugs. It is no longer considered anti-establishment or provocative. A fertile ground for drug addiction is produced by society's ills, including moral permissiveness, a break-up of the family unit and a misguided concept of freedom.

Relationships in settings outside the family, with teachers, peers, in the schools, and in the community can be crucial to a student's emotional, cognitive, and social development (see also section 3.3.9). According to David *et al.* (2003:9) as well as Wicks-Nelson and Israel (2003:203) the risk factors in these environments are (see also section 3.5):

- inappropriate classroom behaviour, such as aggression and impulsivity;
- poor social coping skills;
- association with peers with problem behaviours, including drug abuse;
- academic failure and
- misperceptions of the extent and acceptability of drug-abusing behaviours in peer, school, and community environments (Cavell *et al.,* in Wicks-Nelson & Israel, 2003:203).

Drug-abusing peers are often the most immediate risk for exposing adolescents to drug abuse and delinquent behaviour (David *et al.,* 2003:9). Sambrano *et al.* (2007:5) state that the role that positive peers and adults can play is an important protective factor (see section 3.3.9). Other factors including drug availability, drug trafficking patterns, and beliefs about drug abuse tolerance, are also risks that can influence

young people to start to abuse drugs (David *et al.,* 2003:9) (see also section 3.3.9). Parental monitoring of activities outside the family is thus important (Hawke & Kaminer, 2009:349).

The most salient *protective factors* are (see also section 3.5.1):

- age-appropriate parental monitoring of social behaviour, including establishing curfews, knowing the child's friends, ensuring adult supervision of activities outside the home, and enforcing household rules;
- acceptance of conventional norms against drug abuse;
- success in academics and involvement in extracurricular activities and
- strong bonds with pro-social institutions, such as religious and school institutions.

3.4.4 Critical risk periods

David *et al.* (2003:9-10) suggest that critical periods in development may emphasise the importance of risk or protective factors. Catalano and Toumbourou (2005:56-58) state that when young people enter high school, for instance, they face additional social, educational, and psychological challenges. At the same time, they may be exposed to greater availability of drugs, drug abusers, and social engagements involving drugs. These challenges can increase the risk that they will abuse alcohol, tobacco and other drugs (see also section 3.3.1).

3.4.5 Reasons for alcohol use and abuse

According to Burger *et al.* (2000:174) adolescents drink for the following reasons (see also sections 3.3.6 and 3.3.7):

- Adolescents' physical development is accompanied by heightened awareness of body sensations. Taken in small quantities, alcohol has a relaxing effect that may accentuate these bodily sensations.
- Adolescents may also use alcohol to increase physical arousal, reduce sexual inhibitions, facilitate social interactions and minimize self-consciousness (also found by Wicks-Nelson & Israel, 2003:203).

- Large quantities of alcohol may alter perceptions of reality, which makes adolescents more willing to take risks.
- Many adolescents engage in binge drinking, which they perceive as risky but somehow acceptable within the peer context. It sometimes helps adolescents to feel part of the group and to be accepted.
- Some adolescents drink as a means of rebellion (Zervogiannis, 2003:112).

3.4.6 Reasons for study drug misuse

Miller *et al.* (2007:147) found that study drug misuse is concentrated in certain groups, for instance, friends who are prescribed the medication (see section 3.3.9). Abuse occurs when used in rather high doses or when administered intra-nasally or injected.

3.5 TYPES, SIGNS AND EFFECTS OF ADOLESCENT SUBSTANCE ABUSE

3.5.1 Types of substances

Fisher (2008a) as well as NIDA (2010a) distinguish between commonly abused drugs and prescription drug abuse in terms of their categories and names, how they are administered, and their intoxication effects or potential consequences. It is important to note that Schedule I and II drugs have a high potential for abuse. They require greater storage security and have a quota on manufacturing, among other restrictions. Schedule I drugs are available for research only and have no approved medical use; Schedule II drugs are available only by prescription (no refills) and require a form for ordering. Schedule III and IV drugs are available by prescription, may have five refills in six months, and may be ordered orally. Some Schedule V drugs are available over the counter.

According to Burger *et al.* (2000:174), Fisher (2008a) and NIDA (2010a), drugs can be classified into six main groups: depressants, stimulants, inhalants, relaxants (euphoriants), hallucinogens and narcotics. In each of these categories the drugs differ from each other in respect of:

- their physiological and psychological effects;
- their cost and availability;
- the practices resorted to in using them;
- their popularity among adolescents of different races, sexes and social classes.

Substance use can derail normative patterns of development (Hawke & Kaminer, 2009:346). The signs and effects of substances used and abused by adolescents are now described. As the emphasis in this study is on prevention, I include in this review only the most commonly abused substances by adolescents, namely: alcohol, nicotine, marijuana (dagga), 'study drugs' including Ritalin, and inhalants.

3.5.2 Signs of drug use

According to Lambie and Sias (2005:266), the National Drug Intelligence Center (2007) as well as Saisan and Smith (2010) there are several telltale signs of possible drug use or abuse in adolescents. It is a difficult challenge for parents to distinguish between normal aspects of adolescent development and signs of substance abuse. Indications of drug use may be related to sudden or extreme changes in personality, appearance, school performance, or extracurricular activities. A previously well-behaved, respectful adolescent may become emotionally volatile, hostile, or violent (Wicks-Nelson & Israel, 2003:59-60). Students may withdraw from family and friends, neglect schoolwork and drop previously-enjoyed activities. Secretive behaviour and lying to cover up drug use is also common. They may steal, ask for money, or sell valuable possessions in order to support their habit. Students may wear sunglasses and/or long sleeve shirts frequently or at inappropriate times.

According to Burger *et al.* (2000:178-179) if any of the following signs or symptoms appears one should seek advice from a doctor: trembling hands; sudden loss of weight or appetite, or need to sleep; dilated pupils, which may come from using stimulants; reddened eyes, which may come from using marijuana; pinpoint pupils, which may come from using heroin; sunglasses are often worn to mask these last three symptoms; staggering or stumbling movements; poor judgement of speed, distance or time; or odour of incense or air freshener to mask the smell of drugs.

The following signs are stronger indicators of drug abuse (Burger *et al.,* 2000:179; Fisher, 2008a): unexplained appearance of drugs, hypodermic needles, syringes or bent spoons; needle marks on the legs or arms, which may come from injections; often the user will wear long-sleeved shirts to hide sores which may be caused by injections; unusual quantities of various solvents; rapidly changing moods, anxiety, panic reactions; and vomiting and abdominal pains.

3.5.3 Alcohol effects

Hawke and Kaminer (2009:346) emphasise that the adverse consequences of adolescent alcohol and drug use can be severe and far-reaching. It increases the risks of alcohol and drug abuse in adulthood (Wicks-Nelson & Israel, 2003:203-204).

According to various authors (Isralowitz & Reznik, 2006:845-849; Lambie & Sias, 2005:266; Martin & Milot, 2007; Wisdom, 2008), adolescents who drink and smoke are more likely to take part in other risky behaviours, including using other drugs or driving after drinking. Newman and Newman (in Burger *et al.,* 2000:174) point out that if alcohol and drugs, particularly barbiturates, are combined, this can be especially lethal. The risk of experiencing dating violence when an adolescent uses alcohol is highlighted by Caetano, Goebert, Nishimura and Ramisetty-Mikler (2006:423-429), and Isralowitz and Reznik (2006:845-849).

According to Burger *et al.* (2000:173), alcohol doesn't actually provide a 'high'. In fact, it depresses the central nervous system. Its effect on the nervous system is to relieve inhibitions, making an adolescent feel more spontaneous and socially at ease. The authors emphasise that alcohol interferes with intellectual and thought processes. Alcohol impairs perception, sensory-motor coordination and thinking speed (Crome, London & Rumball, 2004:103-104; Hunt & Kilmer, 2008; NIDA, 2010a). Alcohol also prevents the adolescent from functioning normally and has the potential to cause death. 'Chugging' large quantities of alcohol may suppress breathing. This is a practice that is sometimes included in certain adolescent initiation rites and with competitions over masculinity.

3.5.4 Effects of nicotine use

Burger *et al.* (2000:175) declare that nicotine use by adolescents is often understated as a health risk, although nicotine is highly addictive (NIDA, 2010a; Piasecki & Zucker, 2008; Woodhouse, 2004:117). Smoking is highly prevalent across most anxiety disorders (Morissette, Gulliver, Kamholz, Tull & Zimering, 2007:245-272). Cigarette smoking is associated with various health disorders such as heart attacks and strokes, cancer, emphysema and respiratory infections, and chronic bronchitis (NIDA, 2010a; Woodhouse, 2004:117).

3.5.5 Cannabis and its side-effects

Marijuana (dagga) and 'hash' or 'hashish' (the most potent form of marijuana) are classified as a hallucinogen by some researchers while other researchers classify them as euphoriants (Burger *et al.,* 2000:176). Marijuana does, however, contain properties of depressants, stimulants, narcotics and hallucinogens (Fisher, 2008b; NIDA, 2010a).The effects of marijuana depend on the dose taken, but its use leads to a euphoric release from inhibitions, tensions and anxieties. According to Burger *et al.* (2000:176,) mild doses make the user talkative, relaxed and jovial. Heavier doses increase the intensity of sensory experience. Large doses can impair coordination and judgement and can induce hallucinations.

NIDA (2010a) states that other side effects of cannabis are drowsiness, dizziness, tremors, dilation of the pupils and nausea. Marijuana also increases the heart rate, causes eye and throat irritations, and stimulates appetite. Dagga smoking, like cigarettes, can contribute to heart and lung disease, cancer and damage to unborn children (Fisher, 2008b). According to Burger *et al.* (2000:176) no acute health consequences of moderate use of marijuana have ever been clearly demonstrated. However, it is clear that excessive or prolonged use of marijuana has the danger of damaging the adolescent's health. Marijuana use can also harm the adolescent's affective and social development; affect his or her school performance; and lead to the use of more dangerous drugs (see gateway theory in section 3.3.1).

3.5.6 Effects of ‘study drugs’ including Ritalin

According to Burger *et al.* (2000:176) and NIDA (2010b), study drugs are known commonly as ‘uppers’ as they enhance the adolescents’ ability to perform strenuous tasks and to concentrate. The drugs are commonly used by adolescents to stay awake all night to study; reduce fatigue and appetite; generate excitement and induce an exaggerated sense of well-being.

Bucossi and Stuart (2008) as well as NIDA (2010b) found that study drugs produce many negative side-effects, such as restlessness; headaches; dizziness; tremors and a dry mouth. According to Jensen (in Burger *et al.,* 2000:176) large doses can also cause depression, fatigue, high blood pressure and respiratory failure. Miller *et al.* (2007:137&139) state that such stimulant users most likely to suffer dependence were those who began use early, and had used multiple drugs. Other potential negative consequences of ‘study drug’ use are crime and psychiatric /chronic medical complications.

Kollins, MacDonald and Rush (in Miller *et al.,* 2007:140, 141) reviewed 60 studies of the reinforcing or subjective effects of methylphenidate (Ritalin). They found in 80 percent of these studies that Ritalin functions similarly to d-amphetamine or cocaine, and that there is potential for addiction. There is a potential for psychiatric or chronic medical problems. Ritalin may also temporarily suppress growth among children.

According to Sigmon (2008) effects of Ritalin overdosage can include aggressiveness, anxiety, blurred vision, confusion, dizziness, emotional lability, headaches, insomnia, loss of appetite, twitchiness, sweating, and dryness of the mouth and eyes. In the USA Ritalin is also one of the top 10 most frequently reported drugs stolen from pharmacies.

According to Ryan (2006:12) adolescents that use prescription stimulant drugs for recreational purposes are likely to use other drugs and suffer from drug abuse. They may also incur serious damage from improper administration of these drugs. The U.S. DHHS (in Miller *et al.,* 2007:147) state that strong warning labels may help, but are a limited means of drug control. Prevention and cessation education are important modalities to try to limit its misuse and abuse.

3.5.7 Inhalants and their intoxicating effects

Inhalants are in common use among adolescents living in poverty (Burger *et al.,* 2000:176). Prompted by limited financial resources, youngsters resort to a cheap way of experiencing a 'high'. Inhalants have intoxicating effects similar to those of alcohol (NIDA, 2010a). Inhalants include petrol, model-aeroplane glue, paint thinners, nail polish remover, aerosol propellants and a variety of thinners.

The fumes from these drugs produce dizziness, dullness, floating sensations, feelings of power and, in some users, aggression. Unconsciousness and even death may result from excessive doses. The kidneys, nervous system, brain tissue and bone marrow can also be damaged with long-term use (Klostermann, 2008a).

3.6 THE ROLE OF THE TEACHER REGARDING ADOLESCENT DRUG USE

Zervogiannis (2003:112) states that teachers need to recognise that at this point, there is no effective way of stopping adolescents' exposure to drugs. There does not seem to be any way of preventing drugs from getting on the streets, into the shopping malls, into the clubs, and into the schools. Through government policy, drug enforcement and educational strategies, ways of minimising this will hopefully eventually be found.

According to Kruger (in Zervogiannis, 2003:114), teachers have a great responsibility with regard to adolescents' future career and life success. From a psycho-educational perspective, teachers have the duty to accompany adolescents to responsible adulthood, to nurture their mental welfare and foster a harmonious educational climate between parents and adolescents as well as between teachers and adolescents.

The importance of drug education for teachers, adolescents and users cannot be overemphasised. Zervogiannis (2003:113) emphasises that adolescents who take drugs are often more enlightened about aspects of drug-taking than their parents or teachers. It is most important that teachers or parents should have their facts accurate, or it is simply not possible to appear credible or address the problem

effectively. Burger *et al.* (2000:182) and Zervogiannis (2003:112) emphasise that it is important that parents and teachers be well-informed so that they can recognise the actual symptoms of drug abuse and counsel the students with authority.

Addiction to 'hard' drugs needs to be treated by professionals. However, the general aim of this study is to implement and evaluate a selected audio-visual media resource, to help teachers assist adolescent students with a substance abuse problem, or to prevent those adolescents who are at risk from becoming addicted. The selection of this resource will be based on certain *evidence-based principles* for the implementation of a successful prevention programme (see section 1.3 and section 4.5).

3.7 CONCLUSION

In chapter three adolescent substance use and abuse was explained. The epidemiology of adolescent substance use and abuse was discussed. Various theories and causes of adolescent substance use and abuse were highlighted, and the types and effects of adolescents' substance abuse development were explained. Finally, the implications for educational support were pointed out.

In chapter four I review the literature on the role of audio-visual media to address problem behaviour. The focus is in particular on substance abuse and considers SCT and SET.

CHAPTER 4

SUBSTANCE ABUSE PREVENTION PROGRAMMES AND THE ROLE OF AUDIO-VISUAL MEDIA RESOURCES

4.1 INTRODUCTION

In the previous chapter adolescent substance use and abuse was explained and implications for educational support were mentioned. In this chapter an overview will be given of substance abuse prevention programmes as well as the role of audio-visual media resources in prevention. The aim is to discover how and why audio-visual media may assist parents and teachers in addressing the issue of adolescent substance abuse.

Firstly, 'prevention' is defined. The various intervention levels of prevention are described, and the core elements of effective prevention highlighted. This is followed by the identification of the principles of effective prevention programmes. Evidence-based prevention programmes are described, including existing types of resources and innovation in prevention. Recent innovation in adolescent substance abuse prevention in the form of behavioural health and social media is explained with reference to digital engagement. This is followed by the rationale for integrating behavioural health and social media together with audio-visual media. Criteria for the evaluation of audio-visual media are also explained. Prevention initiatives in South Africa are reviewed before reflections and recommendations in the light of SCT and SET are made.

4.2 WHAT IS PREVENTION?

According to the National Drug Master Plan (NDMP) (2006-2011:22) an intervention may be defined as a way of helping an individual, group or community to understand that an existing or potential problem requires attention. The intervention then assists in dealing with the problem. The most appropriate and preferred intervention is prevention. In this study, preventive approaches attempt to modify or remove the causes of alcohol and other drug (AOD) problems, for example changing the

environment that supports AOD use, or to increase self-efficacy (Bandura, 1986:18-21; Bandura, 2008:87-88; Dusenbury & Hansen, 2004:371-381; Dusenbury *et al.,* 2010:43; Pajares, 2002a).

The main objective of prevention is to delay the onset of use, to delay progression from lower to higher frequency or quantity of use, or to decrease use (Crome & McArdle, 2004:16). Most prevention activities are aimed at alcohol, tobacco and illicit drugs, primarily cannabis (Crome & McArdle, 2004:16). Prevention programmes may focus on different goals in terms of substance, extent of use, and primary, secondary or tertiary level of prevention activity.

Primary prevention attempts to curb the supply and prevent the new use of illicit drugs. This type of prevention focuses on avoiding initiation (NDMP, 2006-2011:22). In addition, primary prevention aims to protect and uplift all people to make pro-health decisions, for example with increasing alcohol abstinence self-efficacy and with preventive peer-oriented programmes. In this research the role of adolescents' vicarious experience and teachers' social persuasions in developing self-efficacy will be emphasised (see chapter 5).

Secondary prevention relates to reducing the level of misuse in terms of abstinence or reduction of harm. A more complex range of objectives are included, which reflect the varying degrees of substance use or use of different substances (Crome & McArdle, 2004:16). Secondary prevention attempts to avert the ensuing negative consequences by persuading persons who are at the early stages of problem behaviour to cease their AOD use (NDMP, 2006-2011:22). In this research the role of authentic mastery experience in developing self-efficacy is emphasised, whereby successes can raise adolescents' efficacy expectations (see chapter 5).

Tertiary prevention is most often referred to as a form of 'treatment' which strives to end compulsive use of AODs and to ameliorate their negative effects. This may include relapse prevention and rehabilitation by means of professional support.

4.3 INTERVENTION LEVEL OF A PREVENTION PROGRAMME

According to Crome and McArdle (2004:16); Dadds and McAloon (2002:151-152), David *et al.* (2003:18) and Thombs (2006:71-72) prevention programmes may be selected for various intervention levels depending on their activities, different components and audience as follows:

- *Universal* programmes are selected as resources for the general population, including all adolescent students in a school. This approach often focuses on raising awareness, substance abuse education and school-based projects, including media campaigns. Kumpfer (in Crome & McArdle, 2004:19) emphasises that a responsible media role could be helpful, especially if combined with interactive teaching styles. Dadds and McAloon (2002:151) state that with universal prevention intervention strategies all groups within the population are considered to be at some grade of risk regardless of their individual degree of risk.
- *Selective* prevention programmes, on the other hand, intervene with specific groups at greater risk, targeting external characteristics, for instance, poor school achievers, or adolescent children of drug abusers (Dadds & McAloon, 2002:151; Thombs, 2006:71-72).
- *Indicated programmes* are for adolescents who are already experimenting with drugs or at high risk for the development of some problem, for example an anxiety disorder or substance use disorder (SUD). Indicated interventions are directed to 'internal' features such as psychological distress (Dadds & McAloon, 2002:151-152; Offord in Crome & McArdle, 2004:17; Thombs, 2006:72). Here the role of the adolescent's physiological or emotional state is emphasised in developing of perceived self-efficacy.
- A *tiered* programme is one that incorporates all three levels of intervention, for example, in the so-called Adolescent Transitions Programme.

Examples of some existing evidence-based universal programmes described by SAMHSA (2011c) are Guiding Good Choices (GGC), the LST programme, Parenting Wisely, and Project Towards No Drug Abuse (Project TND). Selective programmes include the Residential Student Assistance Programme (RSAP) and Reconnecting Youth (RY) (SAMHSA, 2011c). Examples of indicated programmes are Across Ages

and Project EX (SAMHSA, 2011c). Some universal programmes may also be used as selective or indicated interventions (see section 4.6). Many of these programmes make use of audio-visual media such as audio podcasts, video, cd-rom or DVD. Details of this may be found in the intervention summaries and website hyperlinks (SAMHSA, 2011c).

4.4 EFFECTIVE PREVENTION PROGRAMME CORE ELEMENTS

Effective research-based programmes contain certain core elements including structure, content and delivery (David *et al.,* 2003:21). These core elements must be retained when adapting an existing programme to match the needs of a specific community and are now described briefly with examples.

Programme *structure* refers to how the intervention is organised and constructed, also its type, audience or setting. A programme type could be, for example, school-, family- or community-based. In this study the structure is school-based. An indicated programme could be structured for an audience of urban or rural populations, and different racial or age groups. The setting describes where the intervention takes place, for instance within the school setting or an adolescent youth organisation, such as a boys' or girls' club.

Another core element is the *content* of a programme, which is composed of information, skills development, methods and services. Table 4.1 below describes the type of content included in an effective school prevention programme (David *et al.,* 2003:22).

Table 4.1 Content of a school prevention programme

Programme type	**Information**	**Skills development**	**Methods**	**Services**
School	Drug effects	Resistance skills	Norms change	School counselling and assistance

In Table 4.1 above, within a school programme, information on drugs and their effects is combined with skills development training in resistance skills, methods, peer counselling and school counselling services (David *et al.,* 2003:22). These content areas are designed specifically to strengthen protective factors and modify or reduce risk factors. In this research audio-visual media content is used to develop adolescents' self-efficacy, for example, through adolescents observing others perform successfully. Teachers' social persuasions and coaching also form part of the content of this programme in accordance with SET (see Chapter 5).

The *delivery* of a programme includes its selection or adaptation and implementation. In the selection phase an effective research-based programme can be matched to particular needs, or an innovative intervention can be created according to the principles of effective prevention programmes (see also section 4.5 & Chapter 5). David *et al.* (2003:23) emphasise that with adaptation, it is important that the core elements of a programme are retained to ensure the effectiveness of the intervention. The implementation phase refers to how the programme is delivered, including methods used, number of sessions, and follow up. Interactive methods and booster sessions are important. South Africa's NDMP (2006-2011:24) also emphasises that the delivery of prevention interventions should combine demand reduction (for example, through programmes that enhance life skills and reduce socioeconomic inequalities) with evidence and research based. In this research the programme delivery is via an innovative approach that combines elements of social and audio-visual media, in accordance with SCT and SET (see Figure 4.1).

4.5 PRINCIPLES OF EFFECTIVE PREVENTION PROGRAMMES

4.5.1 Prevention activities

Prevention activities are often administered in school milieus and can be structured in a number of ways and forms. Information and affective education approaches seek to prevent drug use by presenting factual information and improving self-esteem. However, these approaches have not demonstrated strong effectiveness (Botvin, 2010).

According to several authors (Botvin, 2010; Botvin & Griffin, 2002:41-48; Thombs, 2006:73; Wisdom, 2008), social-skills training programmes enhance skills related to problem solving, assertiveness, self-control, resistance and coping. This approach has demonstrated success. Valuable components of prevention programmes from U.S. based research include enhancement of family functioning, interactive teacher-pupil sessions and group social-competence interventions (Crome & McArdle, 2004:15; Thombs, 2006:73-74).

Role modelling is a principle of SET and the second most important way by which self-efficacy is built. Teachers, parents and other students can be role models for adolescents, including adults and peers that have overcome addiction or are models of sobriety; the "if they can do it, so can I", scenario. Programmes that use teachers and other students as role models are thus in line with SET.

4.5.2 Prevention principles: CAPTUS, NCJRS, NIDA & ONDCP

A number of prevention principles have been identified in the USA by the National Institute on Drug Abuse (NIDA, 2010c), the Centre for the Application of Applied Prevention Technologies (CAPTUS, 2011), David *et al.* (2003:2-5), the Office of National Drug Control Policy (ONDCP, 2011) and the National Criminal Justice Reference Service (NCJRS, 2011). These principles have proved to be effective in assisting parents and teachers in their planning, selection and implementation of substance abuse prevention programmes and are considered in this research (see chapters 5, 6 and 7). The NIDA (2010c) principles in particular have been adapted for this research as indicated next.

Principle 1: Prevention programmes should enhance protective factors and reduce risk factors within a population defined by age, sex, race, geography (neighbourhood, town or region) and institution (e.g. a school) (CAPTUS, 2011; Crome & McArdle, 2004:25; David *et al.,* 2003:2-5; NCJRS, 2011; NDMP, 2006-2011; ONDCP, 2011). This research shows that adolescents can be trained to become skilled self-regulators in terms of the agentic perspective of SCT which can serve a protective function against risk factors. If adolescents can learn to respond proactively they can be equipped to deal efficiently with life's circumstances (see section 2.3.5). Proactive responses could include setting reachable goals, drawing from an array of coping

strategies, creating motivating incentives and self-monitoring of the adolescents' behaviour.

Principle 2: Prevention programmes should address all forms of drug abuse including the underage use of legal drugs (for example tobacco or alcohol); the use of illegal drugs (for example marijuana); and the inappropriate use of legally obtained substances (for example inhalants), prescription medications, or over-the-counter drugs (CAPTUS, 2011; Crome & McArdle, 2004:25; David *et al.,* 2003:2; NCJRS, 2011; NDMP, 2006-2011; ONDCP, 2011).

Principle 3: Prevention programmes should address the type of drug abuse problem in the local community, for example, the 'gateway' substances of marijuana, alcohol, tobacco, as well as inhalants, including glue and gas from aerosol cans. Programmes should target modifiable multiple risk factors which increase the risk of substance abuse, and strengthen identified protective factors which inhibit substance abuse in the presence of risk (CAPTUS, 2011; Crome & McArdle, 2004:25; David *et al.,* 2003:2; NCJRS, 2011; NDMP, 2006-2011; ONDCP, 2011).

Principle 4: Prevention programmes should be tailored to address risks specific to audience characteristics, such as age, gender, and ethnicity, to improve the programme's effectiveness. Special attention must be given to the most important risk factors, protective factors, psychoactive substances, individuals, and groups exposed to high risk and low protection (CAPTUS, 2011; David *et al.,* 2003:2; NCJRS, 2011; NDMP, 2006-2011; ONDCP, 2011). Dadds and McAloon (2002:147-148) state that many of the risk and protective factors for the development of SUDs are the same risk and protective factors for mental health problems in young people.

Principle 5: Family-based prevention programmes should improve family relationships, and include parenting skills, practice in developing, discussing and enforcing family policies on substance abuse, training in drug education and information (Bandura, 1999:216; CAPTUS, 2011; David *et al.,* 2003:19; McBride, 2005:101; NDMP, 2006-2011). Family bonding can be strengthened through skills training on the parent supportiveness of adolescents, parent-child communication and parental involvement. Parental skills can be enhanced by training on rule-setting, techniques for monitoring activities, praising adolescents for their appropriate

behaviour, clarifying expectations, and moderate, consistent discipline that enforces defined family rules (CAPTUS, 2011; David *et al.,* 2003:3; McBride, 2005:101; NCJRS, 2011; NDMP, 2006-2011; ONDCP, 2011). In accordance with SET, parents can also be role models to help develop their adolescents' self-efficacy.

Principle 6: Prevention programmes for adolescents should increase skills related to studying, communication, peer relationships, self-efficacy, assertiveness and drug resistance. The programmes should also enforce anti-drug attitudes (CAPTUS, 2011; David *et al.,* 2003:3; McBride, 2005:101; NCJRS, 2011; NDMP, 2006-2011; ONDCP, 2011). Effective approaches include strengthening social bonding between adolescents and peer groups. In this research, in accordance with SET, peers can be role models to help build other students' self-efficacy (see chapter 5). Caring relationships and strong standards against substance abuse in families and schools are also important. Spiritual contexts and structured recreational activities can be effective for prevention (Cook, 2006:ix, 145) (see section 3.3.4).

Principle 7: When communities adapt programmes to match their needs, norms, or cultural requirements, they should retain core elements of the original research-based intervention including the structure, content and delivery (David *et al.,* 2003:20) (see also section 4.4).

Principle 8: Prevention programmes are most effective when they employ interactive techniques. These tactics can include peer discussions and role-playing, where peers and parents can be role models in accordance with SCT and SET to learn about drug abuse and reinforcing skills (CAPTUS, 2011; David *et al.,* 2003:20; McBride, 2005:101; NCJRS, 2011; ONDCP, 2011). According to the ONDCP (2011) strictly didactic approaches are less likely to be effective than approaches that emphasise participation and interaction. Adolescents are more likely to learn if they can ask questions and interact extensively with teachers and parents who facilitate anti-drug using knowledge, attitudes and behaviours. In this research adolescents will be able to ask questions and learn interactively by participation in the programme and in focus groups (see Chapter 5).

According to the ONDCP (2011), substance abuse preventive efforts are more likely to be effective when they are multi-modal, using a variety of strategies such as

didactic, discussion, video, cd-rom, and the like, rather than using only single modal approaches. A multi-modal strategy in terms of SCT is thus used in this research (see also sections 4.7 & 4.8 and Chapter 5).

Principle 9: Prevention programmes should intervene and reach appropriate populations in multiple settings such as schools, recreational clubs and religious settings. The media are most effective when they present consistent, community-wide marketing messages in each setting (CAPTUS, 2011; David *et al.,* 2003:19; McBride, 2005:101; NCJRS, 2011; NDMP, 2006-2011; ONDCP, 2011).

Principle 10: Prevention programmes should be used in the long-term with repeated reinforcing sessions over time. The NCJRS (2011) and the ONDCP (2011) indicate that repeated exposure to scientifically accurate and age appropriate anti-drug messages can ensure reinforcement. According to authors (in David *et al.,* 2003:4; Thombs, 2006:101), the benefits derived from middle school prevention interventions diminish without follow-up interventions in high school.

Principle 11: Prevention programmes should include teacher-training in good classroom management practices to ensure that programmes are continually delivered as intended. Techniques such as rewarding appropriate student behaviour help to foster adolescents' positive behaviour (CAPTUS, 2011; David *et al.,* 2003:20; McBride, 2005:101; NCJRS, 2011; NDMP, 2006-2011; ONDCP, 2011). In this research, in accordance with SET, self-efficacy can be developed by rewarding adolescents with encouraging comments to lead them to believe that they are capable of performing tasks (see chapter 5).

4.6 EVIDENCE-BASED PREVENTION PROGRAMMES

4.6.1 National Registry of Evidence-based Programmes and Practices (NREPP)

According to Hettema, Larios and Sorenson (2009:3) the term 'evidence-based' has been defined in many ways, but most definitions include components that emphasise the importance of the scientific method and the cumulative evidence base derived from research. Evidence-based practices are interventions in which there is

consistent scientific evidence showing that they improve outcomes. Sambrano *et al.* (2007:249) state that evidence-based programmes are meant to describe in accessible terms the approach, activities and procedures needed to implement the various programmes with needed fidelity to the original intervention.

The NREPP (SAMHSA, 2011c) provides a guide for selecting prevention programmes for a school. The NREPP is an online registry of more than 180 existing substance abuse and mental health interventions that have been reviewed by independent reviewers in the USA. According to David *et al.* (2003:26) many of the programmes were tested in cooperation with prevention scientists in a school or community setting, all with positive results. The purpose of this registry is to assist teachers and parents in identifying approaches to preventing and addressing substance abuse.

From a review of the literature, the NREPP programmes appear to be indicative of the current prevention programme in the USA (SAMHSA, 2011c). One can locate which intervention is most likely to be useful, depending on the age of the student and the relative focus of the programme (Sambrano *et al.,* 2007:249-250). Prevention programmes may also be selected on the basis of an interest in high-risk sub-groups or other population of interest. All these programmes build on prior research and evidence about prevention.

In the advanced search on the SAMHSA (2011c) website, there are about 26 programmes that are most applicable for adolescent substance abuse prevention. To understand the research results for each outcome users should carefully read the key findings in each intervention summary. The programmes in the NREPP may be referred to for information and guidance in various phases of this psycho-educational programme (see chapter 5).

Although the above-mentioned NREPP programmes on offer are good, there are certain difficulties with implementing them *in South Africa* (see section 1.2) (also see Appendix J for cost involved). Therefore there is a need for an innovative, effective, yet low cost approach which this research aims to provide (see chapter 5). The NREPP interventions emphasise the prevention principles highlighted in section 4.5.

For example, a programme may emphasise developing of decision-making, goal setting, resistance and social skills.

In this research selected evidence-based audio-visual and social media materials identified in the literature will be used to develop adolescents' self-efficacy. The National Youth Anti-Drug Media Campaign (2011a, 2011b, 2011c) and Above the Influence Campaign (ATI, 2011) have provided informed consent (Appendix E) for their evidence-based programmes to be used in this research (see sections 4.7 and 4.8 for details). The materials will be used in the implementation phase.

4.6.2 Types of existing prevention programme resources

Approaches towards prevention may include the social learning approach, educational approaches, family-focused preventions and community-based interventions. For purposes of this study, the focus of prevention is a social learning approach within the school environment. According to Sale *et al.* (in Schuld, 2006:98) the school can serve as a forum from where a change in substance use patterns can be coordinated. Prevention initiatives in schools usually focus on adolescents' social and academic skills, including self-control, enhancing peer relationships, coping skills, social behaviours and drug refusal skills (David *et al.,* 2003:19).

Table 4.2 describes the various types of prevention programme resources, their audiences and settings. In the psycho-educational programme of this research the approach will be within the school, with adolescents.

Table 4.2 Types of prevention programmes (David *et al.,* 2003:19)

Programme types	**Audience**	**Setting**	**Programme availability (existing resources)**	**Programme availability (this resource) (ATI campaign, 2011)**
Universal	All adolescents in the community	Billboards or web banners	Commercially available (see Appendix J)	Innovative programme (see Figure 4.1 & Section 4.12)
Selective	All high-school students in a school	After-school or computer laboratory	Commercially available (see Appendix J)	Innovative programme (see Figure 4.1 & Section 4.12)
Indicated	High-risk adolescents and their families	Clinic or computer laboratory	Commercially available (see Appendix J)	Innovative programme (see Figure 4.1 & Section 4.12)
Tiered	Incorporate universal, selective and indicated levels of a programme	All settings	Commercially available (see Appendix J)	Innovative programme (see Figure 4.1 & Section 4.12)

The aim of the psycho-educational programme in this research is to emphasise intervention within the school setting. In this programme, the aim is to support teachers to develop the skills required to select and deliver an effective prevention programme using principles of SCT and SET (see sections 2.2, 2.3, 2.4 and 2.5). Although there are programmes available on the internet, they are either too costly or are inaccessible for use in South Africa (Hawke & Kaminer, 2009:354) (see also section 1.2). This suggests a need for innovation to select, implement and evaluate an effective and affordable programme as is now explained.

4.6.2.1 Universal programmes

(i) Guiding Good Choices (GGC)

GGC is an evidence-based universal middle school programme (in David *et al.,* 2003:28; Redmond *et al*., 2001:627-642; SAMHSA, 2011c; Thombs, 2006:75-78). The curriculum educates parents on how to reduce risk factors and strengthen bonding in their families by reduction of risk factors, enhancement of protection and regular family meetings (in Thombs 2006:76).

(ii) Life Skills Training (LST)

The LST programme (Botvin, 2010; Crome & McArdle, 2004:20; David *et al.,* 2003:29; SAMHSA, 2011c; Thombs, 2006:73-75) (see also Section 1.1) addresses a wide range of risk and protective factors by teaching general personal and social skills, along with drug resistance skills and normative education. LST is one of the most widely used universal programmes in the USA, consisting of a three year prevention curriculum for middle, junior high and high school students. In junior high school the programme can be taught in grades 7, 8 and 9. LST covers three major content areas: drug resistance skills and information, self-management skills and general social skills. The programme has been extensively tested over the past 20 years and found to substantially reduce the prevalence of tobacco, alcohol and illicit drug use by 50 to 87 percent.

(iii) The Teen Intervention Project (TIP)

The Teen Intervention Project (TIP) is a universal, selected or indicated model of adolescent group facilitation. Aspects of this model will be incorporated into the selection phase of this psycho-educational programme. The theoretical basis of this programme is the Westchester model group intervention which includes Bandura's SCT (Jessor & Jessor, in Wagner & Macgowan, 2006:340). The specific components of the TIP explain methodically how teachers can intervene with adolescents in a group context when implementing an intervention (see Chapter 5).

(iv) Other universal programmes

Other universal programmes include:

- The Strengthening Families Programme for Parents and Youth (SFP) for adolescents aged 10 to 14, which provides rural parents with guidance on family management skills, communication, academic support, and parent-child relationships, based on a bio-psycho-social model (Crome & McArdle, 2004:20; David *et al.,* 2003:18-19, 30; SAMHSA, 2011c).
- The Adolescent Transitions Programme is a tiered universal family programme that operates in a school setting (David *et al.,* 2003:19).
- The Lions-Quest Skills for Adolescence (SFA) (in David *et al.,* 2003:29) is a commercially available, universal, life-skills education programme in use in schools nationwide in the USA.
- Project ALERT (Crome & McArdle, 2004:19; in David *et al.,* 2003:29) reduces the onset and regular use of substances among adolescents using question and answer sessions and videos to increase adolescents' motivation not to use the 'gateway' substances, cigarettes, alcohol and cannabis (in Crome & McArdle, 2004:19). The programme has proven effectiveness with both low-risk and high-risk adolescents from a variety of communities.
- Project Students Taught Awareness and Resistance (STAR) (Crome & McArdle, 2004:18, 21; in David *et al.,* 2003:30) is a prevention programme with components for community organisations, health policymakers, schools and parents. The findings suggest that interactive group interventions, with an educational component, are effective in reducing family conflict and promoting family integration.

4.6.2.2 Selective programmes

Selective programmes are interventions that target groups at risk, or subsets of the general population such as adolescents of substance abusers or poor achievers in a school. According to Offord (in Crome *et al.,* 2004:22) targeted interventions do not waste programmes on those at low-risk, and are, potentially at least, efficient. An example of a selective programme is Adolescents Training and Learning to Avoid Steroids (ATLAS) (in David *et al.,* 2003:33; SAMHSA, 2011c) which is a multi-

component selective programme resource for male high-school athletes, designed to reduce the risk of anabolic steroids and other drugs, while providing healthy sports nutrition and strength-training alternatives to illicit use of athletic-enhancing substances.

4.6.2.3 Indicated programmes

Indicated targeted programme resources focus on students whose emotional and behavioural problems have been identified. According to Biederman *et al.* (in Crome & McArdle, 2004:24) effective treatment of early onset of behavioural disorders reduces the risk of subsequent substance use disorders in adolescence. Project Towards No Drug Abuse (Project TND) (David *et al.,* 2003:33; SAMHSA, 2011c; Thombs, 2006:78-81) is a selective and an indicated prevention programme targeting high school adolescents who attend traditional or alternative high schools. The aim of this programme is to prevent the transition from substance use to substance abuse, considering the developmental issues faced by at risk adolescents. According to Sussman *et al.* (in Thombs, 2006:79) the core curriculum of Project TND is a set of 12 prescribed 40 minute interactive class sessions that provide motivation and correction of cognitive misperceptions, social and self-control skills. The RY programme (in David *et al.,* 2003:33; SAMHSA, 2011c) is a school-based indicated prevention programme for high-school students with poor school achievement. Aims of the programme include increasing school performance, reducing substance abuse, and learning skills to manage mood and emotions.

4.6.2.4 Tiered programmes

The Adolescent Transitions Programme (ATP) incorporates all three levels of intervention in a tiered approach. The ATP is a resource that provides prevention services to students in middle and junior high school and their parents (Dishion *et al.,* in David *et al.,* 2003:34; SAMHSA, 2011c).

4.6.3 Innovation in prevention programmes

4.6.3.1 Availability, accessibility and innovation

According to Hawke and Kaminer (2009:354), although there is growing consensus about which programmes for adolescent substance users have the strongest empirical support, evidence-based programmes represent only a fraction of the treatments provided. In the USA there is a national public health crisis regarding the availability and accessibility of appropriate evidence-based practice in adolescent substance abuse services (Hawke & Kaminer, 2009:354).

According to the ONDCP (2011), programme developers can use the characteristics of effective interventions as the building blocks for designing new substance abuse preventive programmes. In this research the audio-visual media programmes of the Above the Influence Campaign (ATI, 2011) are used in an attempt to provide an innovative and workable programme for implementation in South Africa (see chapter 5). The ATI programmes are also evidence-based and can be well integrated with social media and the SCT/SET approach (see details in figure 4.1).

4.6.3.2 Strategies for optimisation of innovation

According to Backer, David and Soucy (in Thombs, 2006:12-13) various strategies have been identified to facilitate innovation in the substance abuse prevention field. These strategies include interpersonal contact, planning and conceptual foresight, and outside consultation. Also important is the user transformation of information, whereby knowledge about an innovation needs to be translated into language that potential users can readily understand. In addition, enthusiasm expressed for its adoption by influential opinion leaders, as well as the involvement of participants with their suggestions can facilitate its acceptance (see Section 4.12 for details of the psycho-educational programme).

4.7 RECENT INNOVATION IN PREVENTION – BEHAVIOURAL HEALTH AND SOCIAL MEDIA

Adolescents, teachers and parents use social media applications every day to communicate with friends and family. In the USA, SAMHSA News (2011b) the award-winning national newsletter, January/February 2011, describes SAMHSA's robust 'digital engagement programme' with presences on four major social media channels, Facebook, Flickr, Twitter and You Tube (Pond, 2011:1-6; SAMHSA Blog, 2011; SAMHSA on Facebook, 2011; SAMHSA on Flickr, 2011; SAMHSA Store, 2011; SAMHSA on Twitter, 2011; SAMHSA on YouTube, 2011; SAMHSA, 2011b; SAMHSA, 2011d). The digital engagement approach can fit with SCT and SET when social media are used as an educational technology for interacting between teachers, parents and adolescents. This approach is explained in sections 4.7 and 4.8 (see also figure 4.1 and Section 4.12).

4.7.1 Digital engagement

According to Randazzo (in Pond, 2011:4), digital engagement is just another term for social media. SAMHSA sees this as an opportunity to promote its mission and its messages and to open a dialogue on health issues such as the use of drugs with teachers, parents and adolescents. Through social media and the connections it provides, adolescents can be reached faster than in any other way.

- *Facebook* lets users create their own sets of friends among whom they share information. According to Amos (2011:121) and Miller (in Freishtat & Sandlin, 2010:149), Facebook has the potential to operate as a space of cooperative and collaborative learning and can open new educational opportunities. Similarly, SAMHSA on Facebook (2011) offers users a place to share information and to comment on various health providers, including drug related ones. Postings talk about everything SAMHSA does. Wilson (in Pond, 2011-5) states that this provides an opportunity to reach teachers, parents and adolescents. SAMHSA also links to credible news sources that post topics on the agency's work (Pond, 2011:5).

- *Flickr* is an image sharing community that allows people to share images. SAMHSA on Flickr (2011) piloted a project with photos as part of the 2010 Children's Mental Health Awareness Day events in Washington, DC.
- *Twitter* lets users subscribe to receive brief updates from others whom they choose to 'follow'. SAMHSA tweets (SAMHSA on Twitter, 2011) include various announcements and links to programmes and information. Ongoing conversations on topics of interest are happening at all hours. Parents, teachers and adolescents can monitor their Twitter sites and participate in conversations regarding drug-related issues.
- *YouTube* is a video sharing platform that allows viewers to watch videos on the YouTube site. SAMHSA on YouTube (2011) shares information and ideas with a wider audience, such as teachers, parents and adolescents. YouTube is SAMHSA's main platform for hosting videos. Such videos can focus on drug use.

4.7.2 The SAMHSA Blog – outreach and feedback

The SAMHSA Blog (2011) serves as the hub for behavioural health focused efforts. According to Hyde (in Pond, 2011:1) SAMHSA's priority is to become accessible to the audiences it serves and is looking for innovative ways to connect with adolescents, parents and teachers.

Pond (2011:5) points out that social media tools serve two purposes: it allows new ways of getting critical information about behavioural health to providers of prevention services and to the public; and it creates ways to receive critical feedback about the health issues at hand. Also, by using the 'create group' feature, a teacher or researcher can form a private group with confidentiality, to convene online discussions with adolescent participants in a programme, such as is used in this study (see Section 4.12, Appendix H & Appendix I). By means of these discussions adolescents can be encouraged to abstain from alcohol and drug abuse (see also figure 4.1).

4.7.3 Social media – the next wave

Rosenberg (in Pond, 2011:6) emphasises that to educate adolescents, parents and teachers on mental health, aid must be where the audience is, e.g. on Facebook or Twitter or wherever the next wave of media is. Stephens (in Pond, 2011:6) points out that media are reshaping the way we interact with each other locally and globally. A synchronous approach is preferred for interactivity, although an asynchronous approach can also be employed (Mann & Stewart, 2000:101-102).

4.7.4 Questions and Answers - Ask SAMHSA!

'Ask SAMHSA!' offers an opportunity to hear from some of America's experts on any behavioural health questions. Adolescents, parents and teachers can post their own questions on a specific topic through Facebook and Twitter pages. All questions are reviewed and a few are selected. A video response answer is then posted to the SAMHSA Blog (2011). If a question is not selected for video response SAMHSA (2011b) generally responds in follow-up blog posts.

4.8 INTEGRATING BEHAVIOURAL HEALTH AND SOCIAL MEDIA TOGETHER WITH AUDIO-VISUAL MEDIA

4.8.1 Rationale

In section 4.7 the use of the media as an innovative approach to adolescent substance abuse psycho-education was highlighted. In Figure 4.1 elements of incorporating audio-visual and social media into a proposed psycho-educational programme for adolescent substance abuse is described.

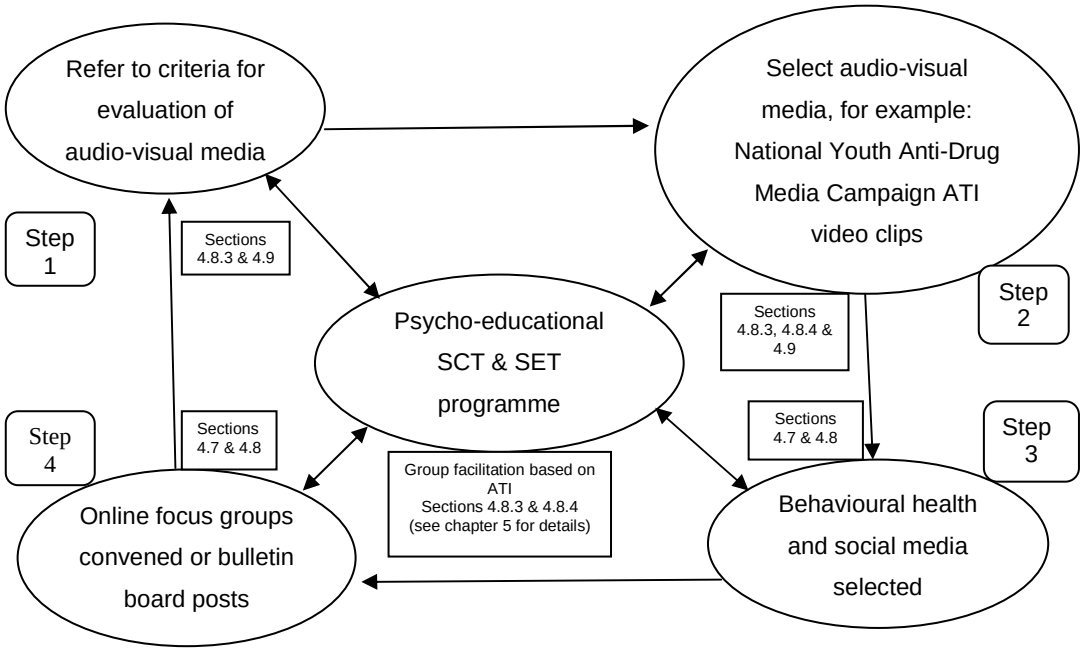


Figure 4.1 Elements of incorporating audio-visual and social media into a proposed psycho-educational programme to address adolescent substance abuse

Figure 4.1 indicates that firstly the teacher refers to criteria for the evaluation of audio-visual media (sections 4.8.3 & 4.9). Then audio-visual media is selected according to criteria (Calder, 2009:80-84; Discovery Education, 2008) for example, video clips from the ATI campaign (2011) (see also section 4.8.3). After this, the type of behavioural health and social media to be used in the intervention is selected (see section 4.7). The facilitator (e.g. the teacher) then convenes the online focus group or posts a message on a bulletin board with at risk adolescents and responds to their questions and answers in terms of the instructions given in the psycho-educational programme (details given in chapter 5). Detailed recommendations for the group facilitation in accordance with SCT and SET are also given in section 4.11.

4.8.2 Virtual focus groups, online focus groups and bulletin boards

4.8.2.1 Virtual focus groups

According to Kluce and Pope (2011:29-31), as well as Maddox and Mehta (2011:14-18), although in-person focus groups still contribute to the majority of qualitative research conducted, virtual focus groups are becoming increasingly popular among

researchers due to their ability to reduce costs and complete research more efficiently. According to Kluce (in Kluce & Pope, 2011:29-31) in some instances, adolescent research can be optimal in the virtual space given adolescents' comfort with technology as their preferred mode of communication. To ensure a successful group both the moderator and the recruiting facility need to be familiar with adolescent dynamics – not only in how to recruit adolescents, but also in how to moderate the group and communicate expectations prior to the session (Salmon, in Allan, 2007:135-139) (see Appendix I). Adolescents will most probably need little training on the social media platform, but will need guidance in *how* to communicate appropriately during sessions. Kluce and Pope (2011:29-31) state that when properly prepared and executed, virtual focus groups can be a great way to engage with adolescents. In chapter 5, more details are given on this method (also see Appendix I).

4.8.2.2 Online focus groups and bulletin boards

According to Chrzanowska and Griffiths (2011b) as well as Maddox and Mehta (2011:14-18) students can meet teachers in a 'group room' at an appointed time, and respond in real time to questions and stimuli initiated by the teacher. The students can also 'listen in' and send notes to the teacher. The most common format is chat (i.e. typing questions and answers). It is believed that the anonymity is more enabling than candid disclosure.

Bulletin boards may also be used. When using bulletin boards a moderator/teacher posts messages by text or video and participants respond in non-real time or asynchronously on a private message board in their own time (Chrzanowska & Griffiths, 2011a)**.**

4.8.3 Selecting audio-visual media

In section 4.6 some of the NREPP – SAMHSA (2011c) prevention programmes were briefly mentioned. There are, however, more audio-visual media programmes which have not been listed by SAMHSA (2011a, 2011c). Therefore, in sections 4.8.4 to 4.8.7, the most important additional material from the literature study is presented. Some of this material has been selected for implementation and evaluation in this

study (ATI, 2011; National Youth Anti-Drug Media Campaign, 2011). On this aspect, what is most relevant are the principles of effective interventions discussed in section 4.5. Also, whatever approach is used, and whichever material is selected, this should conform to certain selection criteria (see section 4.9). Another important factor is the use of short video-clips or images to facilitate discussions in the proposed online focus group (see sections 4.8.2 & 4.8.4). For example, the brief video-clip material of the 'Above the Influence' (ATI) National Youth Anti-Drug Campaign (2011a; 2011b; 2011c) described in section 4.8.4 would be ideal. If detailed audio-video material is also introduced as part of the programme of this research, adolescents could view such media prior to a particular discussion group, thus being prepared for discussion on the topic.

4.8.4 National Youth Anti-Drug Media Campaign

The National Youth Anti-Drug Media Campaign (2011a) was initially developed by the U.S. Congress in 1998 to prevent and reduce adolescent drug use. A redesigned ATI campaign with a broader focus on those substances most often abused by adolescents, including marijuana, alcohol and prescription drugs, was launched in June 2010. The ATI campaign (2011) balances broad prevention messaging with targeted efforts at the local community level. Evidence for the effectiveness of the ATI Campaign was published (National Youth Anti-Drug Media Campaign, 2011b). USA adolescents who were exposed to the ATI campaign were less likely to begin use of marijuana compared to those not exposed to the ATI campaign. Results from focus group testing are used to improve the messages (National Youth Anti-Drug Media Campaign, 2011b). The video clip advertisements from the ATI campaign will be used in this research together with the proposed online focus group to prompt discussions with adolescents (see chapter 5)(see Section 4.12).

4.8.5 Public Service Announcement (PSA) video contest (SAMHSA)

In one novel approach, SAMHSA (2011b) launched a PSA video contest. The contest developed an engaging PSA about how adolescents were taking action in their communities to prevent substance abuse and promote emotional well-being. The theme was: *We are the ones. How are you taking action?* Although the theme of the PSA was aimed at older adolescents, this approach could also be well used with

younger adolescents, whereby students can be inspired to challenge others to take action.

4.8.6 Evaluation Management and Training (EMT) Associates Inc.

Evaluation, Management and Training (EMT) (2011a) administers training programmes focused on substance abuse prevention, mentoring, and related fields of health and human services. EMT Online University (EMT, 2011b) as well as the ePathcampus (2011) and My Prevention (2011) offer online self-paced training courses for the substance abuse prevention and mentoring fields with state-of-the-art knowledge transfer through interactive and multi-media technology.

One of the EMT programmes on offer is the 'Brief Intervention (BI): An approach for Substance Abusing Adolescents' (ePathcampus, 2011). In this programme, teachers and parents learn about a new and effective way of working with adolescents who have already begun to use alcohol or other drugs. Participants view a series of video clips that demonstrate the actual practice of the BI and critically reflect on their substance use behaviours and consequences. In addition, BI provides these adolescents with tools to make better decisions on their use of alcohol and other drugs.

The EMT 'My Prevention' online networking community (My Prevention, 2011) connects prevention-focused teachers and parents intending to share working knowledge of prevention-related issues and concepts and to foster collaboration. In addition, the Centre for Applied Research Solutions (CARS, 2011a; 2011b) is a non-profit organisation working in partnership with EMT Associates, Inc., which assists in executing research-based strategies to the field through the use of consultants, trainings, workshops, and technical assistance.

4.8.7 Social diffusion approach

Bandura (2004:85-86) refers to the social diffusion model as an example of effective audio-visual media use in television serial drama format within the socio-cognitive framework. It dramatises the everyday social problems with which people such as adolescents struggle, models suitable solutions, and provides adolescents with

incentives, support, and strategies for bettering their lives. This approach illustrates well the utility value of televised video drama in successful socio-cognitive interventions that facilitate social change via audio-visual media (Bandura, 2004:75-96) (see chapters 5, 6 & 7).

4.9 CRITERIA FOR EVALUATION OF AUDIO-VISUAL MEDIA

National Youth Anti-Drug Media Campaign (2011a, 2011b, 2011c) video clips are used selectively for in-depth study and focus group or individual interviews (see sections 4.7.3 & 4.8.3). SAMHSA's extensive prevention audio-visual publication material, which is available online (SAMHSA Store, 2011) could also be used in a future study to extend findings. Transcriptions of proposed online focus group or bulletin board discussions via social media sites will be evaluated in detail to determine the extent to which adolescents demonstrate learning of SET and SCT skills (see SET, section 2.4) from this programme. Criteria for evaluation of adolescents' self-efficacy will also be listed in the form of a 'Youth Participant Survey' and an 'Activity Facilitator' feedback on the programme.

4.9.1 Discovery Education evaluation criteria

According to Discovery Education (2008), educational media are being increasingly used as part of the classroom experience due to their popularity and effectiveness. Teachers have a variety of multimedia formats to choose from including VHS and HD videos, DVDs, CD-ROMs, streaming video from the web, television and radio, and social media like Facebook, Flickr, Twitter and YouTube. These various types of media may be integrated into classroom instruction, and used effectively for prevention of adolescent substance abuse (SAMHSA, 2011b) (also see Figure 4.1 & section 4.9). Incorporating educational media into the curriculum has become a vital element of ensuring all students' success.

A clear connection between media content and existing learning goals is required. To achieve that connection targeted teaching strategies are needed that may be adapted for all students. The selection of suitable educational audio-media content is a key teaching strategy. In section 4.9.1.1, I list the Discovery Education (2008)

criteria for selecting and evaluating suitable audio-visual media content (see also Calder, 2009:80-84).

4.9.1.1 Discovery Education Quality Assurance Statement

As there is a great variety of educational media for the purposes of adolescent substance abuse prevention, the following selection criteria may be used (Calder, 2009:82-83). Most higher quality media will meet all of these criteria which are adapted from the *Quality Assurance Statement* (Discovery Education, 2008):

- **Content appropriateness:** All content will first be reviewed for its appropriateness in adolescent substance abuse prevention. Materials should not contain promotional or commercial content. Programming reflects and is connected to provincial, national and international standards in core-curricular content areas for middle and high school classrooms and incorporates exemplary instructional methodologies and approaches.
- **Content accuracy:** Materials are reviewed to verify accuracy of content and ensure that content is up to date and relevant for adolescent substance abuse prevention.
- **Age/grade appropriateness:** The database is keyed to concepts and content appropriate for specific grade levels. The language of the programming is both age- and grade-level-appropriate.
- **Representation of diverse populations:** Programming must represent a diversity of cultures and abilities and represent both sexes fairly.
- **Production quality:** Programmes should include only content with the highest overall production quality.

By identifying audio-visual media that meet most, if not all, of these criteria, teachers may actively use the best available programmes in an intervention. This information could also be catalogued and made available in school libraries (Calder, 2009:80-84). For example, after viewing the audio-visual media (in this case selected video clips from the National Youth Anti-Drug Media Campaign, 2011a, 2011b, 2011c, among others), and after intervening via social media in the psycho-educational programme of this research (via Facebook, Twitter, Flickr or YouTube), the adolescents could react in certain ways in their focus group or individual interviews.

Their reactions are related to *self-efficacy,* for example, choice of lifestyle and effort, persistence and resilience in adverse situations (see chapters 5, 6 and 7).

4.10 PREVENTION INITIATIVES IN SOUTH AFRICA

Substance abuse undermines efforts to build safe and healthy communities and dealing with this problem had been prioritised by the government (Modiba, 2011; SOUTH AFRICA, 2011a, 2011b). According to the National Drug Master Plan (NDMP, 2006-2011), although coordinating structures for adolescents exist in South Africa, their effectiveness in relation to substance abuse has to be improved. The NDMP (2006-2011:15) states that proper adolescent programmes should be established that are accessible to all young people in South Africa to address major gaps in interventions, especially in the rural areas. The psycho-educational programme of this research (chapter 5) aims to assist in this regard, but to make a difference in the rural areas will depend on enthusiasm expressed for its adoption by influential opinion leaders, and also the availability of computers and the web in the rural schools (see section 4.6.3.2). In the adolescent priority area one of the main objectives stated is to encourage a healthy lifestyle through awareness programmes and access to life skills.

4.10.1 Substance abuse summit

The Central Drug Authority (CDA) hosted the *Second biennial substance abuse summit: 15 to 17 March 2011* at the Durban International Convention Centre in KZN. The summit was a follow-up to the first summit that was held in 2007. The theme for this summit was: An integrated approach: Towards a drug-free society (SOUTH AFRICA, 2011c, 2011d). The summit was attended by more than 600 delegates from government and non-governmental organisations (NGOs). The summit committed to implementation of various resolutions in recognition of the dangers of alcohol and substance abuse on aspects of the South African society including:

- Resolution 12: Intensifying campaigns that seek to inform (and/or educate) people, in particular young people, about the dangers of alcohol and drug abuse (see also section 4.5.2 *principle* 3).
- Resolution 24: Implementation of comprehensive prevention programmes including both universal and targeted approaches. All young people need life

skills and this should be taught in all schools. In addition, in high risk areas this should be supplemented by more targeted approaches (see also sections 4.5.2 *principle* 4 & 4.5.2 *principle* 6).

- Resolution 25: Strengthening of after care services, including for young people such as students (see also section 4.5.2 *principle* 10).
- Resolution 26: Utilisation of multiple approaches to prevention across different disciplines and structures targeting, for example, families and schools (see also section 4.5.2 *principle* 8). Programmes for youth development and sport development can be used as channels.
- Resolution 31: Improving education about the harmful effects of drugs and alcohol (see also sections 4.5.2 *principle* 2 & 4.5.2 *principle* 3).

4.10.2 National campaigns

There were a number of national campaigns with regard to alcohol and substances abuse:

- The Cabinet has established an Inter-Ministerial Committee to coordinate and support the launch of a national campaign to strengthen measures to combat alcohol and substance abuse in South Africa (SOUTH AFRICA, 2011d). The national campaign was launched on 14 October 2010.
- The Foetal Alcohol Syndrome Indaba was held in November 2010 under the leadership of the Department of Social Development, in partnership with the South African Breweries and the CDA.
- The Anti-Substance Abuse Campaign, developed in partnership with the CDA, calls on all sectors of our South African society to help mobilise social conscience to take decisive action against alcohol and substance abuse.
- According to Mngoma (2011) the KZN Department of Education launched the My Life, My Future campaign on 3 May 2011. This campaign is aimed at creating awareness about teenage pregnancy and substance abuse.
- Another initiative by government is Ke Moja (I'm fine without drugs) which is aimed at creating awareness, increasing understanding and capacitating adolescents to deal with challenges related to substance abuse.
- South Africa also has a legislative framework that provides a basis for combating alcohol and substance abuse including the NDMP (2006-2011),

and the Prevention of and Treatment for Substance Abuse Act, 1992, enacted by Parliament in 2008 (SOUTH AFRICA, 2011d).

4.10.3 Private sector prevention initiatives in South Africa

In this section I evaluate critically some of the initiatives of the South African Council for Drug Abuse and Dependence (SANCA) and the Cape Town Drug Counselling Centre (CTDCC) and Chatsworth Anti-Drug Forum Facebook Group (2011) for preventing substance abuse in South Africa. From a review of the literature it appears that *no* psycho-educational prevention programme using audio-visual media in an interactive manner has been developed in South Africa. Instead the following are examples of private sector initiatives:

4.10.3.1 SANCA

SANCA is the leading national organisation that provides both prevention and treatment services for alcohol and other drug dependence throughout South Africa (SANCA, 2011). However, it appears that existing prevention programmes in South Africa can be improved upon (see NDMP, 2006-2011:15). Developmental programmes within SANCA strive to empower individuals with decision-making, self-reliance, social integration and capacity building. Peer counselling programmes have also been established in a number of schools in rural and urban areas, for example, anti-drug groups like TADA (Teenagers Against Drug Abuse), focusing on the effectiveness of peer education (SANCA, 2011).

4.10.3.2 CTDCC

Cape Town Drug Counselling Centre (CTDCC) (2011), a non-profit facility, subsidised by the government, offers drug counselling, training and prevention services, with offices in Observatory and Mitchell's Plain. CTDCC assists with teacher training courses, addressing parents, student workshops and school drug policies. The CTDCC offers several programmes, posters, service pamphlets, life skills videos and a families and drugs booklet (CTDCC, 2011).

4.10.3.3 Chatsworth Anti-Drug Forum

According to Gounden (2006), the Chatsworth Anti-Drug forum has started a drug awareness initiative in Durban where they visit schools in selected areas. These schools need help with their drug problems, especially alcohol, and well-known motivational speakers address adolescents.

4.11 REFLECTIONS AND RECOMMENDATIONS FOR AN INTERVENTION PROGRAMME RESOURCE IN THE LIGHT OF SCT AND SET

In the light of the literature review and the conceptual framework of SCT and SET recommendations are made for the selection of an audio-visual resource to be used in the proposed psycho-educational programme of this research. It was decided to select the ATI campaign (2011) from the available programme resources for use in a novel manner. This programme resource offered the following specific advantages:

- The ATI campaign (2011) was created in America as an evidence-based programme of note.
- The ATI campaign (2011) did not have a cost attached to the use of its programmes, unlike most of the other NREPP evidence-based programmes available from the USA (see Appendix J).
- ATI, as a programme, contained extensive audio-visual media and related material on the prevention of adolescent substance abuse that was most closely linked to the conceptual framework of SCT and SET in terms of its theoretical principles. Therefore, having reviewed this programme on the basis of my meta-theoretical perspective and paradigmatic assumptions (see section 1.4), it was logical to want to evaluate the programme more closely for possible usage in South Africa.

In addition to the above, the ATI resource was: content appropriate for adolescent substance abuse prevention; content accurate and relevant for adolescent substance abuse prevention; age and grade appropriate; could be useful for all populations and genders; and of a high production quality (see section 4.9.1.1).

The psycho-educational programme of this research will aim to build adolescents' self-efficacy in the following ways using SCT and SET. These are the strategies that may be used by teachers to prevent adolescent substance abuse:

4.11.1 General aims

- The intervention programme of this research aims to enhance protective factors and reduce risk factors, also to modify adolescent problem behaviour effectively and enhance self-efficacy by approaches that are in accordance with SCT, SET and the concept of triadic reciprocality.
- Psycho-education, group discussions and individual interviews need to stimulate adolescents' cognitive skills.
- The programme needs to be developmentally appropriate for adolescents.
- There should be repeated interventions and booster sessions over time to reinforce the original prevention goals (section 4.5).
- The audio-visual and social media indicated in sections 4.7 and 4.8 need to be integrated in this innovative intervention for the South African context (see Figure 4.1)(also see section 4.5).

4.11.2 Mastery experiences

To facilitate authentic mastery experiences and successes, this programme aims to increase adolescents' academic and social competence with study habits and support, communication, enhancing peer relationships, coping skills, self-efficacy and assertiveness, social behaviours, and drug resistance skills, reinforcement of anti-drug attitudes and strengthening of personal commitments against drug abuse. Especially important are approaches based on life skills and LST (see section 4.11 & section 4.5).

4.11.3 Role modelling

This programme aims to use role modelling, social comparisons and vicarious learning experiences to provide training in adolescent drug education and demonstrate healthy interactions between teachers, adolescents and their parents.

The programme aims to use short video-clips or images to facilitate discussions and role modelling in the proposed group and individual meetings is recommended (see section 4.7). For example, the brief video-clip material of the ATI campaign described in section 4.8.3 might be ideal and will be used. Some aspects may need to be clarified by the teacher depending on the particular cultural context or ethnic milieu in South Africa.

4.11.4 Social persuasions

Teachers using this programme will need strategic skills in good classroom management practices, and techniques such as rewarding appropriate student behaviour, verbal persuasions, coaching, and encouragement (also see section 4.5).

This programme will be most effective when employing interactive techniques, such as peer discussion groups and parent role-playing. These tactics allow for active involvement in learning about drug abuse and reinforcing skills by social or verbal persuasions (see section 4.5).

Online focus groups using Facebook's 'create group' chat feature, with privacy settings to ensure confidentiality are recommended for this programme. A bulletin board can also be used as adolescent research can be optimal in the virtual space (see sections 4.7 & 4.8).

4.11.5 Agentic perspective and choice behaviour

The programme aims to facilitate adolescents' social communication, interpersonal skills, stress management and assertiveness skills for developing positive peer relationships. How to counteract social pressures to drink is important (also see section 4.5). The agentic perspective emphasises choice of health-related behaviour, effort expenditure and persistence.

4.11.6 Triadic reciprocality

This programme is a multi-modal or multi-component prevention resource, using a variety of strategies such as discussion, video, cd-rom, DVD, and the like, rather than

using only single approaches (see section 4.5, 4.7, 4.8 & 4.9). In terms of the SCT principle of triadic reciprocality strategies for increasing well-being need to aim at personal, environmental, and behavioural interacting factors. A multi-modal approach can be used to facilitate this.

4.12 THE PSYCHO-EDUCATIONAL PROGRAMME TO PREVENT ADOLESCENT DRUG ABUSE

The ATI programme resource was selected for use in the programme that was designed in this research. In section 4.11 the reasons for this selection are explained.

The psycho-educational programme aimed at prevention of adolescent drug abuse was developed from the review in the previous chapters. It aimed to adhere to all 11 principles listed in section 4.5.2. Thus it aimed to:

- enhance protective factors and reduce risk factors;
- address all forms of drug abuse;
- address the type of drug abuse problem in the local community;
- be tailored to address risks specific to the relevant age, gender, and ethnicity;
- improve family relationships;
- increase skills related to studying; communication, peer relationships, self-efficacy, assertiveness and drug resistance, and enforce anti-drug attitudes – seen as one of the most important principles;
- retain the structure, content and delivery of the original programme resource;
- employ interactive techniques;
- intervene and reach appropriate populations in multiple settings including schools;
- be used in the long-term with repeated reinforcing sessions;
- include training in techniques such as rewarding appropriate student behaviour

In consideration of the above, the programme that was designed consists of seven sessions as follows.

Session 1

A. A 20 minute DVD using the ATI resource with TV advertisements and flash video adverts is screened.

B. After having watched the DVD, the adolescents complete five open-ended questions on a typed form that are part of the resource (Appendix L). The questions are:

   (i) What was the first thing that popped into your mind as you watched these videos?

   (ii) What is the main message that you are getting from them?

   (iii) What did you learn from this activity?

   (iv) What were some of the influences that were referenced in the videos? Were they positive, negative? Please explain.

   (v) What causes people your age to become under the influence?

C. A classroom discussion follows which is facilitated by the researcher (or teacher). The following questions may be asked on the video:

   (i) What causes people your age or like you to become under the influence?

   (ii) What happens to them if they become under the influence?

   (iii) Thinking about drugs, to what extent do you consider them a similar influence in your life? (Please explain)

   (iv) What does “above the Influence” mean to you?

   (v) What does “under the influence” mean to you?

Sessions 2 and 3

These sessions consist of “Open their eyes to influence” interview discussions with the adolescents individually, using the same or similar sets of questions as in session one. To these questions are added additional available questions from an ATI interview guide (for an in person focus group) and questions formulated from the literature review (Appendix F) such as: “If you’re entering into a risky environment, let’s say you’re going to a party, would you in your mind rehearse flexible plans of action, so that, if you are going to get into a difficult situation, you can have a suitable response?”

Sessions 4, 5 and 6

These are online sessions. The researcher facilitates online chat sessions with adolescents on Facebook by sharing posts (news updates) generated from an ATI

Facebook group. These discussions may be facilitated asynchronously (non-real-time) or synchronously (real-time), depending on the circumstances of the facilitator and the participants. ATI posts numerous regular topics of interest that stimulate discussions. Examples include:

(i) What was the biggest lesson you learned from a negative experience in 2011? Share your words of wisdom with us.

(ii) Is there such a thing as positive peer pressure? Justify your answer.

(iii) Certain people in our lives help make us who we are. Who has helped shape who you are, and how have they done so?

(iv) What important lesson has a friend helped you learn this year?

A transcript of a small group discussion using this method is enclosed in Appendix H.

Session 7

In the last session the adolescents complete open-ended questions in writing (Appendix M). Themes and issues that emerge from sessions one to six serve as prompts to explore the meanings and experiences of the participants. One example would be: *How helpful did you find the DVD 'Above the Influence?*' (Please explain) The same questions can be posed for the individual interviews (sessions 2 and 3) and the ATI online Facebook sessions (sessions 4 to 6).

The ATI Activity, Youth Participant Survey can also be completed by the adolescents to evaluate their experiences of the programme.

4.13 CONCLUSION

In chapter four I reviewed the literature on the role of audio-visual media in addressing problem behaviour. The focus was on adolescent substance abuse prevention in accordance with SCT and SET. Theories of prevention were highlighted. Principles of effective prevention resources were identified. SAMHSA's guide for selecting prevention resources was explained. The use of audio-visual media for adolescent substance abuse was emphasised. Behavioural health and social media were introduced and online focus groups and bulletin boards explained. Criteria for the evaluation of audio-visual media were described and recommendations for an effective psycho-educational programme using audio-visual and social media were presented.

From the literature review it may be concluded that the use of audio-visual and social media may indeed assist teachers and parents in adolescent substance abuse prevention. The literature study shows how and why these media may facilitate prevention, leading to the conclusion that teachers and parents should be made aware of the benefits thereof. For this reason the psycho-educational programme will specifically focus on methods and approaches that may be employed effectively by teachers for adolescent substance abuse prevention in South Africa.

In the next chapter the research design used to evaluate the psycho-educational programme is explained.

CHAPTER 5

RESEARCH DESIGN

5.1 INTRODUCTION

In the previous three chapters all relevant literature regarding the design of a psycho-educational programme to aid the prevention of adolescent substance abuse, was scrutinised. This culminated in the selection of a useful audio-visual resource and the design of a programme (see section 4.12).

In this chapter I report on the research design that was used in the empirical investigation phase. The aim of the design and data collection was to answer the main research question that guided this study, which was to discover *how a psycho-educational programme, using a selected audio-visual media resource, can most effectively assist teachers and parents in helping to deal with adolescent learners' substance abuse problem behaviour in Pietermaritzburg, South Africa.*

As pointed out in 1.3, with regards to alcohol use, the focus was on prevention or drinking that may have led to alcoholism. Alcoholism and drug addiction should be handled by trained and registered professionals. The same goes for drug abuse. Teachers can only try to prevent and address mild cases of cigarette, alcohol and drug use before these become addictions.

5.2 RESEARCH APPROACH AND DESIGN

A qualitative approach was adopted, in contrast to quantitative research which would aim to generalise findings to a wider population. The design was also eclectic, in that an evaluation research approach was used to describe and evaluate the usefulness of a programme in its natural setting, focusing on the process of implementation rather than on quantifiable outcomes (Mouton, 2001:149-150; 161-162). According to McMillan and Schumacher (2010:431) evaluation research can be defined as "determining the worth of a specific educational practice". This study could also be

defined as formative evaluation research as it was being used to improve a programme in a developmental stage (McMillan & Schumacher, 2010:431).

The mode of reasoning was inductive, a-theoretical. No hypothesis was formulated although certain general ideas or expectations acted to guide the empirical investigation. Data were gathered first and then synthesised inductively to formulate conclusions. The process was like a funnel, in that as I worked with the data, progressively more specific findings were generated (McMillan & Schumacher, 2010:323). Interactive field research, calling for direct interaction between me and selected teachers and adolescents was involved. Data collected were in the form of textual words or rich narrative descriptions, being quotes of transcripts from focus groups and individual interviews with the participants. There were in-person focus groups with the grade 10 and 11 students separately, and an on-line focus group with all 26 participants from both grades. There was a focus on the meaning of events and actions as expressed by the adolescents. The reason for this approach was that it enabled me to obtain a complete understanding of the complexity of participants' perspectives and experiences in their own words.

A feature of the investigation was the design which emerged during the study. The idea was to enter the investigation without any particular preconceptions (McMillan & Schumacher, 2010:323). As I learned about the setting, the people, and other sources of information, it became clearer as to what needed to be done. This knowledge then enabled me to make decisions on what was needed to understand the issue that was being researched. I had to have context sensitivity as behaviours are often strongly influenced by the settings in which they occur.

In addition to an interactive method of data collection, non-interactive methods were also used, for example, gleaning information from documents, websites and observations. Due to pragmatic considerations, just a limited number of cases were also selected for evaluation by non-inductive study. The challenge was to arrive at logical conclusions within this constraint.

The research design was in the form of a case study. "A case study is an in-depth analysis of a single entity" (McMillan & Schumacher, 2010:344), also called a 'bounded system'. A bounded system is something that is unique according to place,

time and participant characteristics. The aim herein was to generate information that could be useful to selected groups of teachers and adolescents living in the Pietermaritzburg area of KwaZulu-Natal, South Africa. This design could also have been described specifically as an instrumental case study because it provided insight into a specific theme or issue (Fouché, 2002:275-276; McMillan & Schumacher, 2010:345). The phenomenon was the selection and use of audio-visual media in a psycho-educational programme focused on adolescent substance abuse. The emphasis on *process* allowed for conclusions that explained the reasons for results, thereby providing a greater understanding of how and why complex behaviour occurred (McMillan & Schumacher, 2010:323).

An account of the research methods employed is now given. It includes ethical measures in data access, measures to ensure trustworthiness, data collection and data analysis.

5.3 DATA COLLECTION METHODS

5.3.1 Ethical measures

Qualitative research is more personally intrusive than a quantitative study (McMillan & Schumacher, 2010:338). In collecting or gathering data certain issues had to be born in mind. Ethical principles were adhered to such as to consider policies regarding informed consent, deception, confidentiality, anonymity, privacy and caring.

In conducting this research, I respected the participants' privacy by obtaining informed consent from all stakeholders, including the principal of the school (Appendix D). I also obtained the informed consent of the ONDCP (2011) and National Youth Anti-Drug Media Campaign (2011a, 2011b, 2011c) (letter in Appendix E) (see sections 4.5.1 & 4.9). Every adolescent was informed of the reason for the study (McMillan & Schumacher, 2010:338-339). Participants were also advised that they could withdraw voluntarily if they chose to, and were therefore free to make informed decisions on their participation. Credibility, sincerity and openness were essential in enlisting participants' cooperation and resolving any resistances.

To assure anonymity and confidentiality it was important that the school and participants would not be identifiable in print. The use of code names for people and places were employed to ensure anonymity (McMillan & Schumacher, 2010:339). The knowledge and consent of participants was obtained for all recordings of the focus groups, individual interviews and programme discussions. All disclosures of information were voluntary and from choice (Appendix C). I also endeavoured to promote a sense of caring and fairness in my thinking, actions, and personal morality (McMillan & Schumacher, 2010:339).

It was important that I should undertake the research as competently and responsibly as possible, be sensitive and objective and not make value judgements that might bias the findings. I attempted to avoid bias and subjectivity by maintaining as much objectivity as possible in my interactions and relationships with the adolescents and educators. To ensure that I would be competent to undertake the empirical investigation, I carefully studied the literature on which the content of the programme was based. I report on this in the methods section (see section 5.3.3.4).

5.3.2 Measures to ensure trustworthiness

The verifiability of this research was assessed mainly according to its trustworthiness (De Vos, 2005:345). The model proposed by Lincoln and Guba (in De Vos, 2005:346-347) was used to ward off biases. To ensure credibility (truth value) the phenomenon was as accurately identified and described as possible. With the idea of transferability (applicability) to contexts other than Pietermaritzburg, I indicated the extent to which the findings were applicable to other contexts or groups and included sufficient detailed data to ensure that others could decide to what extent the findings were useful to them (Lincoln & Guba, in De Vos, 2005:347). To ensure consistency (dependability) which is the alternative to the concept of reliability in a positivist paradigm, I used the strategy of confirmability (neutrality) as well as objectivity.

Agreement on the description and meaning of events was especially relevant for *validity* (De Vos, 2005:345-347). Various tactics to enhance validity and to ward off bias were proposed by McMillan and Schumacher (2010:330-331, 355), Kerr (2002:112-114) and Schulze and Lessing (2002:5). The fieldwork was prolonged and persistent which allowed for the refining of ideas. Multi-method strategies were also

used, including triangulation of methods, for example, pilot study interviews (Calder, 2009:1-161), document study, and cross-validation of focus group and individual interview empirical findings to the literature study findings. Literal, precise, verbatim statements of descriptions and situations phrased in participants' language as well as quotations from documents were obtained. Low-inference descriptors were used to identify patterns in the data in language used and understood by the participants. One plan to ward off bias was having the supervisor check the data analysis ensuring an agreement with my interpretations and meanings ascribed in raw data. The use of mechanically recorded data provided accurate and relatively complete records, and professional verbatim transcriptions were also made of each conversation. Direct quotations from documents and the data were presented to illustrate participant meanings. To enhance validity the participants and others at the school were questioned in informal conversational interviews. I also recorded any negative and/or discrepant data found in the emerging pattern of meanings.

I sought to minimise my predispositions by continuous rigorous questioning, re-evaluation and self-questioning, especially in relation to SCT/SET. This involved a personal self-awareness of my subjectivity, or *reflexivity,* a recognition of self, as well as of the participant (Pillow, in McMillan & Schumacher, 2010:332). To enhance reflexivity in all phases, I employed various strategies (McMillan & Schumacher, 2010:334-334). A field log was maintained with a chronological record of dates, times, places, persons, and activities and for each dataset collected. A field reflex journal recorded the decisions made during the emerging design and rationale. Ethical considerations were recorded, including dilemmas, decisions, actions, as well as self-reflections. Data management techniques, codes, categories, and decision rules were recorded for audibility (transcript in Appendix G and Appendix K). Initial findings were formally corroborated by conducting in-person and on-line evaluation focus groups, individual interviews, and writing of open-ended questions by participants.

To ensure authenticity and *extension of findings* I carefully recorded the actual participants' voices and their perceptions (McMillan & Schumacher, 2010:335-338). My prior teaching experience was a helpful factor in recognising observed processes and in the group interactions and interviews. A retrospective account of how the data were synthesised is provided in Appendix K (see also section 5.3.4). An authentic

narrative approach to data reporting will enable readers to connect to the story and visualise scenes and recognise particulars (*cf.* chapters six and seven) (see also section 5.3.4). In section 5.3.3.4, I provided some typicality information about the group composition, including participants' socio-economic status, educational attainment, racial or ethnic composition, age range, the time period of the research, as well as contextual features of the location. I also actively searched for plausible alternative or rival explanations to challenge the emerging patterns and interpretations to generate further research. In the next section data collection methods that were used in this study are explained in detail.

5.3.3 Data collection

5.3.3.1 *The researcher as instrument*

I served as an instrument in this study, meaning that the responses of participants were collected and analysed by me. A considerable amount of time was spent in direct interaction and data collection for a more complete understanding of the participants and their experience of the psycho-educational programme being studied (McMillan & Schumacher, 2010:322). I endeavoured to counter biases in this research by maintaining an awareness of how I was placed in relation to the adolescents and their life-worlds. According to Sherrard (in Kerr, 2002:116) awareness of researcher-participant distance enhances the quality of qualitative research. My perceptiveness was increased by finding dimensions of our researcher-participant differences and similarities which had consequences for each others' unique situation and experiences (see also section 5.3.2).

5.3.3.2 Sampling

A sample was chosen purposefully from the adolescents attending one large English medium secondary school in the Pietermaritzburg area of KwaZulu-Natal, South Africa. A letter was sent to the school (see Appendix A & Appendix B) wherein the research project was explained and a conversation held with the principal.

All adolescents in one grade 10 and grade 11 class in which there were the most at risk adolescents were invited to apply or register for the programme. Johnson and

Yanca (2009:239) emphasise that any prevention group needs to consist of members who have been identified as being at risk, which I carefully considered when selecting the participants. The strategy of reputational case type sampling (McMillan & Schumacher, 2010:326) was used to limit the number of participants due to logistical reasons. This involved speaking to the principal and school guidance counsellor as knowledgeable experts for the best examples, also an illustration of 'intense case sampling'. After consultation with the principal, a maximum number of 26 participants were then selected for the programme, including 10 adolescents from one grade 10 class and 16 adolescents from one grade 11 class. From these students, 10 were purposefully selected for individual interviews on the grounds of being most articulate and thus information-rich (also see 6.3).

According to McMillan and Schumacher (2010:363), typically focus groups consist of eight to 12 persons who are relatively homogenous. Optimal group dynamics were facilitated as the attributes of the group members in each focus group had few noticeable differences in education, authority and at risk behaviour. All the selected grade 10 students and all the participating grade 11 students were involved in two separate in-person focus groups. All the participating students were also included in online focus groups (also see 6.2.1 to 6.2.3).

5.3.3.3 Pilot study

The research began with an action research pilot study project at one school in KwaZulu-Natal in 2006. This phase consisted of informal interviews with senior primary teachers in the middle school. In this pilot study I investigated the effects of behaviour problems on the teachers and their views on the use of audio-visual media for assisting in the support of learners with behavioural problems. A second study was completed in 2008 at another KwaZulu-Natal secondary school with adolescents using focus groups. These studies were of assistance in designing this research programme (see Section 4.12) and also in the drawing up of an interview guide (Appendix F).

5.3.3.4 Phases of data collection

In Figure 5.1, I illustrate the phases of data collection that were used in this study (McMillan & Schumacher, 2010:329-330). These methods depended on each prior phase and the emergent data.

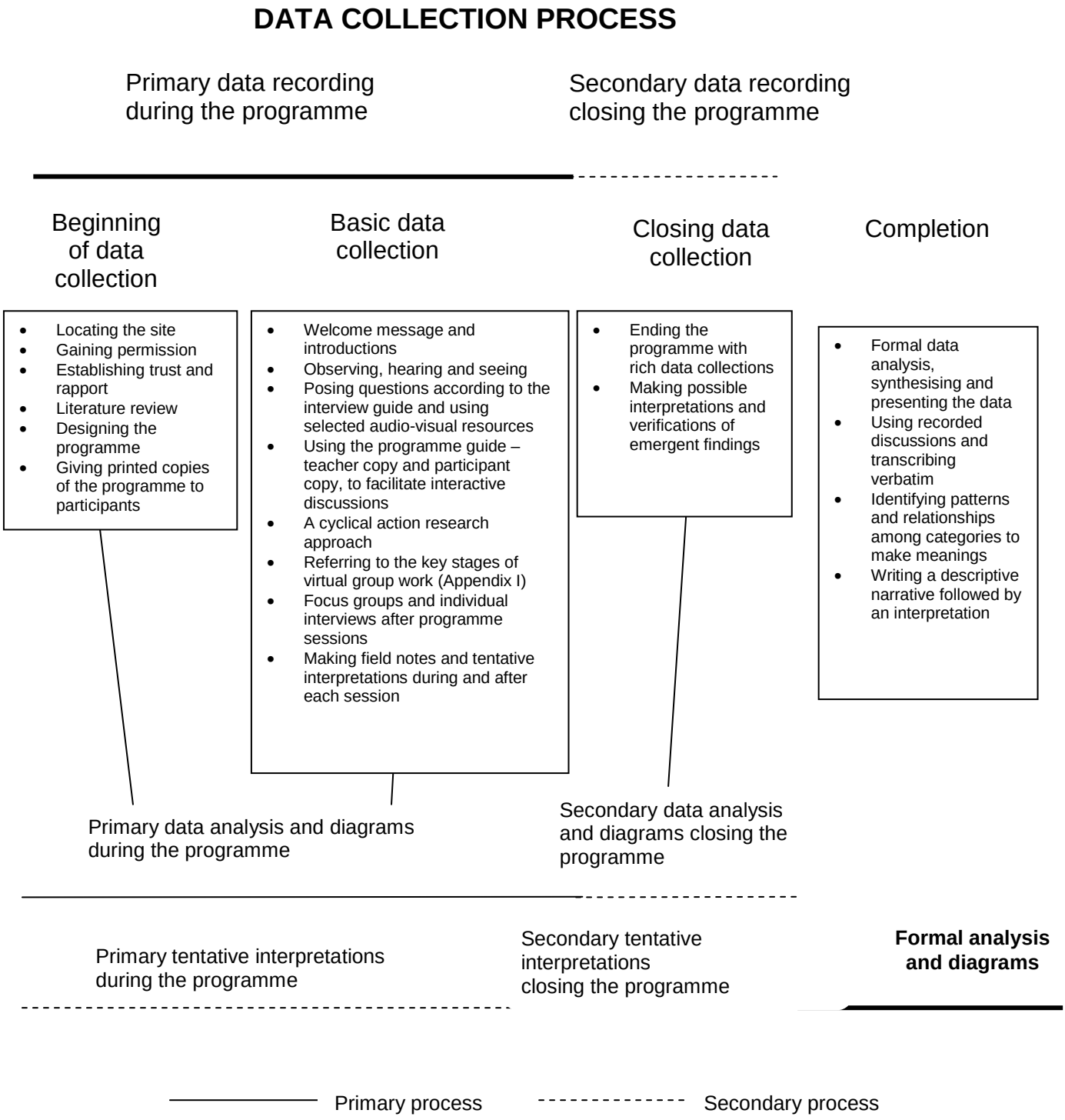


Figure 5.1 Phases of data collection (adapted from McMillan & Schumacher, 2010:329-330)

(i) In the beginning of data collection

In Figure 5.1, at the beginning of data collection, I located the site and gained permission to use the school and the network of adolescent participants and teachers (see section 5.3.1). The collection of content was based on the literature review from chapters two, three, and four, as well as detailed information from the following resources: ATI campaign, 2011; Botvin, 2010; National Youth Anti-Drug Media Campaign, 2011a, 2011b, 2011c; ONDCP; 2011; SAMHSA, 2011b. These resources contained extensive evidence-based materials and selected prevention media that had been tested and proven to be effective in the USA. The media included videos, television advertisements, and symbols (see Section 4.12) which were used in this programme. This programme challenged the adolescents to think critically about the adverse effects of drug use and the potential negative consequences in their social and media environments. I emphasised the participants' capability for proactive choice and goal setting from the beginning to the end of the programme, in terms of the agentic perspective of SCT/SET.

Table 5.1 describes how I conducted the programme, aimed at enhancing the adolescents' self-efficacy. This programme (see Section 4.12) was presented over seven sessions with selected participants taking part in various focus groups (in-person for the two grades separately, and on-line for both groups), individual interviews, or open-ended questions, and also an online focus group.

Table 5.1 Audio-visual programme summary

Sources of self-efficacy	**Self-efficacy beliefs**	**Self-regulatory skills**
Self-efficacy influences	**Dimensions of self-efficacy expectations**	**Self-efficacy in relation to behaviour**
PROGRAMME SUMMARY		
SESSION ONE	**"OPEN THEIR EYES TO INFLUENCE" WEEK ONE (IN-PERSON FOCUS GROUP)**	
SESSION TWO	**"OPEN THEIR EYES TO INFLUENCE" WEEK TWO (IN-PERSON INDIVIDUAL INTERVIEWS)**	
SESSION THREE	**"OPEN THEIR EYES TO INFLUENCE" WEEK THREE (IN-PERSON INDIVIDUAL INTERVIEWS)**	
SESSION FOUR	**"ONLINE SESSIONS" WEEK FOUR**	
SESSION FIVE	**"ONLINE SESSIONS" WEEK FIVE**	
SESSION SIX	**"ONLINE SESSIONS" WEEK SIX**	
SESSION SEVEN	**CLOSING QUESTIONS WEEK SEVEN (IN-PERSON AND/OR BRIEF ESSAY OPEN-ENDED QUESTIONS)**	

Adapted from the ATI campaign, 2011; National Youth Anti-Drug Media Campaign, 2011c)

As shown In Figure 5.1, at the commencement of data collection in the first few days at the participating school, I established a trust, rapport and a reciprocal relationship with the selected grade 10 and grade 11 adolescents to become oriented with the groups and individuals to be observed. Although part of the programme presentation was offered online, it was also important for me to meet all the participants in person to interview them (Mann & Stewart, 2000:112). A suitable site with computer workstations connected to the internet was found where the online sessions took place. It was decided that the school's computer room which was quiet and

accessible would be used for this purpose. To encourage self-disclosure and a relaxed atmosphere within the group, I served refreshments to welcome the participants. A radio played in the background to create a sense of informality in the interactions and an internet café type setting. The programme sessions, subsequent focus groups, also individual interviews, were scheduled for times convenient to all participants. A positive atmosphere was facilitated by explaining the purpose and aims of the research and thanking participants for their involvement.

Also, in the beginning of the data collection process (see Figure 5.1) the participants were given printed and electronic mail copies of various introductory aspects of the programme in the form of a Word presentation. PowerPoint transcript presentations were also introduced as the sessions commenced. A 'Youth Participant Survey activity' and closing open-ended questions (Appendix M) were included in the programme as evaluative exercises.

(ii) Basic data collection phase

As indicated in Figure 5.1, a welcome message can be used to introduce the discussions when commencing with sessions. The basic data collection phase involved carefully hearing and seeing what was occurring. The high interactivity of a real-time online focus group with all the grade 10 and 11 participants can introduce the risk that the data would be superficial and not 'in-depth' because participants may not have had adequate time to respond to questions and to explain and share experiences (Gaiser & Krueger, in Mann & Stewart, 2000:122). I therefore ensured that the adolescents in this study had ample opportunities to consider what they wanted to say and to participate. Many of the comments were posted asynchronously in non real-time. The modalities of presenting this programme can also be adapted, according to the work circumstances, timetables and availabilities of teachers and students.

As data were collected, tentative data analysis began and data collection strategies were chosen (see Figure 5.1). I summarised initial descriptions which were identified for later confirmation. I also posed initial and periodic open-response questions to facilitate interactive discussions (interview guide in Appendix F). A teacher's copy programme guide and a participant copy programme summary were designed (see

also Section 4.12) which were used to facilitate interactive programme discussions and interviews. As the intervention progressed, introduction of content was adapted to improve the programme using suggestions and comments from participants. A cyclical action research approach to data collection facilitated this process.

Other measures to ensure a successful programme included addressing issues in basic data collection such as uneven group participation and sequencing of questions (Mann & Stewart, 2000:114-122). To improve my efficiency in data collection I used a model on the key stages in virtual group work (Salmon in Allan, 2007:135-139) as well as guidelines by Johnson and Yanca (2009:235-261). For example, in the access and motivation (orientation) phase, I found guidance for technical support and welcomed and encouraged the participants. In the online socialisation (authority) stage, I used introductions, icebreakers, ground rules and netiquette. Then, in the information exchange (negotiation) stage, I facilitated structured activities, assigned roles and responsibilities, encouraged discussions, and summarised findings and outcomes. After that, in the project or learning activities (functional) stage, and also in the informing and closure (disintegration) stage, I facilitated online activities, monitoring the process within the overall programme, by asking questions and encouraging reflection. Finally, in the closure stage, I led the review and evaluation process by ensuring that loose ends were tied up (see the adapted model in Appendix I).

As illustrated in Figure 5.1, both focus groups and individual interviews were conducted. The interview guide questions (Appendix F) were used to encourage the participants to evaluate the programme. The topics were selected in advance, but the sequence and wording of the questions were decided by me during the interviews, in order that natural responses were not constrained (McMillan & Schumacher, 2010:355). The interview guide strategy was aimed at verifying and extending information obtained from other sources, and also to verify or extend hunches and ideas developed by the participants and by me. This strategy obtained future expectations or anticipated experiences regarding this programme. In addition, the present perceptions of adolescents' activities, thoughts, feelings, roles, motivations and concerns were gathered (McMillan & Schumacher, 2010:355). Some of the main questions that were listed in the interview guide were as follows (Appendix F):

How helpful did you find the audio-visual programme? (Please explain)
How helpful did you find:

(1) The classroom focus group discussions and DVD videos?
(2) The individual interviews?
(3) The 'Above the Influence' online Facebook sessions?
(4) Your comments on any other aspects of the programme on how it may be improved?

Other possible themes and issues that were identified during the literature review phase and from the pilot study served as prompts to explore the meanings and experiences of the participants. Themes from the programme content that were addressed in the interviews were:

- the adverse effects of drug use and the potential negative consequences;
- standing up to negative influences (choice of behaviour and agency);
- knowing the facts about drugs and alcohol, and making smart decisions about drugs and alcohol;
- more awareness of the influences around adolescents (including vicarious learning experiences and recognition of role-modelling effects);
- setting reachable goals and using coping strategies;
- peer helping, adolescent friendships, peer pressure and adolescent isolation;
- adolescent social and academic competence (authentic mastery experiences);
- teacher competence in use of the programme;
- parental and teacher social persuasions;
- adolescent self-efficacy.

As new themes emerged they were added to the interview guide for the focus groups that were conducted for the Grade 10 and 11 students separately. According to Folch-Lyon and Trost (in Schulze & Lessing, 2002:3), participants usually have the confidence to express their honest opinions within a support group of peers. The group dynamic was also a synergistic factor in bringing information out, particularly in the online sessions, which lasted over at least three weeks.

Individual interviews were also called for with a total of 10 students (three students from Grade 10 and seven students from Grade 11 purposefully selected because they were articulate and would be information-rich). The aim was to obtain in-depth data on participants' meanings and conceptions of their worlds and, also, to discuss how they could explain or make sense of the important events in their lives (McMillan & Schumacher, 2010:355).

Field notes were also made after each session with regard to how the students paid attention and how well they contributed to the discussions and interviews, among others. Other field notes included my observations of the participants' comments, and tentative interpretations of data within the data collection and analysis phases.

The students also completed open-ended questions after sessions in which they viewed the selected DVD resource (called Above the Influence'). This was done in a written format.

(iii) *Closing data collection* ended the programme evaluation. After the data had been collected and analysed, some follow-up individual interviews were conducted. This happened several months after the programme had been implemented. Thus data collection stopped when the additional data collected did not yield more insights relevant to the research problem (see Figure 5.1). Possible interpretations and verifications of emergent findings were then made.

(iv) *Completion* of data gathering led into formal data analysis and construction of ways to present the data (see Figure 5.1 & see Appendix K). In order to make interpretations, diagrams were an essential aid in synthesising the data. The discussions of the programme sessions, individual interviews and evaluation focus group session were recorded and transcribed verbatim.

5.4 DATA ANALYSIS

Data collection and analysis were interwoven, influencing each other. The fieldwork led to data but data obtained influenced the fieldwork.

I adhered as carefully as possible to the general principles that guide most qualitative research as explained by McMillan and Schumacher (2010:369-384). A cyclical process of data analysis was employed whereby collected data were analysed, additional data collected and then again analysed. This was primarily an inductive process of systematically organising the data into categories and identifying patterns and relationships among the categories to provide explanations (McMillan & Schumacher, 2010:367-368). Thus, data analysis began with the lowest level categories closest to the data and worked upwards in the following way (Johnson & Christiansen, 2000:426-431):

(i) Segmenting

This was done by carefully reading the transcribed data, one line at a time and reflecting: Was there a segment of text which was important for this research? Was it different from the text coming before or after it? Where did the segment begin and end? A data segment was text that was comprehensible by itself and contained one idea, piece of relevant information or episode (McMillan & Schumacher, 2010:368-370). Segmenting involved dividing the data and editing it into meaningful analytical units. Such segments (words, sentences or several sentences) were bracketed to indicate where they started and ended (See examples on the first page of Appendix G).

(ii) Coding

The segments of data were identified by means of category names and symbols. Codes were phrases or names that were used to provide meaning to the segments and were either quotations, context, participants' perspectives, events, relationships, processes and other actions or ideas (McMillan & Schumacher, 2010:371). For example, Mastery Experiences = ME; Vicarious Learning Experiences = VLE; Choice Of Behaviour (agency) = COB; Parental Social Persuasions = PSP; Positive Evaluation of Programme = PEP; Negative Evaluation of Programme = NEP. These category names were influenced by the evaluation criteria listed in a comprehensive master list of codes. The provisional codes were adapted and carefully refined as the study progressed.

A template style of organising the data was also used, whereby the initial codes or categories were predetermined and derived from the research questions, interview guide, or the data. A category or theme represented major ideas that were used to describe the meaning of similarly coded grouped data. This initial set of codes or categories was subject to revision in the final analysis. The categories that are generally used by an evaluator were used in this study to organise the data for coding as the purpose was the evaluation of this programme (McMillan & Schumacher, 2010:370, 376). Facesheet codes that applied to a complete transcript were also given to enable me to search for group differences. For example, groups one and two were G1 and G2 respectively.

(iii) Compiling a master list

All the category names that were developed were placed on the master list that included the symbolic codes. The codes on the master list were then reapplied to new segments of text each time an appropriate segment was encountered. New categories and codes were added as the need arose. The process of constantly comparing and identifying categories was a recursive process which involved the repeated application of a category to fit codes and data segments (McMillan & Schumacher, 2010:377). It was a continual search for both supporting and contrary evidence about the meaning of a category.

(iv) Checking for inter-coder and intra-coder reliability

I checked for consistency about the appropriate codes between myself and my promoter in order to ensure inter-coder reliability. Intra-coder reliability also needed to be checked to ensure consistency in my coding.

(v) Data patterns

The goal of this research was to state relationships among categories and to discover valid patterns in the data. Patterns were relationships among categories (McMillan & Schumacher, 2010:378). To find patterns I examined the data in as many ways as possible. I challenged each major hunch by searching for plausible explanations as well as negative evidence and alternative explanations. Patterns of meanings in the data emerged as ideas were modified and recast in a circular

process. Techniques that facilitated pattern seeking included: gauging the trustworthiness of the data, using triangulation, evaluating discrepant and negative evidence, ordering categories for patterns, sorting categories for patterns, constructing visual representations, and doing logical cross-analyses (McMillan & Schumacher, 2010:379-380).

(vi) Reporting on findings

Summaries of the patterns discovered were presented in an extensive descriptive report of evidence and interpretation in Chapter six. A narrative structure was used to describe key issues which were useful to the participants and readers. When quotes were used, the number and gender of each respondent was indicated as well as the date of the interview (for example, Participant 11, female, 17 Jan).

5.5 CONCLUSION

In this chapter I reported on the empirical investigation phase. The research design was described, ethical measures, measures to ensure trustworthiness, data collection and data analysis methods were accounted for. In Chapter six I report on the findings of the empirical investigation.

CHAPTER 6

FINDINGS AND DISCUSSION

6.1 INTRODUCTION

In the previous chapter I explained the research design and data collection to answer the main research question, namely: *How can a psycho-educational programme using ATI as audio-visual resource assist teachers and parents in an effort to prevent adolescent students' substance abuse problem behaviour?*

In this chapter, I report on the findings of the empirical investigation. I describe the participants who took part in the study, and record the research findings that resulted from the in-person and online focus groups, written open-ended questions, the individual interviews and field notes.

In the presentation of the findings, I first explain the realisation of the sample. Thereafter I elucidate the positive aspects of the programme as experienced by the adolescents; I indicate the findings related to an evaluation of the *programme* in the light of SCT/SET; the positive *processes* of the programme in the light of SCT/SET; the challenges or difficulties experienced by the adolescents with their participation in the programme; and finally I highlight the adolescents' recommendations for improvements to the programme, to the resource used and the way in which I presented the programme.

6.2 THE FOCUS GROUP PARTICIPANTS

The participants comprised of 10 students from one Grade 10 class and 16 students from one Grade 11 class with 26 participants in all.

6.2.1 Grade 11s (Focus Group One) (in-person)

The programme commenced with showing the ATI ('Above the Influence') DVD to the first group of 16 students in Grade 11. After viewing the DVD, participants completed

brief open-ended questions which also formed part of the findings. Thereafter the focus group was conducted. In this group were 10 girls and six boys, aged mainly between 17 and 20 years of age. One student was 16 years of age and one was 21. Of these 16 participants, four of the girls and one boy showed the most willingness to participate actively in the discussions.

6.2.2 Grade 10s (Focus Group Two) (in-person)

The programme continued with showing of the ATI DVD to the second group of 10 students in Grade 10. After viewing the DVD, participants completed brief open-ended questions which also formed part of the findings. Thereafter the focus group was conducted. Within this group were three girls and seven boys, aged mainly between 16 and 18 years of age. One student was 20 years of age. Of these 10 participants, three of the girls and two of the boys showed the most willingness to participate actively in the discussions.

6.2.3 Grade 10s and 11s (Focus Group Three) (online)

This part of the programme was completed online, using Facebook, to create an asynchronous (non-real time) focus group. Interactive chat discussions were facilitated using ATI postings on relevant topics. In this group were some of the Grade 10s and some of the Grade 11s who had participated in the in-person focus groups and individual interviews. There were five boy and four girl participants in this group, all aged between 16 and 20, as well as two mediating teachers as observers. The programme continued online for about three to four weeks of the school holidays with regular comments from seven of the participants (see excerpts of a transcript in Appendix H).

6.3 THE INDIVIDUAL INTERVIEW PARTICIPANTS

From the focus group sessions in each of Grade 10 and Grade 11, some of the students contributed well. The more articulate ones were invited to participate in individual interviews afterwards, since their communication could be information-rich. A total of 10 students participated in the individual interviews, including three

students from Grade 10 (two boys and one girl) and seven students from Grade 11 (two boys and five girls).

6.4 FINDINGS AND DISCUSSION

The findings and discussions are an indicator of the extent to which this psycho-educational programme and the ATI resource can contribute to prevent adolescent substance abuse. These findings are presented here in terms of the following broad categories. Themes and sub-themes are also illustrated in Figure 6.1, Appendix N:

- **Positive aspects of the programme** which were proven to be effective for adolescents' enhanced self-efficacy, including the resource content and audio-visual media, life-skills training, and my positive expectations of the programme as researcher. In addition, the participants' perceptions and positive processes of the programme are presented.

- **Challenges or difficulties experienced** by the adolescents in their participation in the programme. This section includes the evaluating of any discrepant and negative evidence, also critical incidents.

- **Recommendations for changes or improvements** to the programme or resource to become more effective, including its presentation.

6.4.1 Positive aspects of the programme experienced by the adolescents

In section 4.5.2, I listed 11 principles identified in the USA that were shown to be effective in assisting parents and teachers to select drug abuse prevention programmes. Of these, *principle 6* is seen as a core principle. According to this principle, a prevention programme and its associated resources should increase skills related to studying; communication, peer relationships, self-efficacy, assertiveness and drug resistance. The programme should also enforce anti-drug attitudes.

In this next section I evaluate the positive effects of the programme experienced by the participating adolescents in particular in the light of the above-mentioned

principles. The aim is to investigate the extent to which the programme, using ATI material as a resource, may be of assistance to prevent adolescent misuse of substances. The participants' comments are also evaluated in the light of the conceptual framework of SCT/SET where applicable.

6.4.1.1 Positive evaluations of the audio-visual media resource content of the programme

The participants made a number of comments indicating a very positive experience of the programme and its audio-visual media resource. For example:

(i) The audio-visual resource enhanced adolescent learning

The students commented on how the resource had emphasised the importance of learning and study skills and was motivational in this regard. Among others, the students indicated that they learnt to strive to avoid the mistakes illustrated in the DVD. The mistakes included drinking and smoking.

Examples of relevant comments on the ATI DVD include:

> *It* [the dvd] *was a very educational one, and it taught us that we mustn't drink and smoke and that life is all about learning. We should follow our parents and whatever rules they have taught us and learn from that (Participant 22, female, 15 Dec).*

> *Yes, I think it's a good idea to watch the video. Just, by basically you know, learning from other people's mistakes and, watching the video and, seeing how these teenagers in the video did things that didn't amount them to any good. Also, to learn from their mistakes so that in life they won't make the same mistakes that they made, when they're growing up (Participant 5, male, 18 Nov).*

> *Watching the programme I've learnt a lot. Things that I really, really thought, you know I took it lightly, but then when you watch it, you see it happening,*

you realise that it is real. And that people go through that, but they can overcome it. So, I learnt that, if anything (Participant 22, female, 13 Mar).

(ii) The programme and audio-visual resource enhanced adolescent communication skills

According to *principle 8* in Section 4.5.2, prevention resources are most effective when they employ interactive techniques which promote learning of communication skills. These tactics can include peer discussions and role-playing, where peers and parents can be role models in accordance with SCT and SET to learn about drug abuse and reinforce skills (CAPTUS, 2011; in David *et al.,* 2003:20; McBride, 2005:101; NCJRS, 2011; ONDCP, 2011).

In this research, adolescents were able to ask questions and learn vicariously by observational learning from role models in the audio-visual media DVD, as well as learn in their interactive participation with the interviews and in focus groups. According to observation notes, it was clear that the practicing of various activities during the implementation of the programme had enhanced the students' communication skills and understanding. The interview data in the following sections also illustrate the adolescents' communication regarding issues related to adolescent substance abuse, among others.

(iii) The programme and audio-visual resource strengthened constructive adolescent peer relationships

According to *principle 6* in Section 4.5.2, effective approaches to prevention include strengthening constructive social bonding between adolescents and peer groups. In this research, in accordance with SET, peers in the ATI video resource were acting as positive role models to help build other students' self-efficacy (see chapter 5 and Section 4.12).

Interview data indicated how the adolescents learnt to handle negative peer pressure and choose constructive friendships: For example:

It was really helpful to me. It really taught me the right from wrong. Basically it motivated me to encourage others (Participant 22, female, 17 Jan).

I learnt a lot about peer pressure. You shouldn't take it to heart. When people do things to you, you shouldn't worry about them, you turn the other cheek and worry about what you think is right (Participant 22, female, 15 Dec).

The main message I got from this video is that in life you get good and bad friends, you make the choice as to how you going to live with them (Participant 1, female, 17 Nov).

(iv) The programme and audio-visual resource increased adolescent self-efficacy

As mentioned in chapter two, section 2.3, Bandura (1986:391) states that of all the thoughts that affect human functioning, and standing at the very core of SCT, are *self-efficacy beliefs*. These beliefs are people's judgments of their capabilities to organise and execute courses of action required to attain designated types of performances.

Interviews indicated that the students had gained greater self-confidence to respond appropriately in various situations. They were thus much encouraged with self-belief as a result.

In my opinion, I would say that it will actually help more people and the society and the environment as well. It would change their lives by seeing that video, and if libraries could support those people who don't know anything about alcohol and drugs. To produce those [ATI] *books, produce those charts* [posters]*, advise them a better way, advise them the good future to see the success and see the changes that they can make of their lives (Participant 1, female, 13 Mar).*

Yes, it [the programme] *can, definitely it can help the people, especially teenagers that are going through this* [substance abuse]*. It can encourage them and make them better with what they are doing as well, and that there*

are people who can help them. It can improve us and make us better people and we can learn from our mistakes, and it motivates us to do the right thing in life (Participant 22, female, 15 Dec).

Yeah, it can help them, a lot. Especially, I learnt not to be shy, not to be self-inferior (Participant 18, female, 29 Nov).

From the above positive evaluation comments, I would interpret that, in the light of SET, the ATI audio-visual DVD as a resource can be used effectively to increase adolescents' self-beliefs.

(v) The programme and audio-visual resource increased adolescent assertiveness

In terms of the agentic perspective of SET described in section 2.3.5, intentionality, forethought, self-reactiveness and self-reflectiveness are essential properties of human agency and the exercise of free will (Bandura, 2008:87-88).

I interpreted from their comments below that the programme and the resource that was used had increased their assertiveness skills, in line with principle 6 for prevention programmes (see section 4.5.2).

Yes, it's made us much more assertive because now we can understand and we see things happening because on the video it showed us and we've learned from the video from what we've seen (Participant 2, female, 13 Mar).

It made me think a lot about life [self-reflectiveness] *and things that we take for granted, and if I had to take anything for granted, I wouldn't go there now* [forethought]*. Watching the movie, I would like change my life. I wouldn't do the bad things* [intentionality]*. If I did anything bad I would like change for the better* [choice].

(vi) The programme and audio-visual resource increased resistance against drugs

According to *principle 6* in Section 4.5.2, caring relationships and strong standards against substance abuse in families and schools, are also important in prevention. By

setting a good example of resistance against drug usage, peers and parents acting in the DVD video resource can be effective role models for adolescents. Interview comments made by the participants indicated that their viewing of the DVD resource had helped them in their observational learning, with increasing of their drug resistance standards.

> *It was very helpful and open because everybody had different opinions as well as a lot to say. The videos were living proof that one should stay above the influence (Participant 14, female, 17 Jan).*

> *An interesting video, it got my full attention. It had me thinking what was going to happen next and that alcohol and drugs are not worth it, and joining wrong company can cause pressure (Participant 11, female, 16 Nov).*

(vii) The programme and audio-visual resource enforced anti-drug attitudes

According to Di Clemente *et al.* (1995:112-113) and as mentioned in section 2.4.4, abstinence self-efficacy involves adolescents' confidence in their ability to abstain from the addictive behaviour in the various situations that are cues or triggers to perform that behaviour. Bandura (1997:360) emphasises that development of personal efficacy is likely to foster sobriety, good feelings and positive self-awareness (see section 2.4.8.2).

Interviews indicated that the participants' anti-drug attitudes were decisively more evident and that they had developed an increased sense of abstinence self-efficacy after seeing the ATI DVD resource during the programme. This is in line with principle 2 (see section 4.5.2) that states that programmes should address all forms of drug abuse and resistance against them.

For example:

> *Well, I learnt that as a teenager, you should make the right decisions in your life. To get educated, so that you can advise the people that are coming behind you, stay away from drugs, drinking, alcohol, and those people who are affected in society (Participant 1, female, 17 Nov).*

Yes, it [the DVD] *gave us new reasons why we shouldn't do it and taught us more about the reasons we didn't know, and the dangers that we didn't know. The children speaking about their experiences and what happened to them, what they've been through opened our eyes to see that we don't want that to happen to us. Yes, because they know what it's like and it's not always a pleasant thing to do (Participant 2, female, 13 Mar).*

Yes, it helped me so much. It made me think about all the bad things, even the video showed me how things are happening outside in this world there. How our life would suffer out there for the other students or a youth like me. Now, it showed me a perfect way of living because they showed all the side effects of all those drugs out there (Participant 7, male, 19 Mar).

6.4.1.2 Positive feedback from the online chat-room sessions

According to the ONDCP (2011) and in terms of *principle 8* in Section 4.5.2, substance abuse preventive efforts are more likely to be effective when they are multi-modal, rather than using only single approaches. A multi-modal strategy in terms of SCT was thus used in this research (see also sections 4.7 & 4.8 and chapter 5). In this section, I report on the positive findings from the chat-room sessions as follows (see also Appendix H for an excerpt from a transcript).

(i) Positive experiences from the online sessions

Principle 4 (see section 4.5.2) emphasises that programmes should be tailored to address risks specific to audience characteristics such as age, and principle 8 recommends interactivity. Both of these principles were addressed by the online communication sessions. The students who participated in the online sessions evidently enjoyed this learning experience. I concluded that this approach could be very helpful to both teachers and students, providing that the educational technology to use this platform of digital communication to best effect was available. The following comments reported well on this dimension of the programme:

There were a lot of discussions and topics that were talked about, as people had a lot of different views and opinions which helped me understand to choose a

better life and group of friends. The programme was very well organised and well prepared and should be done more often. No alterations necessary (Participant 14, female, 17 Jan).

The responses we got from people on our Facebook group were very interesting. People also gave great advice as to how to conduct yourself during the holidays (Participant 23, female, 17 Jan).

In addition to the positives above mentioned, a few difficulties were encountered in the implementation of the online part of the programme (see section 6.4.4 and chapter 7 for recommendations on improvements to the use of the online chat-room sessions, including internet availability and discussions on students' anonymity).

6.4.1.3 Positive evaluations of the in-person life skills training component of the programme

The psycho-educational programme (see section 4.12) was presented in such a way as to complement presentation of the ATI resource material. I evaluated the resource to see how it could be better adapted to assist adolescents in South Africa. This is in line with principle 1, according to section 4.5.2. The interview questions that I formulated were based on SCT/SET (see pages 4, 5 and 6 of Appendix F).

In section 4.5.1, it was stated that social-skills training programmes can enhance skills related to problem solving, assertiveness, self-control, resistance and coping (Wisdom, 2008). To implement the *in-person* life skills and social skills training interviewing component of this psycho-educational programme, I used the ATI Interview Guide (see Appendix F and also section 4.12).

(i) The participants' experiences of the interactive individual interviews of the programme

The following brief comments by the participants suggested that they had enjoyed the interactive interviewing phases that followed the DVD presentations as part of the programme (section 4.12). For example:

It was a good experience being interviewed, made me more aware of things (Participant 11, female, 17 Jan).

The interview was good and helpful. It also helped to open up when you're in private. It was a great interview, whereby you were given an opinion as to your answer. It brought a great change and an experience to my life story (Participant 1, female, 17 Jan).

Thus, the participants appreciated the interactive interviewing approach that I had facilitated. This allowed them to contribute well with their opinions in the discussions.

(ii) The participants' experiences of the in-person focus group discussions of the programme

The participants enjoyed the group interviewing phase. Their responses indicated that it had been enriching discussions. Examples include:

[The focus groups were] *quite interesting discussions.* [They were] *more focused and based on everything which takes place in our country. It brought a great understanding to every individual and to understand more about influence (Participant 1, female, 17 Jan).*

The classroom discussion was very focused but most of the students did not participate, but those who took part in the activity did very well (Participant 10, female, 17 Jan).

6.4.2 The programme in the light of SCT/SET

In order to evaluate the effects of the ATI programme in relation to its contribution towards the life skills training of the participants, I used some of the key elements of SCT/SET (see sections 2.2, 2.3 and 2.4) as criteria to evaluate and assess the adolescents' learning of certain important life skills within the presentation of the psycho-educational programme of this research. With the conceptual framework in mind, I now present my findings on this theme, by referring specifically to the most

important aspects of SCT/SET (see sections 2.3.2 to 2.3.5), which are *role modelling*, *social persuasions*, *emotions* and *choice of behaviour*.

6.4.2.1 The influence of role modelling on participants' self-efficacy

The programme needed to increase participants' self-efficacy through role modelling, either with reference to what they had seen in the DVD resource, or in self-reflection and self-evaluation of their life experiences. In terms of SCT (see section 2.2), a role modelling approach to learning can be particularly effective especially when the visuals include a model whose attributes are similar to those of the adolescent, and when accompanied by teachers' verbal persuasions and coaching. Adolescents can form their self-efficacy beliefs through social comparisons and the vicarious experience of observing others perform tasks and noting the consequences (see section 2.3.2).

In my interviews with the participants the topic of role modelling was introduced to facilitate the adolescents to be more self-reflective on their perceptions of free will and choice of behaviour, a key aspect of Bandura's agentic perspective (see section 2.3.5). The adolescents were therefore questioned about family, friends and famous people as role models. The following comments made by the adolescents, suggested that they had reflected well on this aspect of influence in their lives and could in the future be better equipped and more cognisant of the effects of role modelling in their lives.

(i) Friends as role models

In section 2.4.9.1, it was stated that one of the qualities that can protect adolescents from engaging in risky behaviours is that of correcting erroneous beliefs that drug use is common and acceptable among the peer group. In our discussions there was much reflection by the students on this account, as evidenced by the following comment.

> *You should be your own role model, I think. I think that it's like this, I think we should all be our own role models and set up good examples for ourselves, and for others as well, when they see us standing out they will know what kind*

of people we are and how we brought ourselves up. Then they're going to all want to be like that. So basically if they see me now and I don't smoke, I don't go in the groups that people smoke. I keep away from bad people, they're going to say, 'look at this girl, she's like something that they've never seen before'. Eventually they're going to want to be like me. So I think we should be our own role model (Participant 22, female, Mar 9).

(ii) Famous people as positive role models

I questioned the adolescents how influenced they were by famous people. The comments suggested that many of the students identified both positively and negatively in this respect. Firstly, positive comments were given.

Sir, I guess I have to say some vernacular, Denzel W, because, when he was young, he was living in a bad neighbourhood that was always influenced by drugs and alcohol and crime. So, then, he joined this boys and girls club that I just saw in the video and, he learned that in life you have to do things that are ok with us, not that are wrong. That's why he's a huge influence in my life because he is a role model and, a good man too (Participant 5, male, 18 Nov).

In sports, I can maybe call someone like in the football, maybe someone like JP. He used to do drugs, now he's over with drugs. Now he can come and motivate the students about how drugs are bad because he came from bad things, hey. Yeah, those are the kind of guys we need on these things – they can tell us about their background, how they started drugs, how they ended up, all those things (Participant 7, male, 15 Dec).

I also have a role model in my life. I can say my father is my role model, but in sports I can say it's Brian H. One day I want to be like him. I want to be a rugby player. Now I can say….he helps people, he donates in all those orphanage homes. Ja, he's a kind player and he plays well too. I've seen his game and he plays well too. He's my motivation (Participant 7, male, 19 Mar).

The adolescents' self-reflection in identifying with these above-mentioned individuals as role models, was clearly a source of inspiration to them which would have motivated them to 'stay above the influence' with an increased self-efficacy.

(iii) Famous people as negative role models

The adolescents showed cognisance of the fact that many famous people might be negative role models. For example:

> *Currently I'm not looking up to any famous person. I'm happy for them, I'm happy that they're making money, getting everything that they want. But then, most of them aren't very positive influences because they do drugs and alcohol and, yes, they sort of brainwash some teenagers into believing that that's the life to live. Which it isn't. And making us believe that that's happening when they're drunk and having money and all of that, but it isn't. You cannot be happy with just drinking, you may have that consolation for a while if you're drunk or whatever, but then other than that the problems will come back and you are going to have to face them. And then, you're going to think you're going to take another drink or whatever. And then, you're going to become addicted and you end up not solving your problems (Participant 14, female, 15 Mar).*

In one of our group discussions, the focus was on famous singers and to what extent they were role models for the students. This initiated a debate on the merits of identifying with these singers. The debate provided the participants with the opportunity to reflect on their intentionality of influencing their own behaviour in terms of the agentic perspective (section 2.3.5). The debate thus helped the participants to reflect on how they could contribute to their own life circumstances instead of just being influenced by them. Comments included:

> *It's because teenagers are exposed to the media and they're brainwashed to believe that what they see on TV is the right thing. They admire these people because they have a lot of money...* [but] *most of them did the wrong things to get to that point, so they're sort of brainwashed in a way, believing that they are positive role models when they're not. I think the mutual conception is that a role model is a famous person that has money. That's where the problem is.*

That is not a role model. A role model is somebody who will have a positive influence in your life, that you look up to. To have a positive change, to be better than what you are…..and know where you're heading in life and you know where you going (Participant 14, female, 9 Mar)

You find that with most gospel singers they are mostly drug addicts or after a couple of years, they drink alcohol, they're abusive. And that's not a good image to look up to, so whereas R, yes, she's making her money or singing about the wrong things, but you find that in a way, she's living her life the way she wants to live her life. If I had money, I'd love to live like R. Even though I don't approve of some of the things she does. But, I wouldn't mind being in her shoes for like one day, because she's doing what she likes to do. Exactly, like gospel singers will go out there and sing about God, but then in a dark room you don't know what they are doing behind closed doors. But R is out there saying, yes, I love to do this, yes it's smoking, it's drinking and she's just out there for everyone to see. She's not fake (Participant 23, female, Mar 9).

The above comments show that on role modelling the psycho-educational programme was useful for stimulating debate. When combined with the interactive coaching input of the researcher and with the supporting audio-visual resources, the qualitative discussions were a powerful source to address erroneous beliefs and to see things in a positive perspective.

(iv) Family and community as role models

In section 2.4.9.1, it was stated that one of the qualities that can protect adolescents from engaging in risky behaviours and which can help improve self-efficacy, is that of increasing the qualities of parenting including communication, supervision, and setting of clear standards for behaviour, including positive personal attention (Dusenbury & Hansen, 2004:371-381). If programmes can enhance family relationships, this is also in accordance with principle 5 for effective programmes, which states that the programmes should improve family relationships (see section 4.5.2).

In our discussions there was much reflection on this account, as evidenced by the following comments.

> *If my father is addicted to alcohol that's not a very good role model... I'll think of myself as worthless, I won't have any support system or anything like that. And then, that could have a positive or negative influence on my life. Because I will either choose to be like my father or I can choose to have a better life. This also adds to the peer pressure as well. If I have such a low self-esteem and I don't have any support system, when my friends tell me, 'okay let's go drinking tonight', or whatever, because I don't know how to stand up for myself, I don't have anybody who can do that for me or anything like, then I'll probably do it just because I want to belong. I want to feel loved and I think that those peers maybe could give me that. But then if I know that I don't want to be like that, then I'll choose to do something different, I'll choose to do something better with my life (Participant 14, female, Mar 9).*

> *My role model would be my mother, because of her inspiration, her confidence, and teaching me how to do good, and teaching me God's way, to follow God's way. She has helped me a lot in life as well. I am also influenced positively at church, because most people there at church will always be by your side. So, there's not a doubt that, at church, I feel cared about, I feel loved. So, that's my positive influence that I get from church and at home (Participant 17, male, 29 Nov).*

Thus, the participants' programme experiences enhanced an awareness of role modelling and its influence on self-efficacy. The students gained an increased belief in self-efficacy to reflect in the light of the core properties of human agency, being intentionality, forethought, self-reactiveness and self-reflectiveness (see section 2.3.5).

6.4.2.2 The influence of social persuasions on participants' self-efficacy

The participants' self-efficacy needed to increase since they explored the influence of social persuasions in their lives, with reference to what they had seen in the DVD resource, and in self-reflection and self-evaluation of their life experiences. In terms

of SCT (see section 2.3.3), social persuasions, including verbal persuasions and encouragement received from others, play an important role in the development of adolescents' self-beliefs.

In my interviews with the participants the topic of social persuasions was addressed to facilitate self-reflection on their perceptions of free choice of behaviour, a key aspect of Bandura's agentic perspective (see section 2.3.5). The adolescents were therefore questioned about being influenced by the *media,* including the *social media* and their *peers* and *parents*. The data indicated that the adolescents had reflected well on this aspect of influence in their lives as shown in the next sections.

(i) The role of the media in influencing social persuasions

Discussions in the programme delivered data that suggested that the students viewed the influence of the media generally with some degree of scepticism. By being reflective about the role of the social media at large, the adolescents could be better equipped to self-regulate their behaviour. This form of control self-efficacy (see section 2.4.4) focuses on adolescents' confidence in their capability to control their behaviour in a variety of provocative situations, such as being influenced by advertisements on television persuading people to drink alcohol. Some comments were as follows:

> *I think it has a negative influence, because what we see on TV, like the people overseas, it's not really them. They have make-up on and they are photo-shopped. You know, so like the youth doesn't really know that, so they want to look like them, and be like them But it's not really them, it's make-up (Participant 14, female, 29 Nov).*

The adolescents criticised the influence of social media persuasions and the chat messaging systems of cellular phones objectively in the programme discussions. It was seen as a type of peer pressure. The emphasis in the discussions was to acknowledge that it might be a negative influence, but with a disciplined choice of behaviour, it need not be a problem. Comments included:

I think that with the social networks, [a student] *may have Facebook, because they don't have friends at home and their parents don't want them to go out, because they don't want them to be exposed to all these negative influences. But then, because I'm lonely, you know, I want people that think like me in some sort of way because my parents don't think like me. They're old, you know. Then, I'm going to the social level because I feel lonely, I want someone who understands what I'm going through. And then I get into the social network. But then I get addicted, that's where the problem comes...and I neglect every other important thing in my life (Participant 14, female, 9 Mar).*

Thus, the discussions on this topic as part of the programme had served as an opportunity for the adolescents to be self-reflective so that they could be better equipped to self-regulate their behaviour in a variety of provocative or risk situations.

(ii) The role of peers in social persuasions

Programme discussions around peer influence served as an opportunity for the adolescents to be self-reflective. This may equip them to better self-regulate their behaviour in a variety of risk situations. Their coping self-efficacy would be increased by them taking greater cognisance of the need to be assertive with friends. Examples include:

Make sure the group that they're trying [to mix with] is a right group for him or her and, at that certain stage of her age or his age. You must, to avoid peer pressure, stick with your age group (Participant 17, male, 29 Nov).

Before you take a decision in life you have to look at the bad side and you must also look the good side. But by following your friends, you must also look at…..your friends are there as an example, because if you haven't been in that shoe of that person. You don't know actually what that person is going through in their life, what made them take those drugs (Participant 1, female 12 Mar).

Sometimes friends are negative influences because they peer pressure them and if they don't do it then they can't be in the group, or they put negative thoughts

into their minds, so that a teenager wanting to fit in would participate and would do it (Participant 2, female, Mar 15).

Regarding choosing friends as positive or negative influences, the participants' comments indicated that they thought adolescents who experienced problems needed to be helped and educated by their peers who knew what their circumstances were. For example:

I would like to invite all the youth that are having issues in drugs and all that are involved in drugs, alcoholic drinking and things like that. Create a community whereby everybody would meet up if they are having an issue, invite them to your community, make up their group, make up their team, talk about it, what you went through, tell them about your experience and explain to them how good it is and explain to them the positives and the negatives of drugs (Participant 1, female, Mar 9).

They should have a set goal, something positive. They should do something they really love, something that would distract them from all those bad things. Something positive, like they could do volunteer work, yes. Work at SPCA as well, there's a lot of things that they could do (Participant 14, female, 15 Mar).

I don't think we should leave them out, even though they're like that. Talk to them, if they're unsure they will see that what they're doing is wrong at the end. As you talk to somebody in the end they're going to come to some understanding. So, when the teachers see them doing that, call them one side and talk to them. We should be there for them (Participant 22, female, Mar 13).

Thus, participants' seemed to have increased their self-efficacy by taking greater cognisance of the influence of peers. As emphasised by Livestrong (2011) and Haegerich and Tolan (2008:47-60), adolescents would be less likely to use substances when they have strong bonds to pro-social peers. By identifying with peers who set a good example, peers experiencing a problem can be coached and encouraged towards positive behaviours. Those adolescents who are helping will benefit from increased self-efficacy, and the ones needing the help will also experience improved self-beliefs.

(iii) The role of parents in social persuasions

As mentioned in section 2.3, social persuasions, coaching and encouragement by a significant other, can lead adolescents to believe that they are capable of performing tasks. The following are examples of comments by participants who reflected on the role of parents in this regard.

> *Some people come from very bad environments like having parents that are alcoholics or abusive parents, so their self-esteem is very low. So, they tend to do things just because they want to belong, they want to feel loved. But, then some people will use that to their advantage and take that bad experience and look over it and possibly say, I will make something better out of this. I will make myself a better person (Participant 14, female, 15 Mar).*

The above indicates that the programme discussions increased the students' self-efficacy by them taking greater cognisance of the influence of family bonds in their lives as also shown by Livestrong (2011), as well as Haegerich and Tolan (2008:47-60).

6.4.2.3 The influence of extra-mural activities to address emotions on participants' self-efficacy

In terms of SCT (see section 2.4) and with reference to Bandura (1986:401), anxiety, stress, arousal, and mood states are related to efficacy beliefs. Participants' self-efficacy could be increased by them exploring how participation in extra-mural activities support them to address their emotions. Such discussions were facilitated with reference to what they had seen in the DVD resource, and in self-reflection of their life experiences.

In this study interviews with the adolescents provided them with the opportunity to reflect on what made them feel well in general and on their emotional and physical well-being. During the programme the adolescents' discussed how their participation in sports and in other extra mural activities helped them deal with negative emotions

and thus supported them to live 'above the influence'. A participant's comment on this was as follows:

> *I play sport, doing ballet. And when I've got free time with my family, my brother and I play Scrabble. When I'm done with my schoolwork I read a lot. I love reading, because there's a lot of interesting things when you read. You learn a lot. And I like listening to music. Sometimes I watch TV. On the internet, and like when you're playing sports a lot you like get to learn, get to meet new people. And those people are like motivating you, because most people playing sports in my life, are like very energetic and they like tell you more about….and then you get to be like…..everybody gets to know more about each other. So, it's in a good way, because we are not learning about drugs, now you're learning about basically everything in a good positive way. I think if they, like say, associate with sports and always with their family and all, with sport, they won't like go smoking and everything. They can accept that instead of smoking, they play sports. They won't really have the time to go and smoke and drink, because most of their time will be like watching sports with their families and their friends. So playing sports helps them (Participant 22, female, 13 Mar).*

Thus, programme discussions of the topic had facilitated increased perceptions on the role of authentic mastery experience (see section 2.3.1) in building a sense of self-efficacy. Success at a given task and reflections thereon would increase efficacy expectations for that particular task.

6.4.2.4 The influence of choice of behaviour on participants' self-efficacy

The participants' self-efficacy was increased by them exploring their perceptions on their choices of behaviour, their setting of goals for the future, and their creating of motivating incentives in their lives. This was facilitated during the programme by means of discussions on what the adolescents had seen in the DVD resource, and through self-reflection and self-evaluation of their life experiences.

In terms of SCT (see section 2.5), choice of behaviour plays an important role in the development of adolescents' self-beliefs. In my interviews with the participants, the topic of free will was introduced to facilitate and coach the adolescents to be more

self-reflective of how they could actively contribute to their life circumstances. The following comments from the participants illustrated their intentionality, their creating of motivating incentives and their setting of goals to inspire them and make good decisions.

We focus on what we are doing and what we want in life. So, like in our school now, we've got our own study group .... and every day we go for like about two hours to the library to study and for all our work. And we help each other and we talk about things. So, at the end of the day that's what makes us very confident, because we know we've got each other. So, I think that people who don't feel like they've got anyone, they can join us in order to feel confident, self-confident. Yeah, if you do that then you are going to leave there, and at the end of the day say, I know what I want it, and I achieved it. But then, if you don't do that you going to end up as a failure and you are not going to achieve anything. That's basically the question. What do you want in life (Participant 22, female, Mar 13).

I'd like to help others that don't understand how to be drug-free, all these things. Some of them like, they don't want to do drugs anymore, but they don't know how to stop drugs, all those things. I would like to be the person to motivate them, and show them how to stop drugs, and explain how in life…. if you don't do drugs you can succeed in life (Participant 7, male, 19 Mar).

I have a set goal, a positive one. I want to get as educated as possible, and I don't think I can do that if I have distractions like drugs and alcohol, where I can end up getting addicted and not being able to focus on my studies. (Participant 14, female, Mar 15).

I plan. I've planned out my life, so I know what I want to do, I know what I want to achieve, I know what I want to become (Participant 2, female, Mar 13).

It is clear that the programme had facilitated increased perceptions on the role of choice of behaviour in influencing the adolescents' functioning and the course of environmental events influencing them. Bandura (2008:87), in his discussion of the agentic perspective, emphasises that adolescents can use their personal influence to

determine conditions governing self-development, adaptation and change (see also section 2.3.5).

6.4.3 Positive processes experienced by the adolescents in the programme in the light of SCT/SET

In this section I discuss interview data that indicate positive processes and findings of having had participated in the psycho-educational programme to prevent adolescent substance abuse. The data were generated by means of questions that I created from the literature review to encourage adolescents to believe that they have the cognitive means by which they are able to influence their own destiny (Maddux, 1995:4; Pajares, 2002a). These questions were phrased in relation to some of the main tenets of SCT/SET and were supplementary questions to the ATI interview materials. The interviews included aspects related to adolescents' fundamental capabilities to symbolise, plan alternative strategies (forethought), learn through vicarious experience, to self-regulate and to self-reflect (see also section 2.2). I also questioned them on dimensions of perseverance and effort expenditure as processes which relate to the strength of the adolescents' self-efficacy in adversity (section 2.3.6.2).

6.4.3.1 Processes of self-reflection, outcome expectations and learning from vicarious experience

In this section I discuss the students' self-reflections and visualising of their outcome expectations in relation to the consequences of sobriety; of drinking; the likelihood of taking drugs or start drinking in the future; and how confident they were in specific situations, including coping with peer pressure. According to DiClemente *et al.* (1995:113) (see also sections 2.4.5 and 2.4.6) it is important to review the distinction between efficacy expectations and outcome expectations for addictive behaviours. Outcome expectations relate to sobriety, a drug free life and beliefs on the positive and negative consequences of these states (Meece & Schunk, 2005:73). Efficacy evaluations, however, represent individuals' confidence in their ability to reach a particular target behaviour (DiClemente *et al.,* 1995:114). The findings from the empirical study on these themes now follow.

(i) Visualising the positive consequences of sobriety

According to Bandura (1999:215), training in cognitive self-regulatory coping strategies can predict enduring abstinence to resist drinking alcohol (see section 2.4.8.2). I thus asked the participants what they visualised to be the positive consequences of sobriety. In other words, what the positive result was of not partaking of alcohol. The participants commented in particular on the positive influence of abstinence on withstanding negative peer pressure and on making responsible choices. For example:

> *The positive thing of not taking alcohol is that you are able to stand firm and expect what comes along your way. You are able to take decisions in your life (Participant 1, female, 9 Mar).*

> *Being sober? Well, you're always aware of what you're doing if you're sober. You make conscious decisions. You are less likely to regret anything that you've done, because you are quite aware of what you're doing, unlike when you drunk (Participant 14, female, 15 Mar).*

> *I think when you drink, you're not in your right mind, you don't understand what you're doing, you're lost, you're confused and being sober is a much better thing because you understand life, you can compare better and you know what you doing, Alcohol makes you do stupid things, like some people fall pregnant when they're drunk (Participant 2, female, 13 Mar).*

I interpreted from the above outcome expectation comments that the students' visualisation of the positive consequences of sobriety would help them in the future with increased abstinence self-efficacy (see also section 2.4.8.2).

(ii) Visualising the negative consequences of drinking

When the students were asked how they visualised the negative consequences of drinking, this reflective outcome expectation process was also an exercise in cognitive self-regulatory coping strategies (see section 2.4.8.2). Some of the participants' comments were as follows:

The negative, I can say is that it leads you to an unhealthy life; it also leads you to earn unclear vision with your life. It also leads you to an unsuccessful future (Participant 1, female, 9 Mar).

The negative effects of drugs, it can make you sick and you can also get addicted, and then you end up stealing from people, stealing your mother's money and then doing things that you've never done before just to get those drugs. Sometimes drugs can cost you your life (Participant 17, male, 29 Nov).

There are many negative consequences, the children get raped and neglected, they sometimes go for abortion, sometimes they even have the children, and you know people are killed. People are raped (Participant 22, female, 13 Mar).

What I think of them, they always go out to parties and all those things. For example, when we're writing exams, all they think about is alcohol, drugs all those things. They don't focus in class, like writing their exams. Maybe they're thinking about alcohol, maybe their friends they're waiting for them outside, to do all those things (Participant 7, male, 19 Mar).

I interpreted from the above comments that the students' visualisation of the negative consequences of drinking would help them in the future with increased abstinence self-efficacy (see section 2.4.8.2).

(iii) The likelihood or expectation of taking drugs or alcohol in the future

At completion of the programme, I asked the students to predict their future estimated responses and expectations to abstain from taking drugs or alcohol. According to Bandura (1997:367) self-convincing early experiences to achieve abstinence can encourage adolescents to persevere, maintain and sustain the effort needed to succeed.

I'm always trying to compare myself with those people who don't take drugs or are involved in none of the above that is mentioned, drugs, alcohol, all those things

that I've seen in the video, and it leads to a comfortable confidence of my life (Participant 1, female, 9 April).

Well, I don't drink at all, so now I have a more of a reason not to because I'm seeing what the others kids were going through, why they started drinking and all of that. I would be more aware of the things maybe if I was caught in that situation, I'd know to avoid doing this because it would get me into drinking. Because now I know, I've seen people that have been going through this, so I think it would help me that way (Participant 14, female, 3 Mar).

From the above comments, I would interpret that the participants had clearly envisaged positive outcomes in the future, in terms of their self-confidence and an enduring abstinence. These outcome expectations can encourage the perseverance and effort expenditure necessary to consistently stay 'above the influence' (see section 2.4.8.2).

(iv) Withstanding peer pressure in specific situations in the future

It was emphasised in section 2.4.9.1 that building a personal intention to stay drug-free, is a quality of commitment that can protect adolescents from engaging in risky behaviour. Comments from the students indicated how confident they were that they could cope with specific situations, for example, withstanding the peer pressure to smoke, drink and take drugs. The following are typical examples of their expressions of commitment:

Knowing the consequences of taking drugs and alcohol, and being able to stand up for myself, I have that ability, I am able to say 'no'. I'm not influenced by other people's choices. I have my own goals and visions that I want to pursue ... my peers won't have any influence on that (Participant 14, female, 15 Mar).

I think everyone has a mind of their own and everyone has responsibilities and choices to make. If you understand your responsibilities in life and what it does to you, I think I'll be able to walk away and say 'no' (Participant 2, female, 13 Mar).

I used to feel like left out and I didn't fit in, but then I started to realise that I don't need to fit in, I want to stand out of the crowd. So, now when I see them like all drinking and everything, I don't feel anything. I feel confident and I don't want to go in that direction (Participant 22, female 13 Mar).

Yes, I'm pretty sure I will say 'no', definitely no! Like people living around me they, like my friends, won't influence bad things to me. I pretty sure I will say 'no' because I'm not interested all those things… (Participant 5, male, 19 Mar)

I interpreted from the students' above comments, that their expressions of commitment to stay drug-free when faced with peer pressure had increased their abstinence self-efficacy and that they would consequently stay 'above the influence' in the future when with their peers.

6.4.3.2 Processes of planning alternative strategies (forethought) and self-regulation

According to Bandura (1997:363-364) and as mentioned in section 2.3.1, adolescents who have difficulty in controlling their drinking behaviour can develop self-regulative skills and rehearse flexible plans of action. By dealing with progressively more risky drinking situations in their natural environment, they can learn to remedy their vulnerabilities. For example, if they had intended going to a party where they might encounter difficulties, in their mind they could rehearse beforehand how to react in that situation, so that they could be prepared with responses when they get to that type of event. Some positive comments made by the adolescents on this were as follows:

Yes, I would be prepared to respond in that kind of situation. By taking part, by actually being a defender in what's happening to say that I will be able to prepare for risk, by taking a step forward, knowing that I'm doing the right thing. At least there is one life in front of you, than seeing it's happening like and just let it go (Participant 1, female, 9 Mar).

I would tell the host of the party that I don't drink alcohol, so if they want me at that party, they should have juice or something. But, I don't really go to

parties. So, I'm not sure how I'd handle that situation. But, I think I'd have to speak to the host, and they would have to understand that, you know, it's important for me to be at that party, you know, maybe it's a very close friend. I'd probably have to go but I'd have to explain that, ok, I'm not going to drink, you'll have to respect my decision (Participant 14, female, 13 Mar).

I think that there's nothing wrong with partying. It's how you party that can become a problem. It's just like how people drink alcohol, there's nothing wrong with having like two glasses of wine. But when you drink to get drunk then that's where the problem is. If I go to a party, and I enjoy myself, I don't have any alcohol. I party and enjoy the music, I go back home. (Participant 23, female, 9 Mar).

If you are at the place, I think it's to be strong minded, strong willed, you have to know you are alright, you have to know that you can make responsible decisions (Participant 2, female, 13 Mar).

I wouldn't go to parties like that if I know this is what's happening. I would go to like family parties, and people I really, really trust, I will go with them. But I wouldn't go to like clubs and like that (Participant 22, female, Mar 13).

The students' comments above indicate that by rehearsing flexible plans of action, this experience had increased their abstinence self-efficacy and they could in the future be able to manage without recourse to alcohol. The interview discussions with the participants in the psycho-educational programme, supported by use of a criterion-selected audio-visual medium, served as an effective exercise in practicing such rehearsal strategies.

6.4.3.3 Processes of perseverance and effort expenditure in adversity

In section 2.3.6.2 strength of self-efficacy was discussed. Adolescents who have the self-belief that they are capable of abstaining from drinking alcohol at a party, will have the conviction to persevere in those circumstances.

During the programme I encouraged the participants to be resolute and to put in more effort to accomplish their goals, and also motivated students towards responsible choices. Participants indicated what influenced their perseverance in various situations. Comments from the participants emphasised their views on the importance of strength of character.

> *With faith you can do anything. Like, for example, my father always tells us the story about him, when he was growing up. How, his parents were poor. They were struggling at home, but with faith...he ended up with a nice job now. So, if you have faith into what you are doing, you can do anything, you can succeed in life. And another thing is, I believe in God….. (Participant 7, male, 19 Mar)*

> *I give myself a confidence and am positive of what I'm doing. Ja, and I know I'm an optimistic person and lead an exemplary life to follow (Participant 1, female, 9 Mar).*

> *If people motivate you and keep you up ... I've got people who are like motivating me in all this business. Then you will eventually achieve what you want (Participant 22, female, 13 Mar).*

I interpreted the above comments to suggest that the participants had understood the importance of persevering when confronting obstacles and that reflecting on this in the interviews had been helpful to them. According to Haegerich and Tolan (2008:47-60) the higher the adolescents' sense of efficacy, the greater their effort and perseverance. Adolescents with a strong sense of personal competence approach difficult tasks as challenges they could surmount rather than as threats to be avoided (see also section 2.3.7.2).

6.4.4 Challenges or difficulties experienced by the adolescents in their participation in the programme

Here I discuss any discrepant and negative evidence, also critical incidents. One of the challenges the adolescents experienced was being able to discern the difference between positive and negative influences in the audio-visual media. Only a few of the

influences that were referenced in the videos were a little challenging to some of the participants. Many of the adolescents recognised the negative and positive role modelling effects conveyed in the resource. The students had to carefully evaluate their assumptions, cognitions, emotions, and take a proactive stance towards understanding certain aspects of the audio-visual material. This didn't appear to cause most of the participants any undue difficulty, but a sense of maturity was perhaps necessary to discern the differences between some of the positive and some of the negative influences. The students all agreed that there were both negative and positive influences referenced in what they had seen. One student had this to say:

> *They were talking about people that were 'negative' influences to them and, they are being a positive influence to us by telling us not to associate with those people (Participant 14, female, 16 Nov).*

There were also some difficulties with a few of the students' participation in the chat-room sessions, due to limited availability of internet facilities at home and the wish for anonymity. Some of the participants were seeking more assurance of their anonymity in participating online. The following comment illustrates this:

> *I met some friends (online). There were kind of some positive things there, they helped me a lot. Like, asking how people in your life influence you, make better choices, and things like that. So, you had to sit and think. Like the people that were in your life, were they really good for you? You know, some of them weren't. I think people respond differently to, differences, because we know there are different types of communication obviously. So, people may be good with verbal communication, or written communication, or electronic, or just simply being anonymous. Not wanting to be known who they are, but they want to be heard, that kind of thing (Participant 14, female, 15 Mar).*

I therefore suggested that adolescents who were hesitant could also use the chat-room sessions by signing up under a pseudonym, and then participate in the focus group discussions. Adolescents who were reticent to participate would then be able to be anonymous in the chat-room (see also section 6.4.5).

6.4.5 Recommendations for improvements to the programme, the resource or the presentation

In this section suggestions for improvements to the programme are given. The participants had a number of comments as to how the programme and the audio-visual resource could be improved in the schools to adapt it for better usage in South Africa.

6.4.5.1 Recommendations for improvements to the resource (the audio-visual media)

(i) A story with actors

The students suggested that the DVD media should have more of a storyline to it. Some of the quotes from participants on this topic were as follows:

> *When you make another DVD or so, you should have a storyline to it like, make actors act, like something had happened to them with drugs and experience. That's where teenagers would prefer to watch it more. With people talking they are not really paying attention. They would like to see a movie, a story with actors in them, that's drama (Participant 11, female, 17 Jan).*

> *You should have actors and make up a story like something probably happens to this girl, her parents neglected her, you know what I'm saying, and that's how she got into drugs. And how she went through rehab. If you see a story like that, people will be more interested watching a story like that, than just showing that person's life experience. It should be a whole story like a movie for instance. You know what ... I've been there, I've been in their shoes, and I can tell you it's not easy, but there is a way out (Participant 11, female, 9 Mar).*

In line with the above, a student suggested using adolescents who had experienced difficult things themselves, as role model participants in the DVD. Her comments were, "You can take people who have been through things in school. You can put them there" (Participant 22, female, 15 Dec).

One student thought that there should be less music and more one-to-one sessions with a facilitator. Thus, it seems that the interview sessions of the programme had been a very helpful ancillary component together with the audio-visual media resource.

(ii) Use of sub-titles within the DVD resource

I voiced to the participants my thoughts to try and improve the resource by including indigenous languages as well (e.g. Xhosa, Sesotho, Nguni, Zulu). The indigenous language subscripts could be integrated. Interview data indicated that the students favoured this idea as an aid to understanding. Many, but not all of the participants had a comprehension of the problems related to substance abuse. Comments included:

> *Maybe that* [using indigenous language subscripts] *can help. Me, I could understand what was going on. But, then maybe if it was put in a South African environment kind of thing, then maybe it would help and reach out to others as well (Participant 14, female, Mar 15).*

> *I think it could* [be helpful] *because there are people who don't understand English. When they know it's their language, they are going to want to watch it. If it's just in English, then they are going to say that it's only catering for the whites and the Indians, what about us? (Participant 22, female, 13 Mar).*

6.4.5.2 Recommendations for improvements to the presentation of the programme by teachers

Adolescents' comments emphasised the role of teachers in making the programme work effectively. This is in line with principle 11 (that calls for the inclusion of teacher training) of the principles for an effective psycho-educational programme – see section 4.5.2. One participant mentioned

> *Sometimes teachers will be harsh to the learners – they need someone polite. I think people should participate in the programme that can show them* [drug abusers] *love 'cause they need love (Participant 7, male, 15 Dec).*

The participants suggested that a psycho-educational programme to prevent adolescent substance abuse could be presented regularly as part of Life Orientation. This would enable more interactive classroom discussions between teachers and the students on a regular basis. This is in accordance with principle 10 (that requires long-term use with repeated reinforcing sessions over time) – see section 4.5.2. However, these teachers needed to view students' disclosures as confidential. For example, adolescents stated,

> *I think the programme is a good programme, but then, I think we can like watch it at least like every Friday and then we can like discuss it. We can talk about the things that influence us with the learners who are our classmates (Participant 23, female, 29 Nov).*

> *I think it's relevant for Life Orientation. I think we should discuss this thing on a deeper level, you know. But in some schools …teachers are not that reliable. You go to a teacher with confidence and you tell them something and then you hear that it's being discussed in the staffroom (Participant 14, female, Mar 15).*

From the above comments it seems that the students believed that there should be more interactive discussions in the classroom, where the teacher can speak to them and discuss issues related to substance abuse in detail. After having watched the video resource, some students needed to ask the teacher questions and the teacher needed to be available for discussions.

The students were also of the opinion that their teachers needed to be trained in the necessary academic and counselling skills to be able to implement such a programme most efficiently. To this purpose, there should be teacher training courses and workshops for prospective programme facilitators. Teachers trained with such skills would then be better equipped to conduct interviews and assist better with the programme after these interventions.

The practical activities and interviews were also enjoyed by the students and one student recommended that the teachers be trained to use more practical activities in the programme. She stated, “Above the Influence can help provide more practical activities that we can do, other than watching the videos, which were cool” (Participant 14, female, 17 Jan).

6.4.5.3 Recommendations for greater community and parental involvement in the presentation of the programme

Some students thought that an increased community involvement would be most advantageous in the presentation of the programme. For example, a student stated: “I think it is a great programme. It would be nice to get together with other schools in our province and spread the word” (Participant 23, female, 17 Jan).

The participants’ comments also suggested that parents and the community could become more involved in improving the presentation of the resource and the programme itself to make it more relevant for that community. This is in line with principle 3 (that recommends that that substance abuse programmes should be designed to directly address the needs of local communities), and principle 5 (indicating the family relationships need to be improved by such programmes) – see section 4.5.2.

6.5 SUMMARY

In this chapter, I presented the findings of the empirical investigation. To this end, I presented the positive aspects of the programme; the programme in the light of SCT/SET; positive processes experienced by the adolescents in the programme in the light of SCT/SET; challenges or difficulties experienced by the adolescents in their participation in the programme; and recommendations for improvements to the programme, the resource or the presentation.

In the next chapter, the conclusions, recommendations and limitations of this research are provided.

CHAPTER 7

CONCLUSIONS, RECOMMENDATIONS AND LIMITATIONS

7.1 INTRODUCTION

In the previous chapter the findings of the empirical investigation were presented. The findings indicated the adolescent participants' perceptions of what was positive about the programme that was implemented, what was negative about the programme and what needed to be done to improve the programme.

In this chapter the conclusions, recommendations and limitations of the research are provided. The conclusions are used to answer the main research question which is: *How can a psycho-educational programme, using ATI as audio-visual media resource, most effectively assist teachers and parents to prevent adolescent students' substance abuse?* The recommendations are used to reach the specific aim of this research, namely to provide suggestions to teachers and parents how to implement this type of a programme.

It should be noted that no definite conclusions can be drawn that the programme did in fact prevent adolescent substance abuse. There are two reasons for this: (i) The programme developed in this research would need to be implemented over a long time period for reinforcement to have a significant impact. This particular study was a once–off development, implementation and evaluation. (ii) To evaluate the long-term impact of the programme to prevent adolescent substance abuse, a longitudinal study would be needed. This is beyond the scope of a doctoral thesis.

The study concludes with recommendations for further research. The limitations of the research are also highlighted.

7.2 CONCLUSIONS

In the conclusions that follow, I identified important patterns from the literature review and the empirical investigation, which aimed to build adolescents' self-efficacy in the

following ways using SCT and SET (see sections 4.11.1 - 4.11.6, also sections 2.4.9.3, 2.4.9.4 and 2.4.11, for strategies to be used by teachers, as well as sections 6.4.1 - 6.4.3). The research has determined that an integrated psycho-educational programme using selected evidence-based audio-visual media resources and content from the literature review can be effective in helping teachers and parents in an effort to prevent adolescent substance abuse (see chapter 5 and Section 4.12 for details of the intervention).

I concluded primarily, from the findings, that the media and materials from the ATI (2011) resource can be well used in an adapted programme, modified to an extent by use of the SCT/SET conceptual framework in its content and presentation.

Firstly, I discuss the conclusions from the literature study and empirical investigation to describe how the individual items or topics of *content* were adopted within this programme and their relevance in the light of SCT/SET. Secondly, conclusions on the actual delivery and *presentation* are provided.

7.2.1 Conclusions on resource and programme content

The effectiveness of this audio-visual programme was determined partly by its specific *content*, as well as by its *presentation*. To be effective, I conclude that the resource content should provide information and strategies on how to cope with the challenges faced by adolescents (see Section 4.12 and Appendix F). Also, I conclude from the findings that the participants' academic and social competencies and their self-beliefs had improved. The adolescents were now better equipped with the skills and self-efficacy to respond proactively in difficult and challenging situations.

7.2.1.1 Conclusions on how audio-visual media resource content can be used effectively to assist teachers and parents

(i) The resource content increased adolescents' learning skills

The DVD content helped the adolescents to realise the importance of improving their studying skills and to recognise the importance of learning (see section 6.4.1.1). A respect for parents and willingness to learn from them was recognised in the video.

Students were provided with the opportunity to learn vicariously by observing other people's mistakes and to learn from their shared experiences, so that in life the observing participants would not make the same mistakes that the role model actors made. Watching the DVD content taught the participants not to take alcohol and drugs lightly, because when they watched the video, they could recognise the negative consequences of participation. They also learned how people could overcome substance abuse.

(ii) The resource content facilitated adolescents' communication skills

In section 6.4.1.1, it was noted that the DVD content had afforded participants the opportunity to increase their communication skills by the observational learning from role models. I concluded that it was the combination of using the resource content together with the interactive in-person interviews, and the practicing of various activities which had enhanced their communication skills and understanding (see *principle 8* in Section 4.5.2).

(iii) The resource content strengthened adolescents' peer relationships

The DVD content had a positive effect on the participants with regard to their peer relationships (see section 6.4.1.1). It made them more aware on the importance of peer helping and encouraging others. When experiencing peer pressure, it was advisable to focus primarily on what they believed was right. The role of choice and the agentic perspective was emphasised in the video, suggesting that adolescents had to take responsibility for making their own choices when in situations of peer pressure (see section 2.3.5).

(iv) The resource content increased adolescents' self-efficacy

I conclude that viewing of the DVD content had helped the adolescents in increasing their self-beliefs (see section 6.4.1.1). The resource advised them how they might hope for a good future, to envisage success, and it encouraged them to see how they could change their lives for the better. The content reminded adolescents of the necessity to persevere, to set goals and to create motivating incentives (see also section 2.3.5). It emphasised self-improvement and mastery experiences (see

section 2.3.1) in becoming a better person, also learning from mistakes, and it motivated the students to do the right thing in life.

(v) The resource content increased adolescents' assertiveness

I conclude that the DVD content had helped to enhance the adolescents' assertiveness skills (see section 6.4.1.1 and section 2.3.5). They were now able to understand things better from what they had seen in the video, and wouldn't take things for granted in the future. They would actively change for the better and be more assertive. It advised them not to be shy and, also, how to overcome feelings of self-inferiority.

(vi) The resource content increased adolescents' resistance against drugs

The resource DVD had helped the adolescents vicariously through observational learning to increase their drug resistance standards (see also section 6.4.1.1 and *principle 6* in Section 4.5.2). The videos were considered by participants as living proof that they should 'stay above the influence', and that alcohol and drugs were not worthwhile. They were made more aware of the fact that joining wrong company could also cause them to experience pressure.

(vii) The resource content enforced anti-drug attitudes in the adolescents

The resource helped the adolescents to develop an increased sense of abstinence self-efficacy and they would be much less likely to want to use drugs or alcohol in the future than before (see sections 2.4.4 and 2.4.8.2). They had learned from the DVD to make the right decisions in their lives, to become educated, so that they could advise other people to stay away from drugs and alcohol. The learning content gave them new reasons why they should not abuse substances, and insights into the dangers of abuse that they were not previously aware of. The children speaking on the video about their experiences opened the observing participants' eyes to see that they did not want to experience the negative effects of substance abuse. The video showed a healthy way of living to aspire to, as well as all the side effects of substance abuse in contrast (see section 6.4.1.1).

7.2.1.2 Conclusions on how online chat-room session resource content can be used effectively

I conclude that the programme's online chat sessions and content should be moderated by a trained ATI teacher to help facilitate interesting interactive discussions. A multi-modal preventive effort using a variety of online resource content is more likely to be effective (see section 6.4.1.2 and *principle 8* in Section 4.5.2). The online chat-room session content was helpful in facilitating relevant discussions on various programme related topics which allowed for many different views and opinions. This helped to encourage the participants to choose a better life and group of friends.

7.2.1.3 Conclusions on how programme content and discussion processes should be interpreted in the light of SCT/SET

I conclude that the participants' self-efficacy had increased by their experiences of exploring the influence of *role modelling* (see section 2.3.2), *social persuasions* (see section 2.3.3), *emotions* (see section 2.3.4) and *choice of behaviour* (see section 2.3.5), either with direct reference to what they had seen in the DVD resource, or by processes of self-reflection on and self-evaluation of their life experiences. My positive expectations as to how the programme content and processes of discussion should be interpreted, in the light of SCT/SET, now follow.

(i) Conclusions on how the discussion content on the influence of role modelling had influenced participants' self-efficacy

The participants' self-efficacy increased by the processes of them exploring the influence of role modelling and social comparisons in their lives (see sections 2.3.2 and 6.4.2.1). The influence of free will on adolescents' choice of behaviour was emphasised in particular in these discussions (see section 2.3.5).

Some friends were positive role models. However*, friends were not necessarily positive* role models (see section 6.4.2.1). Thus, it was concluded that adolescents should be their 'own role model' and that they should set good examples for themselves, and for others as well. If their peers could see a certain adolescent didn't

smoke, and kept away from negatively influencing groups, that would then be an encouragement to others to want to be like such a person, which would assist in the observers' increasing their self-beliefs and self-confidence.

Famous people were positive role models to the adolescents (see section 6.4.2.1). I conclude that the participants were influenced positively by identifying in discussions with the lifestyle examples of some famous people. For example, the American actor, Denzel W (in the vernacular), had lived in a bad neighbourhood that was always influenced by drugs and alcohol and crime when he was young. Nevertheless, he had joined a boys and girls club that was shown in the resource video of the ATI DVD. He was named by one of the participants as a significant positive influence and, as a positive role model and an inspiration. Jabu P, a footballer, who had previously done drugs but had overcome them, was a motivational character for another student, who also mentioned the rugby player, Brian Habana as a role model, because of his sporting skills, but also because of his kindness and generosity to his community. Musicians, like HHP, were also considered as inspirational. I therefore conclude that these discussions on role modelling made participants more aware of the role of influence in their lives and to 'stay above the influence' by identifying and reflecting on people with good character. This is consistent with SCT/SET and leads to increasing of self-beliefs.

Sometimes *famous people* were, however, also negative role models to the participants (see section 6.4.2.1). The students also showed cognisance of the influence of negative role models who sometimes did drugs and alcohol and this motivated some adolescents into believing that that was the life to aspire to. The programme reminded the participants that even if these role models were negative, they nevertheless somehow appealed to many of the adolescents. This facilitated debate on the issue. This debate was an emerging feature of a discussion in the study, and I conclude that such interactive exchange had provided the participants with the opportunity to reflect on their intentionality of influencing their own behaviour, in terms of the agentic perspective (section 2.3.5). This debate had helped the participants to reflect on how they could contribute to their own life circumstances instead of just being influenced by them. The participants and I concluded that a role model was somebody who would have a positive influence in your life that you would look up to. I therefore conclude that a psycho-educational programme, such as this

one, created a very useful forum for debate of such issues. When combined with the interactive coaching input of a teacher and supporting audio-visual resources, the qualitative discussions were a source of positive influence and an inspiration to the participants to correct erroneous beliefs and to see things in a healthy perspective.

Family and some community members were also seen as role models by the participants (see sections 6.4.2.1 and 2.4.9.1). I conclude from our discussions that there had been much reflection by the students on this account. If a student's father was not a very good role model but abused substances such as alcohol, for instance, this would not necessarily have to have a negative influence on that adolescents' life. The adolescent could either choose to be like the father, or could choose to have a better life (see agentic perspective, section 2.3.5). I also conclude that some of the participants were emphatic in their praise of their parents, who were considered an inspiration, as well as role models of confidence and of adopting an exemplary and Christian lifestyle. Accordingly, some students praised their church as an 'extended family' who had influenced them positively. I therefore conclude that the participants' discussion experiences had facilitated increased perceptions on the topic of role modelling and its influence on self-efficacy. The students had gained an increased self-efficacy to reflect in the light of the core properties of human agency, being intentionality, forethought, self-reactiveness and self-reflectiveness (see section 2.3.5).

(ii) Conclusions on how the discussion content on the influence of social persuasions had increased participants' self-efficacy

Participants' self-efficacy had increased by the processes of their exploration of the influence of social persuasions in their lives (see sections 2.3.3 and 6.4.2.2). The topic of social persuasions was introduced to facilitate and coach the adolescents to be more self-reflective on their perceptions of free choice of behaviour, a key aspect of Bandura's agentic perspective (see section 2.3.5). The adolescents were therefore questioned about being influenced by their parents, peers and the media, including social media. I conclude that they had reflected well on this aspect of influence in their lives. My positive expectation and interpretation of this is that they should in the future be better equipped to deal with this matter and more cognisant of the effects of social persuasions in their lives; the conclusions on this follow below:

The role of the media at large was perceived negatively by some participants as they had indicated that the images seen in the media at large were often computerised and were unrealistically portrayed (see section 6.4.2.2). I conclude that by their being self-reflective about the role of the media, the adolescents would be better equipped to self-regulate their behaviour. This form of control self-efficacy (see section 2.4.4) focuses on adolescents' confidence in their capability to control their behaviour in a variety of provocative situations, such as being influenced by observing advertisements on television persuading people to drink alcohol.

The social media and cellular telephones were also evaluated objectively in the discussions as a form of social persuasion and as a type of peer pressure (see section 6.4.2.2). I conclude that cellular telephones with chat messaging systems were a distraction to adolescents and without proper self-discipline, adolescents would sometimes be inclined to neglect their schoolwork. This might make them susceptible to other extraneous influences and initiate subsequent substance abuse behaviours, by being negatively affected by peer pressure. I conclude from the students' comments and critique that the social media, including Twitter, Mxit and Facebook were often used by adolescents to seek out companionship, but that there were also inherent risks with these form of interactions, as the participants had mentioned. I conclude that the discussions on this topic during the programme implementation had served as an opportunity for the adolescents to be self-reflective. This enabled the participants to be better equipped to self-regulate their behaviour in a variety of provocative or risk situations, such as when interacting on the social networks and in coping with peer pressure (see sections 2.3.3 and 2.3.5).

The role of peers in social persuasions was acknowledged by the students (see section 6.4.2.2). The participants' perceptions of peer pressure influences revealed that older people or older friends could sometimes exert pressure on younger ones. I conclude that the programme succeeded in supporting adolescents to avoid negative peer pressure, to strive to make their own decisions and not try and impress others, to be themselves and to try and see things from the other person's point of view before judging them. The programme helped them see that they should not strive to fit in with the crowd at all costs (see section 6.4.2.2). I conclude from the findings that the participants were better able to perceive the negative effects of peer pressure

persuasions. The classroom discussions had served as an opportunity for the adolescents to be self-reflective. Thus, they should be better equipped to self-regulate their behaviour in a variety of provocative or risk situations. Their coping self-efficacy would be increased by taking greater cognisance of the need to be assertive with friends or if talking with someone who was emotionally distressed (see sections 2.3.3 and 2.3.5).

Peer helping and *teacher* positive social persuasions were also part of the discussion content (see section 6.4.2.2). I conclude that the participants hoped to help their fellow classmates who were experiencing difficulties. Neighbourhood help and community talking groups would also make adolescents more aware that there are people available to offer them assistance with various matters. The programme discussions facilitated the realisation that adolescents should form support groups and communicate their feelings, tell each other about their experiences and explain to others the positive and the negative effects of substances. The participants' had increased their self-efficacy by taking greater cognisance of the influence of peer helping in their lives. I conclude that by the adolescents identifying with peers who were setting a good example, peers experiencing a problem would be encouraged towards positive behaviours. Those adolescents who were helping others also benefitted from increased self-efficacy, and the ones needing the help also experienced improved self-belief.

Parents' social persuasions were positively perceived by the participants (see section 6.4.2.2). It was revealed in the findings that parents often influenced their children to a large extent, because they usually set rules for behaviours that were acceptable or not. The programme participation helped the participants to believe that those adolescents with parents who encouraged and supported them, would be 'strong-minded' and resilient before they even entered school. The findings showed that some of the adolescents wanted a better life than their parents had. Those adolescents indicated that they would make their own decisions without being influenced by a negative parent, and were conscious of how they, as adolescents, had free will (see section 2.3.5). In this way programme participation increased the participants' self-efficacy. They took greater cognisance of the influence of family bonds in their lives. The adolescents should therefore be less likely to use

substances when they have strong bonds with family and pro-social peers (see sections 2.3.2 and 2.3.3).

(iii) Conclusions on how discussion content on emotions had influenced participants' self-efficacy

The participants' self-efficacy had increased by the processes of them exploring the influence of emotions in their lives (see sections 2.3.4 and 6.4.2.3). The topic of physical well-being and healthy emotions was introduced to facilitate and coach the adolescents to be more self-reflective on their experiences of emotions. The findings indicate that the programme enhanced the adolescents' awareness that they could positively influence their emotional states and therefore also their self-efficacy beliefs. The adolescents realised that they should adopt a healthy lifestyle by, for example, participating in sports. This would leave them for little time or need to abuse substances. They should also participate in other worthwhile activities to promote their well-being such as reading. In this way most of their time would be occupied with constructive activities. The programme discussions on this topic had facilitated increased perceptions in the participants on the role of authentic mastery experience in increasing their self-efficacy (see section 2.3.1).

(iv) Conclusions on how discussion content on choice of behaviour had influenced participants' self-efficacy

The topic of free will and agency was introduced to facilitate and coach the adolescents to explore their perceptions, and to reflect on their choices of behaviour, their setting of goals for the future, and their creating of motivating incentives. The findings show that participants' self-efficacy had increased by them exploring the influence of choice of behaviour and free will in their lives (see sections 2.3.5 and 6.4.2.4). The programme discussions encouraged some adolescents to start their own study group in order to help each other and talk about things. This should make them more self-confident because they would know that they had each other to motivate. Deciding of their own free will to initiate such a study group gave adolescents the confidence to realise that they were instrumental in driving and in determining their own futures, and in achieving something positive of their own accord.

Some participants had also voiced their aims and goals in life (e.g. to be a social worker, or to help others to stay drug-free). The programme motivated the adolescents to make decisions to stay drug-free in the future because they were now consciously more aware of how drugs and alcohol would distract them from achieving their goals and visions in life. Thus, the discussion content on agency had facilitated a deeper understanding on the role of choice of behaviour in influencing the adolescents' functioning. Adolescents used their personal influence and ability to choose and determine the conditions governing their self-development, adaptation and change.

7.2.2 Conclusions on the programme's presentation

In this section I discuss my conclusions as to how the programme's use of interviewing should be done effectively. I also conclude on how SCT/SET discussion processes should be integrated successfully into the programme's presentation.

7.2.2.1 Conclusions on how the interviews should be presented effectively to assist teachers and parents

(i) Conclusions on the in-person individual interview presentations

According to section 6.4.1.3 it was found that the participants had benefited from the in-person individual interviewing phases, especially in their abilities to communicate verbally, and as a sounding board for feedback from their teacher. The interviewing presentations within the empirical investigation based on SCT/SET (see section 4.12) had been helpful to the students (see also Appendix F). The interviewing experiences had made participants more aware of issues related to substance abuse. Since the interviews required the participants to give their opinions and to answer questions, the programme interviews facilitated reflection and healthy decision-making.

(ii) Conclusions on the in-person focus group discussion presentations

Section 6.4.1.3 revealed that the participants had also enjoyed the in-person focus group interviewing phase (see section 4.12). The focus group phase had been

interesting and discussions had encouraged the adolescents to gain a deeper understanding about the role of influence in their lives, even though only a few had participated actively in the group phase discussions.

7.2.2.2 Conclusions on how SCT/SET discussion processes should be integrated effectively into the programme's presentation

From the findings in section 6.4.3, I conclude that the interview questions I had devised from the SCT/SET literature review should also be adopted in the programme to encourage and coach the adolescents towards increased self-efficacy (see section 2.2). I had also questioned the participants on dimensions of perseverance and effort expenditure which related to the strength of adolescents' self-efficacy in adversity (see also section 2.3.6.2). The research revealed that discussions on these core SCT/SET processes positively influenced the adolescents' self-efficacy beliefs and thus possibly their ability to abstain from alcohol and drugs. This is explained below. The processes I had selected from the literature review for inclusion within discussions were as follows:

- Processes of self-reflection, outcome expectations, and learning from vicarious experience (see section 6.4.3.1);
- Processes of planning alternative strategies (forethought) and self-regulation (see section 6.4.3.2);
- Processes of perseverance and effort expenditure in adversity (see section 6.4.3.3).

(i) Conclusions on how processes of self-reflection, outcome expectations, and learning from vicarious experience should be included in discussions

Section 6.4.3.1 described how students used self-reflections and visualising of their outcome expectations in relation to the positive consequences of sobriety (see also sections 2.4.5 and 2.4.6). I conclude that by *visualising the positive consequences of sobriety,* the adolescents had agreed to stand firm and had learned to expect what came along their way. This was an exercise in cognitive self-regulatory coping strategies (see section 2.4.8.2). The adolescents were reminded that if they were sober, they would always be aware of what they were doing and would make

conscious decisions. They would be less likely to regret anything that they had done, because they would be aware of what they were doing, unlike if they were under the influence of alcohol. The adolescents visualised that being sober was a positive aim, because they would understand life, be able to make good choices, live healthy lives, stay free from drugs, and were not going to fall pregnant or do anything else that would compromise their future. Such visualisation of the positive consequences of sobriety should help adolescents in the future with increased abstinence self-efficacy (see also section 2.4.8.2).

Section 6.4.3.1 revealed how students used self-reflections and visualising of their outcome expectations in relation to the expected negative consequences of drinking (see also sections 2.4.5 and 2.4.6). I conclude that *visualising the negative consequences of drinking* was also an exercise in cognitive self-regulatory coping strategies (see section 2.4.8.2). The programme helped the participants to understand that the negative results of drinking could have a snowball effect. The adolescents perceived that it led individuals to an unhealthy lifestyle and to an unsuccessful future. They perceived that the negative effects of drugs included poor health and addiction. Addiction in turn could lead to theft and participation in harmful behaviours in order to obtain the drugs. They could also fall victim to abuse. In addition, the students perceived from the consequences that they would not be able to study effectively. I conclude that the students' visualisation of the negative consequences of drinking could help them in the future with increased abstinence self-efficacy (see section 2.4.8.2).

Self-convincing early experiences helped some adolescents to achieve abstinence. This should encourage adolescents to persevere, maintain and sustain the effort needed to succeed (see section 6.4.3.1). Thus, there should be less of a *likelihood or expectation of participants taking drugs or alcohol in the future* as a result of this programme, as they stated verbally that they usually tried to associate with those people who did not drink and who were not involved in taking drugs or alcohol. This purportedly gave the adolescents confidence in life. This was facilitated by programme participation because they had seen in the DVD resource why some children started drinking and what they were going through. The students indicated that they now knew how to avoid situations that could predispose them to start drinking. I conclude that the participants had envisaged positive outcomes in the

future, in terms of their self-confidence and an enduring abstinence. I also conclude that the processes of visualising outcome expectations should encourage the adolescents with the perseverance and effort expenditure necessary to consistently stay ‘above the influence’ (see section 2.4.8.2).

I interpreted that participants should be able to better *withstand peer pressure in specific situations in the future* as was emphasised in section 2.4.9.1, namely that a firm personal intention to stay drug-free was a quality commitment that could protect adolescents from engaging in risky behaviour (see also section 6.4.3.1). I concluded from the findings that the adolescents were not influenced by other people’s choices and that they had created their own goals and visions which included responsible behaviour. They were clear about the fact that they had a mind of their own and that everyone had their own responsibilities, they would walk away from negative peer pressures and believed that they would stay ‘above the influence’. It was not necessary to try and fit in with the crowd, instead, it was better to want to stand out in a crowd, to be self-confident, and to know for themselves where they were going in life, they said. I interpreted that the participants’ expressions of commitment to stay drug-free when faced with peer pressure had increased their abstinence self-efficacy, and that they would consequently stay ‘above the influence’ in the future when with their peers.

(ii) Conclusions on how processes of planning alternative strategies (forethought) and self-regulation should be included in discussions

In section 6.4.3.2, it was shown how students should use processes of planning alternative strategies (forethought) and self-regulation in controlling their drinking behaviour. I concluded that adolescents should develop self-regulative skills and rehearse flexible plans of action, if they intended going to a party or into a risky environment where they might encounter difficulties, in order to be prepared for that type of situation (see section 2.3.1). By being well-prepared to respond to risk and knowing that they were doing the right thing, they could be in control and would therefore be less vulnerable to alcohol or drug abuse. They would know that, if invited to a party, not to go there with somebody that they did not know, also to arrange with the hosts beforehand that they should have something non-alcoholic to drink there for them. The adolescent would probably have to attend if the occasion

was for a close friend, but would then have to explain that he or she were not going to drink alcohol, and that the hosts would have to respect that decision. At a party the adolescent should be resilient, strong-willed, to know they made the right choices and to know that they would be responsible for themselves and should make responsible decisions. Some of the students emphasised that they would abstain from attending, which was also a suggestion in certain instances. I concluded that by rehearsing flexible plans of action and strategies in our discussion interviews, this process had increased the adolescents' abstinence self-efficacy and that they would consequently in the future be able to manage without recourse to alcohol or drugs.

(iii) Conclusions on how processes of perseverance and effort expenditure in adversity should be included in discussions

In section 2.3.6.2, strength of self-efficacy was discussed. In section 6.4.3.3, the findings showed that if adolescents could state categorically with a sense of self-belief that they were capable of abstaining from drinking alcohol at a party, they would be more resolute and persevering. In the empirical study, adolescents' processes of self-reflection on the importance of strength of character were also emphasised. Some of the participants had previously experienced poverty and hardship in their lives, but through perseverance and faith in God, they now believed that anything was possible and that they would succeed in life. When people motivated each other it led to increased self-belief and instilled the necessary confidence to achieve. I conclude that programme discussions supported the adolescents to understand the importance of persevering when confronting obstacles. Adolescents with a strong sense of personal competence could now approach difficult tasks as challenges they could surmount rather than as threats to be avoided (see also section 2.3.7.2).

7.2.3 Conclusions on difficulties experienced by the adolescents in their participation in the programme

I conclude that most of the participants in the programme were able to discern the difference between positive and negative influences portrayed in the audio-visual media resource. I also conclude that a sense of maturity in the adolescents was necessary to develop such skills of discernment. I think that the experience of

participating in this programme helped adolescents in developing that sense of maturity.

7.2.3.1 Conclusions on difficulties experienced in the chat-room sessions

As shown in section 6.4.4, I found that, even though the chat-room sessions had been favourably evaluated by the participants, there had been a certain reticence with participation by a few of them. This was attributable to the limited availability of internet facilities at home. In addition, in some instances the students were seeking more assurance of their anonymity in participating online. Although there were many positives emerging from the online sessions, students would sometimes simply have preferred to be anonymous. I conclude that pseudonyms are useful for chat-room participation by mutual agreement with the coordinating teacher.

7.2.4 Recommendations for improvements to the content and presentation

In this section suggestions for improvements are provided. I conclude that the programme could be improved in certain ways by changes to both the resource content as well as to the presentation.

7.2.4.1 Recommendations for improvements to the resource content (the social and audio-visual media)

(i) A story with actors

From the findings I conclude that the DVD resource media should have a stronger storyline to it (see section 6.4.5.1). A movie storyline would enhance the adolescents' experience, would be more interesting, and would improve attention to greater dramatic content. A movie could show, for example, drugs and what it could do to an adolescent. Through a storyline adolescents could learn what happened to an addicted person and how that person wanted to overcome addiction or recovered from addiction. This form of prevention could save many children's lives who might otherwise delve deeper into drugs. The students' suggestions for producing a movie should also be researched and explored further from a South African standpoint or perspective.

(ii) Use of sub-titles within the DVD resource

From the findings in section 6.4.5.1, I conclude that the resource content should be improved further by incorporating sub-titles in the indigenous languages, such as Xhosa, Sesotho, Nguni, and Zulu. This approach should be adapted within a revised ATI DVD, for example. The indigenous language subscripts could be integrated, because the ATI prevention messages would be better comprehended by those participants whose first language was not English. This is based on my observation that there were those adolescents who did not understand English very well, so they were less interested in participation. However, if it was in their own language, the adolescents would perhaps be more interested, and then they should learn more from the resource material. Thus they would derive the most benefit from the resource and comprehend the important points of the programme.

7.2.4.2 Recommendations for improvements to the presentation of the programme by teachers

(i) Teacher training, interactivity and involvement

I conclude from the findings in section 6.4.5.2, that the role of teachers in making the programme work effectively is an essential component in improving its presentation. Teachers with the necessary educational skills and personality attributes should be used as facilitators to motivate and show support to all the adolescents whose lives are influenced by drugs. The adolescents need teachers who could show love and care for them, and who could be sympathetic and understanding.

Life Orientation teachers should conduct regular ATI discussions in the classroom, as the participants had thought that this was very relevant for the subject.
Counselling should be conducted by facilitators who are qualified and who know that students' privacy and confidentiality needed to be respected. Many students were reticent to discuss problems related to substance abuse with their teachers because they felt that their confidentiality might be breached. In addition, gender also needs to be considered. For example, a female rather than a male counsellor would be better placed to discuss some matters, such as teenage pregnancies, with girls. There

should also be more interactive discussions in the classroom, where the teacher could speak to the adolescents and discuss substance abuse issues in detail instead of only watching the video. This would allow the adolescents to ask the teacher questions which could be discussed. It is clear that there should be teacher training courses and workshops for prospective ATI facilitators. Teachers trained with such skills would then be better equipped to conduct interviews and assist with discussions and practical activities in the programme.

(ii) Recommendations for greater community and parental involvement in the presentation of the programme

I conclude from the findings that there should be an increased community involvement with the presentation of the programme (see section 6.4.5.3). Community involvement could include the following: liaison with other schools, locally in our respective provinces, to improve the programme content by using local students as actors in the resource presentations, or as role model examples of individuals who had themselves experienced difficulties in their lives. I also conclude that the programme should be expanded to a greater extent, with posters in schools, public speaking, and group talks by social workers. The programme should also be better advertised.

The programme could be shown on televisions and in chatrooms. Other media may also be considered.

More funding is needed to equip schools better with the necessary educational technology and manpower that could support the presentation of this programme to best effect. The community could clearly become more involved in improving the presentation of the resource and the programme itself to try and prevent adolescent substance abuse.

(iii) Recommendations for how the 'ATI' campaign could help in improving the content and presentation

I conclude from the findings that the psycho-educational programme used in this study could help adolescents, especially here in South Africa, to be more empowered

or confident about their decisions (see section 6.4.5.3). Students need help to communicate with more confidence. To this end competitions or debates could be coordinated involving other schools. There could be carefully monitored communication on substance abuse with adolescents in adjoining schools using Facebook.

The presentation of the programme should be ongoing. It should include the showing of resource content, and the sharing of information and practical activities with other schools and teachers. In section 4.5.2, such reinforcing sessions were suggested for an effective intervention programme (see 4.5.2 *principle 10*).

(iv) The time-frame of the course and use of content and presentation

The presentation of the programme (see section 4.12 and Table 5.1) was divided into seven weekly sessions. The sequencing of programme content and its presentation, could, however, be adapted to suit the particular circumstances of a school in terms of teachers' time availability and the resources at the school. Sessions could also incorporate more or less of the given content, depending on whether the emphasis is towards individual or group in-person interviews, or towards online presentation of the materials. Teachers could refer to the Interview Guide (Appendix F) and other appendices enclosed to refine their presentation of the programme accordingly to suit their needs.

7.2.5 Contribution to knowledge

In this section, an interpretation of what makes this programme unique and indications of what *new contributions* it has made to new knowledge are provided. There were certain characteristics of this programme that made it different to other similar programmes. I now indicate what contribution my studies made. The rationale of the contribution towards new knowledge could perhaps be best explained as follows:

1. Provision of a state-of-the-art literature review of existing resources and identification of the principles of effective evidence-based prevention. Also, the identification and selection of 26 specific programmes (see Appendix J),

but the finding that there was a substantial monetary cost attached to most of them.

2. On the basis of this new state-of-the-art literature review (a contribution in itself) the selection of a resource, identified in terms of the principles of effective prevention, that can be implemented, evaluated and adapted to a programme within a South African environment, bearing in mind that teachers don't necessarily have the time, skills, or knowledge to implement such an evaluation.
3. Using the evidence-based principles it was decided to *select* the ATI resource for extensive *implementation* and *evaluation*. This was a first for South Africa, in the area of substance abuse prevention, especially in terms of using the conceptual framework of SCT/SET and the 11 principles for an effective programme.
4. The essence of the contribution to new knowledge, is that an existing evidence-based resource from the ONDCP (the ATI campaign, 2011), has been selected, implemented within a wider psycho-educational programme, and evaluated within a school, for possible usage in South Africa, using elements of SCT/SET in the process of implementation and evaluation.
5. The implementation, a first for South Africa, using SCT/SET, has contributed new knowledge for the future adaptation of this type of a programme, specifically for teachers who have no prior knowledge of SCT/SET. The way in which the programme is presented, lends itself towards comprehension and use by most teachers with little specialised training in implementation skills. This approach is cost-effective.

7.2.6 General conclusion

The evaluation and feedback from the participants suggests that with certain improvements and modifications, the ATI resource could be very successfully used in a programme that could be integrated into South Africa's Life Orientation learning syllabus.

7.2.6.1 A cost-effective programme

Although there are a number of existing evidence based programmes described in section 4.6.1 and 4.6.2 that may be effective for addressing substance abuse prevention, there are certain difficulties with implementing them *in South Africa* due to their costs (see section 1.2) (also see Appendix J). Therefore there was a need for an innovative, effective, yet low cost approach, for use in South Africa, which this programme aimed to provide (see section 4.12 and Chapter 5).

7.2.6.2 An integrated programme relevant for South African adolescents

This psycho-educational programme is the only one of its type in South Africa, to incorporate educational content into its presentation using specific audio-visual media from the ATI (2011) campaign (see Appendices D&E). The credibility and validity of the ATI campaign was established as part of the ONDCP in the USA and by prior empirical research (see section 4.8.4). Teachers may choose to integrate and share selected content from the Facebook page of ATI, depending on the applicability of the posts for a particular group.

7.2.6.3 Adaptation of a programme to suit the participants in terms of its emergent design

The emergent nature of this research enabled me to adapt the presentation of the programme content to consider feedback and suggestions from the participants at various stages of its implementation. The participants' evaluations of the programme at various stages were also used to help change it better to a South African environment. The evaluations have indicated the modifications needed to the content and presentation so that a programme of this type can be effective for assisting teachers and parents in South Africa.

On the basis of the empirical investigation and literature review I conclude that selected audio-visual media and, specifically the media from the ATI campaign (2011), can be used effectively in an integrated psycho-educational programme to prevent adolescent substance abuse. The information, techniques and strategies outlined in section 7.2.1 can be used as ideas or topics of content to stimulate

discussions with adolescents. Effective presentation of the programme can be enhanced by taking cognisance of the ideas for changes or improvements in section 7.2.2.

7.3 RECOMMENDATIONS

In view of the conclusions the following recommendations are made:

7.3.1 Recommendations for teachers and schools

- Items and topics of *content* outlined in section 7.2.1 need to be included in an effective programme aimed at prevention of adolescent substance abuse.
- To make certain that the programme *presentation* is effective, it needs to incorporate the ideas for changes or improvements aforementioned in section 7.2.2.
- If the *dialogue* of the media is in English, I recommend that subtitles in other languages be used in order to be more relevant for South Africa's learners, Afrikaans (Afrikaans), Ndebele (isiNdebele), Northern Sotho (Sesotho sa Leboa), Sotho (Sesotho), Swati (siSwati), Tsonga (Xitsonga), Tswana (Setswana), Venda (Tshivenda), Xhosa (isiXhosa) and Zulu (isiZulu).
- To *adapt* the presentation of the programme to suit the social, economic and political circumstances, cultural requirements, and needs of a particular school, also in terms of the availability of resources and technology.

7.3.2 Recommendations for further research

Recommendations for further study include:

- The development of an audio-visual media information *catalogue*, reviewed by teachers, for prevention of adolescent substance abuse, in collaboration with the Above the Influence (2011) campaign.
- Investigation into the commissioning of ATI teacher *trainers* and training of teachers via interactive workshops to present the programme, including accreditation of trainers within education departments. Also, research into

incorporation of programme content into the Life Orientation subject syllabus and expanding of the programme within schools.

- Investigation of the use of other language *subtitles* in audio-visual media with English dialogue used to prevent adolescent substance abuse.
- Research into the use of a dramatic *storyline* and local actors in the videos and making a movie by the ATI campaign.
- Investigation into continued online support and *re-enforcing sessions* to be offered via social media.

7.4 LIMITATIONS

The participants in this study were selected from a particular school in one city in South Africa. These adolescents were deemed by the principal, however, to be individuals 'at risk' for substance abuse. They were therefore well suited to take part in the programme. However, other authors need to evaluate to what extent findings may be applicable to adolescents living elsewhere in South Africa, or to those of other cultures and beliefs, or to those with differing social, political or economic backgrounds.

This thesis was not a longitudinal study but a case study. This implies that the long-term effect to what extent the programme prevented participants from abusing substances could not be determined.

7.5 SUMMARY

The aim of this research was to select, implement and evaluate a psycho-educational programme, to help teachers assist adolescent students with a substance abuse problem or those adolescents who are at risk. A literature study provided the theoretical background to the development and implementation of the programme. The conceptual framework of the study was based on SCT and SET. In the selection phase of the research the main principles identified for effective programmes were used to identify a useful audio-visual resource and design a suitable psycho-educational programme.

The programme was thereafter implemented with a group of 26 Grade 10 and 11 students in Pietermaritzburg. Thereafter the impact of this intervention was evaluated in the light of SCT and SET, and in terms of participants' views of the programme. Qualitative data collection took place within the seven sessions and a two month time frame that the programme was implemented. In-person and online focus groups as well as individual interviews and open-ended questions were used for data gathering. After a few months, some follow-up interviews were conducted. The findings indicated that audio-visual media, and specifically the media from the ATI campaign, can be used very effectively in an integrated psycho-educational programme aimed at preventing adolescent substance abuse.

The study pointed out some limitations of the research. Recommendations for improvement as well as for further research were made.

BIBLIOGRAPHY

Above the Influence (ATI) campaign. 2011. [Online]. Available at http://www.abovetheinfluence.com [Accessed on 27 March 2011].

Allan, B. 2007. *Blended learning. Tools for teaching and training.* London: Facet Publishing.

Alvarez-Nemegyei, J., Nuno-Gutierrez, B.L. & Rodriguez-Cerda, O. 2006. Why do adolescents use drugs? A common sense explanatory model from the social actor's perspective, *Adolescence*, 41(164):649.

American Heritage Dictionary of the English Language. 2007. (4th Edition.) Boston:Houghton Mifflin Company. [Online]. Available at http://0-www.credoreference.com.oasis.unisa.ac.za/book/hmdictenglang#T_2 [Accessed on 16 December 2010]

American Psychiatric Association. 2000. *Diagnostic and statistical manual of mental disorders 1V-text revised (DSM 1V-TR).* Washington, DC: American Psychiatric Association.

Amos, D.S. 2011. Schools get on Web 2.0 bandwagon. In: Partridge, K. (ed.). *Social networking.* USA: H.W. Wilson. The Reference Shelf:121-124.

Anatchkova, M.D., Prochaska, J.O. & Velicer, W.F. 2005. Replication of subtypes for smoking cessation within the contemplation stage of change. *Addictive Behaviours*, 30(5):915-927.

Antidrugs Civil Union. 2010. [Online]. Available at http://www.antidrug.health.am/news/english/addiction/2198 [Accessed on 16 December 2010].

Atkinson, R. 2006. *Adolescence*. [Online]. Available at http://usm.maine.edu/~atkinson/adolescence.htm [Accessed on 14 May 2006].

Bandura, A. 1977. Self-efficacy theory: toward a unifying theory of behavioral change. *Psychological Review*, 84(2):191-215.

Bandura, A. 1978. Reflections on self-efficacy. *Advances in Behavior Research and Therapy,* 1:237-269.

Bandura, A. 1982. Self-efficacy mechanism in human agency. *American Psychologist,* 37:122-147.

Bandura, A. 1986. *Social foundations of thought and action. A social cognitive theory*. Prentice-Hall, Inc., Englewood Cliffs: New Jersey.

Bandura, A. 1994. Self-efficacy. In: Ramachaudran V.S. (Ed.), Encyclopedia of human behaviour, New York: Academic Press. 4:71-81. Reprinted in Friedman, H. (Ed.), *Encyclopedia of mental health*. San Diego: Academic Press, 1998. [Online]. Available at http://www.des.emory.edu/mfp/BanEncy.html and http://www.uky.edu/~eushe2/mfp.html [Accessed on 18 June 2010].

Bandura, A. 1997. *Self-efficacy: The exercise of control.* New York: WH Freeman and Company.

Bandura, A. 1999. A sociocognitive analysis of substance abuse: An agentic perspective. *Psychological Science,* (10):214-217.

Bandura, A. 2001. Social cognitive theory: An agentic perspective. *Annual Review of Psychology,* 52:1-26.

Bandura, A. 2004. Social cognitive theory for personal and social change by enabling media. In: Singhal, A., Cody, M.J., Rogers, E.M. & Sabido, M. (eds.). *Entertainment-education and social change: History, research, and practice. LEA's communication series.* Mahwah, NJ, US: Lawrence Erlbaum Associates, Publishers:75-96.

Bandura, A. 2008. The reconstrual of “free will” from the agentic perspective of social cognitive theory. In: Baer, J., Kaufman, J.C., & Bauermeister, R.F. (eds.). *Psychology and free will.* Oxford: Oxford University Press:86-127.

Baumeister, S.E., John, U., Meyer, C., Ruge, J., Rumpf, H.J., Schmidt, C., Schorr, G., Schumann, A. & Ulbricht, S. 2008. Does precontemplation represent a homogeneous stage category? A latent class analysis on German smokers. *Journal of Consulting and Clinical Psychology,* 76(5):840-851.

Bellamy, N., James, S., Matthew, R.F. & Wang, M.Q. 2005. A structural model of the substance use pathways among minority youth. *American Journal of Health Behavior,* 29(6):531.

Bethea, J. 2008. "Biopsychosocial Model of Addiction." *Encyclopedia of Substance Abuse Prevention, Treatment, & Recovery*. [Online]. Available at http://0-www.sage-ereference.com.oasis.unisa.ac.za/substance/Article_n55.html [Accessed on 23 December 2010].

Blog. 2011. Substance Abuse and Mental Health Services Administration (SAMHSA) Blog. 2011. [Online]. Available at http://blog.samhsa.gov/ [Accessed on 15 March 2011].

Borsos, D. 2008. "Addiction, Models of." *Encyclopedia of Substance Abuse Prevention, Treatment, & Recovery.* [Online]. Available at http://0-www.sage-ereference.com.oasis.unisa.ac.za/substance/Article_n6.html [Accessed on 23 December 2010].

Botvin, G.J. 2010. *Life Skills Training.* [Online]. Available at http://www.lifeskillstraining.com/index.php [Accessed on 23 April 2010].

Botvin, G.J., Diaz, T., Griffin, K.W. & Ifill-Williams, M. 2001a. Drug abuse prevention among minority adolescents: Posttest and one-year follow-up of a school-based preventive intervention. *Prevention Science,* 2(1):1-13.

Botvin, G. J., Diaz, T., Griffin, K.W. & Ifill-Williams, M. 2001b. Preventing binge drinking during early adolescence: One- and two-year follow-up of a school-based preventive intervention. *Psychology of Addictive Behaviors,* 15:360-365.

Botvin, G.J., Diaz, T., Griffin, K.W. & Scheier, L.M. 2001. Protective role of personal competence skills in adolescent substance use: Psychological well-being as a mediating factor. *Psychology of Addictive Behaviours,* 15(3):194-203.

Botvin, G.J. & Griffin, K.W. 2002. Life skills training as a primary prevention approach for adolescent drug abuse and other problem behaviours. *International Journal of Emergency Mental Health,* 4(1):41-48.

Botvin, G.J., Griffin, K.W. & Nichols, T.R. 2006. Effects of a school-based drug abuse prevention program for adolescents on HIV risk behaviors in young adulthood. *Prevention Science,* 7:103-112.

Bouman, T.K. & Buwalda, F.M. 2008. A psychoeducational approach to hypochondriasis: Background, content, and practice guidelines. *Cognitive and Behavioural Practice,* 15(3): 231-243.

Brendtro, L.K. & Long, N.J. 2005. Psychoeducation in the life space. *Reclaiming Children and Youth: The Journal of Strength-based Interventions,* 14(3):157.

Buckley, E.J. & White D.G. 2007. Social marketing campaigns aimed at preventing drunk driving: A review and recommendations. *Health Education,* 107(1):42-62.

Bucossi, M.M. & Stuart, G.L. 2008. "Amphetamines." *Encyclopedia of Substance Abuse Prevention, Treatment, & Recovery.* [Online]. Available at http://0-www.sage-ereference.com.oasis.unisa.ac.za/substance/Article_n27.html [Accessed on 23 December 2010].

Burger, S., Gouws, E. & Kruger, N. 2000. *The adolescent.* (2nd ed). Cape Town: Heinemann Publishers (Pty) Ltd.

Caetano, R., Goebert, D., Nishimura, S. & Ramisetty-Mikler, S. 2006. Dating violence victimization: associated drinking and sexual risk behaviors of Asian, native Hawaiian, and Caucasian high school students in Hawaii. *Journal of School Health,* 76(8):423-429.

Caine, V.A., Cummings, S.F., Muegge, C.M., Saywell, R.M., Wooldridge, J.S. & Zollinger, T.W. 2003. Impact of the life skills training curriculum on middle school students tobacco use in Marion County, Indiana, 1997-2000. *Journal of School Health,* 73:338-346.

Calder, B.D. 2009. *The selection and evaluation of audio-visual media for supporting learners with behavioural problems.* Unpublished MEd dissertation. University of South Africa.

Caldwell, L.L., Flisher, A.J., Smith, E.A., Vergnani, T. & Wegner, L. 2007. Healthwise South Africa: cultural adaptation of a school-based risk prevention programme. *Health Education Research,* 23(6):1085-96.

Calfas, K.J., Taylor, C.B., Wilfley, D.E., Winzelberg, A.J. & Zabinski, M.F. 2004. An interactive psychoeducational intervention for women at risk of developing an eating disorder. *Journal of Consulting and Clinical Psychology,* 72(5):914-919.

Cape Town Drug Counselling Centre (CTDCC). 2011. [Online]. Available at http://www.drugcentre.org.za/ [Accessed on 14 March 2011].

Catalano, R.F. & Toumbourou J.W. 2005. Predicting developmentally harmful substance abuse. In: Gruenewald, PJ., Loxley, W., Stockwell, T. & Toumbourou, J.W. (eds.). *Preventing harmful substance abuse. The evidence base for policy and practice*. England: John Wiley & Sons Ltd:53-65.

Cavaiola, A.A. 2008a. "Psychological Models of Addiction." *Encyclopedia of Substance Abuse Prevention, Treatment, & Recovery.* [Online]. Available at http://0-www.sage-ereference.com.oasis.unisa.ac.za/substance/Article_n280.html [Accessed on 23 December 2010].

Cavaiola, A.A. 2008b. "Sociocultural Models of Addiction." *Encyclopedia of Substance Abuse Prevention, Treatment, & Recovery.* [Online]. Available at http://0-www.sage-ereference.com.oasis.unisa.ac.za/substance/Article_n327.html [Accessed on 23 December 2010].

Center for the Application of Prevention Technologies (CAPTUS). 2011. [Online]. Available at http://captus.samhsa.gov/ [Accessed on 15 March 2011].

Center for Applied Research Solutions. (CARS). 2011a. [Online]. Available at http://www.cars-rp.org/ [Accessed on 29 March 2011].

Center for Applied Research Solutions. (CARS). 2011b. Preventing adolescent binge drinking. [Online]. Available at http://www.cars-rp.org/ [Accessed on 29 March 2011].

Center for Substance Abuse Prevention (CSAP). 2011. [Online]. Available at http://www.samhsa.gov/about/csap.aspx [Accessed on 15 March 2011].

Chatsworth Anti-Drug Forum Facebook Group. 2011. [Online]. Available at http://www.facebook.com/group.php?gid=34813476224 [Accessed on 10 March 2011].

Chrzanowska, J. & Griffiths, J. 2011a. Training in online qualitative research. Bulletin boards: 10 reasons to use bulletin boards. [Online]. Available at http://www.qualitativemind.com [Accessed on 24 April 2011].

Chrzanowska, J. & Griffiths, J. 2011b. Training in online qualitative research. Online focus groups (OFG or OLFG): 10 reasons to use online focus groups. [Online]. Available at http://www.qualitativemind.com [Accessed on 3 April 2011].

Cismaru, M., Lavack, A.M. & Markewich E. 2008. Alcohol consumption among young consumers: a review and recommendations. *Young Consumers: Insight and Ideas for Responsible Marketers,* 9(4):282-296.

City of Cape Town. 2010. *Alcohol and drugs.* [Online]. Available at http://www.capetown.gov.za/en/drugs/Pages/default.aspx [Accessed on 23 December 2010].

Clair, S., Redmond, C., Shin, C. & Spoth, R.L. 2006. Long-term effects of universal preventative interventions on methamphetamine use among adolescents. *Archives of Pediatric & Adolescent Medicine,* 160:876-882.

Cockcroft, K. 2002. Theories of cognitive development: Piaget, Vygotsky, and information-processing theory. In: Cockcroft, K., Hook, D. & Watts, J. *Developmental psychology.* Lansdowne: University of Cape Town:175–199.

Collins English dictionary – complete and unabridged. 7th ed. 2005. Glasgow: HarperCollins Publishers.

Cook, C.C.H. 2006. *Alcohol, addiction and Christian ethics.* Cambridge: Cambridge University Press.

Corey, G. 2001. *Theory and practice of counseling and psychotherapy.* 6th edition. USA: Brooks/Cole Thomson Learning.

Crome, I.B. & McArdle, P. 2004. Prevention programmes. In: Crome, I.B., Ghodse, H., Gilvarry, E. & McArdle, P. (eds.). *Young people and substance misuse.* Glasgow: Gaskell, The Royal College of Psychiatrists:15-30.

Crome, I.B., London, M. & Rumball, D. 2004. Health issues. In: Crome, I.B., Ghodse, H., Gilvarry, E. & McArdle, P. (eds.). *Young people and substance misuse.* Glasgow: Gaskell, The Royal College of Psychiatrists:101-113.

Cross, C.L. & Gulmatico-Mullin, M.L. 2008a. "Central Nervous System Depressants." *Encyclopedia of Substance Abuse Prevention, Treatment, & Recovery.* [Online]. Available at http://0-www.sage-ereference.com.oasis.unisa.ac.za/substance/Article_n72.html [Accessed on 23 December 2010].

Cross, C.L. & Gulmatico-Mullin, M.L. 2008b. "Over-The-Counter Drugs." *Encyclopedia of Substance Abuse Prevention, Treatment, & Recovery.* [Online]. Available at http://0-www.sage-ereference.com.oasis.unisa.ac.za/substance/Article_n262.html [Accessed on 23 December 2010].

Dadds, M.R. & McAloon, J. 2002. Prevention. In: Essau, C. (ed.). *Substance abuse and dependence in adolescents. Epidemiology, risk factors and treatment.* Guildford and Kings Lynn, East Sussex: Brunner-Routledge, Taylor-Francis Group:143-184.

David, S.L., Rao, S.A. & Robertson, E.B. 2003. *Preventing drug abuse among children and adolescents: A research-based guide for parents, educators, and community leaders. (2nd ed., N.I.H. Publication No. 04–4212(A).* [Online]. Available at http://www.drugabuse.gov/publications/preventing-drug-abuse-among-children-adolescents [Accessed on 23 December 2010].

De Vos, A.S. 2005. Qualitative data analysis and interpretation. In: De Vos, A.S., Strydom, H., Fouche, C.B. & Delport, C.S.L. *Research at Grass Roots for the Social Sciences and Human Services Professions.* (3rd ed.). Pretoria: Van Schaik Publishers:333-349.

De Vries, H., Hoving, C. & Smit, E.S. 2010. Does a typical contemplator exist? Three clusters of smokers in contemplation. *Health Education Research,* 25(1): 61-73.

De Vries, H., Kremers, S.P.J., Mudde, A.N., Pais-Clemente, M. & Vitoria, P.D. 2006. Psychosocial factors related with smoking behaviour in Portuguese adolescents. *European Journal of Cancer Prevention,* 15(6):531-540.

DiClemente, C.C., Fairhurst, S.K. & Piotrowski, N.A. 1995. Self-efficacy and addictive behaviours. In: Maddux, J.E. ed. *Self-efficacy, adaptation, and adjustment: Theory, research, and application.* New York: Plenum Press:109-141.

Dino, G., Gao, X., Horn, K. & Momani, A. 1999. A pilot study of Not On Tobacco: a stop smoking programme for adolescents. *Health Education,* 99(5):192-206.

Discovery Education. Feb. 2008. [Online]. Available at http://www.discoveryeducation.com/ [Accessed on 5 February 2008].

Donald, D., Lazarus, S. & Lolwana, P. 2000. *Educational psychology in social context.* Cape Town: Oxford University Press.

Dr. Phil. Feb. 2008. [Online]. Available at http://www.drphil.com/ [Accessed on 5 February 2008].

Dusenbury, L., Giles, S.M., Hansen, W.B., Jackson-Newsom, J., Nelson-Simley, K., Pankratz, M., Pittman, D.S., Ringwalt, C. & Wilson, C.V. 2010. Coaching to enhance quality of implementation in prevention. *Health Education,* 110(1):43-60.

Dusenbury, L. & Hansen, W. 2004. All Stars Plus: a competence and motivation enhancement approach to prevention. *Health Education,* 104(6):371-381.

EMT Online University. 2011b. [Online]. Available at http://eou.emt.org/main.php [Accessed on 29 March 2011].

ePathCampus. 2011. [Online]. Available at http://www.epathcampus.com/servlets/Campus?disp=ThisCourse&courseID=53928&lessonID=95792&topicID=4668614&pageID=12293735 [Accessed on 29 March 2011].

Evaluation, Management, Training Associates, Inc. 2011a. [Online]. http://www.emt.org/ [Accessed on 29 March 2011].

Facy, F. & Rabaud, M. 2006. Towards the prevention of alcohol abuse. *Drugs: Education, Prevention and Policy,* 13(2):139-149.

Fen, Y.S. & Hong, L.K. 2009. Exercise as a healthy lifestyle choice: A review and avenues for future research. *International Business Research,* 2(1):146-158.

Fisher, G.L. 2008a. "Drugs, Classification of." *Encyclopedia of Substance Abuse Prevention, Treatment, & Recovery.* [Online]. Available at http://0-www.sage-ereference.com.oasis.unisa.ac.za/substance/Article_n133.html [Accessed on 23 December 2010].

Fisher, G.L. 2008b."Marijuana." *Encyclopedia of Substance Abuse Prevention, Treatment, & Recovery.* [Online]. Available at http://0www.sagereference.com.oasis.unisa.ac.za/substance/Article_n206.html [Accessed on 23 December 2010].

Flisher, A.J., Parry, C.D.H., Evans, J., Muller, M. & Lombard, C. 2003. Substance use by adolescents in Cape Town: Prevalence and correlates. *Journal of Adolescent Health:*32:58–65.

Fouché, C.B. 2002. Research strategies. In: De Vos, A.S. (ed.). *Research at grassroots for the social sciences and human services professions.* (2nd edition.), Pretoria: Van Schaik Academic:270-276.

Fraguela, J.A., Martin, A.L. & Trinanes, E.A. 2003. Drug-abuse prevention in the school: Four-year follow-up of a programme. *Psychology in Spain,* 7:29-38.

Freishtat, R.L. & Sandlin, J.A. 2010. Facebook as public pedagogy: A critical examination of learning, community and consumption. In: Kidd, T.T. & Keengwe, J. (eds.). *Adult learning in the digital age: Perspectives on online technologies and outcomes.* New York: Information Science Reference:148-162.

Gallon, E.C., Martino-McAllister, J. & Wessel, M.T. 2008. "Barbiturates." *Encyclopedia of Substance Abuse Prevention, Treatment, & Recovery.* [Online]. Available at http://0-www.sage-ereference.com.oasis.unisa.ac.za/substance/Article_n46.html [Accessed on 23 December 2010].

Ghodse, H. 2004. Introduction. In: Crome, I.B., Ghodse, H., Gilvarry, E. & McArdle, P. (eds.) *Young people and substance misuse.* Glasgow: The Royal College of Psychiatrists:1-14.

Gounden, F. 2006. Drug forum on mission to root out 'sugars'. *Independent Online, IOL News:* August 12. [Online]. Available at *http://www.iol.co.za/news/south-africa/drug-forum-on-mission-to-root-out-sugars-1.289088* [Accessed on 14 March 2011].

Graham, M.D., Valach, L., Wood, R.A. & Young, R.A. 2008. Addiction as a complex social process: An action theoretical perspective. *Addiction Theory and Research,* 16:121-133.

Grant, J. 2002. Kohlberg's theory of moral reasoning. In: Cockcroft, K., Hook, D. & Watts, J. *Developmental psychology.* Lansdowne: University of Cape Town Press:294-311.

Haegerich, T.M. & Tolan, P.H. 2008. Core competencies and the prevention of adolescent substance abuse. *New Directions for Child and Adolescent Development,* 122:47-60.

Hawke, J. & Kaminer, Y. 2009. Evidence-based interventions for adolescent substance users. In: Miller, P.M. (ed.). *Evidence-based addiction treatment.* USA: Elsevier Inc. Academic Press:345-360.

Hayes, C. & Morgan, M. 2005. Evaluation of a psychoeducational program to help adolescents cope. *Journal of Youth and Adolescence,* 34(2):111.

Hessling, J.K. & Jerusalem, M. 2009. Systematic review of the role of external contributors in school substance use education. *Health Education,* 109(4):329-341.

Hettema, J.E., Larios, S. & Sorenson, J.L. 2009. What is evidence-based treatment? In: Miller, P.M. (ed.). *Evidence-based addiction treatment.* New York: MacMillan Publishing Solutions, Elsevier, Inc:3-18.

Hunt, S. & Kilmer, J. 2008. "Alcohol." *Encyclopedia of Substance Abuse Prevention, Treatment, & Recovery.* [Online]. Available at http://0www.sageereference.com.oasis.unisa.ac.za/substance/Article_n15.html [Accessed on 23 December 2010].

Ilgen, M., McKellar, J. & Tiet, Q. 2005. Abstinence self-efficacy and abstinence one year after substance use disorder treatment. *Journal of Consulting and Clinical Psychology,* 73(6):1175-1180.

Institute for Dynamic Educational Advancement (IDEA). 2011. Social cognitive theory. [Online]. Available at http://www.idea.org/blog/2006/06/01/social-cognitive-theory-sct/ [Accessed on 23 January 2011].

Isralowitz, R. & Reznik, A. 2006. Brief report: binge drinking among high-risk male and female adolescents in Israel. *Journal of Adolescence,* 29(5):845-849.

Jacobs, J.E. & Klaczynski, P.A. 2002. The development of judgment and decision making during childhood and adolescence. *Current Directions in Psychological Science,* 11:145–149.

Jason, L.A., Majer, J.M. & Olson, B.D. 2004. Optimism, abstinence self-efficacy, and self-mastery: A comparative analysis of cognitive resources. *Assessment,* 11(1):57-63.

Johnson, B. & Christiansen, L. 2000. *Educational research. Qualitative and quantitative approaches.* Boston: Allen & Bacon.

Johnson, L.C. & Yanca, S.J. 2009. *Generalist social work practice with groups.* USA: Pearson Education Inc.

Jokela, V., Kemppainen, U., Pantelejev, V., Puska, P., Tossavainen, K., Uhanov, M. & Vartiainen, E. 2007. Identifying Russian and Finnish adolescents' problem behaviours. *Health Education,* 107(1):81-98.

Joof, B.M., Kremers, S.P.J., Maassen, I.T.H.M. & Mudde, A.N. 2004. Smoking initiation among Gambian adolescents: social cognitive influences and the effect of cigarette sampling. *Health Education Research,* 19(5):551-560.

Keel, R.O. 2010. *Theories of Drug Use.* [Online]. Available at http://www.umsl.edu/~keelr/180/theordrg.html [Accessed on 27 January 2011].

Kerr, P.P. 2002. Guidelines for a psycho-educational programme to enhance self-actualisation of retired people. Unpublished MEd dissertation. University of South Africa.

Kerr, P.P. 2009. *A psycho-educational programme to enhance the efficacy of parents of adolescents.* Unpublished DEd thesis. University of South Africa.

Klostermann, K. 2008a. "Inhalants." *Encyclopedia of Substance Abuse Prevention, Treatment, & Recovery.* [Online]. Available at http://0-www.sageereference.com.oasis.unisa.ac.za/substance/Article_n190.html [Accessed on 23 December 2010].

Kluce, J. & Pope, D. March, 2011. The 'Virtual Reality' of Focus Groups. *Survey Magazine,* p.29-31. [Online]. Available at http://surveymagazine.org/?p=338 ; http://viewer.zmags.com/publication/d4afca7c#/d4afca7c/14 [Accessed on 3 April 2011].

Krenek, M. & Maisto, S.A. 2009. History and current substance use. (*In* Miller, P.M. (ed.). *Evidence-based addiction treatment.* U.S.A.: Elsevier Inc. Academic Press:47-75.

Lambie, G.W. & Sias, S.M. 2005. Children of alcoholics: implications for professional school counseling. *Professional School Counseling,* 8(3):266.

Lillehoj, C., Redmond, C., Spoth, R., Trudeau, L. & Wickrama, K. 2003. Effects of a preventive intervention on adolescent substance use initiation, expectancies, and refusal intentions. *Prevention Science,* 4:109-122.

Litt, M.D., Kabela-Cormier, E., Kadden, R.M. & Petry, N.M. 2009. Changing network support for drinking: Network support project 2-Year follow-up. *Journal of Consulting and Clinical Psychology,* 77(2):229-242.

Livestrong. 2011. Lance Armstrong Foundation. *5 ways to curb nicotine addiction in adolescents* [Online]. Available at http://www.livestrong.com/article/13650-curb-nicotine-addiction-adolescents/ [Accessed on 27 January 2011].

Lubbers, D. 2005. *Cognitive mediators of adolescent drinking*. Unpublished Ph.D dissertation. United States – Michigan: Wayne State University.

Lynch, K.G., McKay, J.R., Mensinger, J.L. & Tenhave, T.R. 2007. Mediators of telephone-based continuing care for alcohol and cocaine dependence. *Journal of Consulting and Clinical Psychology,* 75(5):775-784.

Maddox, L. & Mehta, D. March, 2011. Focus groups: traditional vs. online. I pledge allegiance to … *Survey Magazine,* p.14-18 [Online]. Available at http://surveymagazine.org/?p=315 http://viewer.zmags.com/publication/d4afca7c#/d4afca7c/14 [Accessed on 3 April 2011].

Maddux, J.E. 1995. Self-efficacy theory: An introduction. In: Maddux, J.E. (ed.). *Self-efficacy, adaptation, and adjustment: Theory, research, and application.* New York: Plenum press:3-36.

Mallin, R. 2002. Smoking cessation: Integration of behavioral and drug therapies. *American Family Physician,* 65(6):1107-1115.

Mann, C. & Stewart, F. 2000. *Internet communication and qualitative research: A handbook for researching online.* Great Britain: SAGE publications.

Marlatt, G.A. & Witkiewitz, K. 2009. Relapse prevention for alcohol and drug problems: That was Zen, this is Tao. In: Marlatt, G.A. & Witkiewitz, K. (eds.). *Addictive behaviours: New readings on etiology, prevention, and treatment.* Washington, DC: American Psychological Association:403-428.

Martin, L. & Milot, A. 2007. Assessing substance use and abuse among adolescents: A guide for out-of-school time program practitioners. Research-to-results brief. *Child Trends,* 2007(8):1-4.

McBride, N. 2005. The evidence base for school-based interventions. In: Stockwell, T., Gruenewald, P., Toumbourou, J., & Loxley, W. *Preventing harmful substance use: The evidence base for policy and practice.* John Wiley & Sons., Chichester:101.

McClendon, J.R., Miletic, M.M., North, C.S., Reid, D.L., & Pollio, D.E. 2006. Living with severe mental illness - what families and friends must know: Evaluation of a one-day psychoeducation workshop. *Social Work,* 51(1):31-38.

McCown, R., Driscoll, M. & Roop, P.G. 1996. *Educational psychology. A learning centered approach to classroom practice.* (2nd edition). Boston: Allyn and Bacon.

McIntyre, T. 2008. *Dr. Mac's Behavior Management Site.* [Online]. Available at http://www.behavioradvisor.com/ [Accessed on 02 February 2008].

McMillan, J.H. & Schumacher, S. 2010. *Research in education: Evidence-based inquiry*. (7th ed). Boston: Pearson.

MedicineNet.com. The Medical Dictionary. 2010. [Online]. Available at http://www.medterms.com/script/main/art.asp?articlekey=24405&pf=3&page=1 [Accessed on 18 June 2010].

Meece, J.L. & Schunk, D.H. 2005. Self-Efficacy in Adolescences. In: Pajares, F. & Urdan, T. (eds.). *Self-efficacy beliefs of adolescents. A volume in the series adolescence and education publishing.* Greenwich, CT: Information Age Publishing, 71-96. [Online]. Available at http://www.des.emory.edu/mfp/AdoEd5.html#schunk [Accessed on 27 January 2011].

Miller, T., Pentz, M.A., Spruijt-Metz, D. & Sussman, S. 2007. Abuse of study drugs: Prevalence, consequences, and implications for therapeutic prescription and policy. In: McKenna, C.R. (ed.). *Trends in substance abuse research.* New York: Nova Science Publishers, Inc:133-150.

Mngoma, S. 2011. Schools declare war on social ills. *The Witness*: May 4.

Modiba, I. 2011. Raise the legal drink age. *The New Age:* March 14. [Online]. Available at http://www.thenewage.co.za/Detail.aspx?news_id=12553&cat_id=1015&mid=53 [Accessed on 14 March 2011].

Moon, A. 2000. Evaluating the health-promoting school. *Health Education,* 100(6):237-241.

Morissette, S.B., Gulliver, S.B., Kamholz, B.W., Tull, M.T. & Zimering, R.T. 2007. Anxiety, anxiety disorders, tobacco use, and nicotine: a critical review of interrelationships. *Psychological Bulletin,* 133(2):245-272.

Mouton, J. 2001. *How to succeed in your master's and doctoral studies.* Pretoria: Van Schaik Publishers.

My Prevention. 2011. Online networking community for prevention professionals. [Online]. Available at http://www.myprevention.org/ [Accessed on 29 March 2011].

National Clearinghouse for Alcohol and Drug Information (NCADI). 2010. [Online]. Available at http://ncadistore.samhsa.gov/catalog/results.aspx?h=publications&topic=128 [Accessed on 01 June 2010].

National Criminal Justice Reference Service (NCJRS). 2011. Office of National Drug Control Policy (ONDCP). Evidence-Based Principles for Substance Abuse Prevention. [Online]. Available at http://www.ncjrs.gov/ondcppubs/publications/prevent/evidence_based_eng.html [Accessed on 8 March 2011].

National Drug Intelligence Center. 2007. *Teens and drugs fast facts.* [Online]. Available at http://www.usdoj.gov/ndic/pubs11/12430/index.htm [Accessed on 23 December 2010].

National Drug Master Plan (NDMP). 2006-2011. Central Drug Authority (CDA). [Online]. Available at http://www.dsd.gov.za/cda/ [Accessed on 11 March 2011].

National Institute on Drug Abuse (NIDA). 2010a. [Online]. Available at http://www.nida.nih.gov/DrugPages/DrugsofAbuse.html [Accessed on 16 December 2010].

National Institute on Drug Abuse (NIDA). 2010b. [Online]. Available at http://www.nida.nih.gov/DrugPages/PrescripDrugsChart.html [Accessed on 16 December 2010].

National Institute on Drug Abuse (NIDA). 2010c. [Online]. Available at http://www.drugabuse.gov/nidahome.html [Accessed on 16 December 2010].

National Survey on Drug Use and Health report (NSDUH). 2007. *Alcohol use and delinquent behaviors among youths.* [Online]. Available at http://www.oas.samhsa.gov/2k5/alcDelinquent/alcDelinquent.htm [Accessed on 19 May 2010].

National Youth Anti-Drug Media Campaign. 2011a. Office of National Drug Control Policy (ONDCP). [Online]. Available at http://www.whitehousedrugpolicy.gov/mediacampaign/index.html [Accessed on 27 March 2011].

National Youth Anti-Drug Media Campaign. 2011b. Office of National Drug Control Policy (ONDCP). New Campaign Vision: Above The Influence (ATI).[Online]. Available at http://www.whitehousedrugpolicy.gov/mediacampaign/about.html#step2 [Accessed on 27 March 2011].

National Youth Anti-Drug Media Campaign. 2011c. Office of National Drug Control Policy (ONDCP). Ad Gallery. Available at http://adgallery.whitehousedrugpolicy.gov/ [Accessed on 27 March 2011].

Neuman, W.L. 2000. *Social research methods: Qualitative and quantitative approaches.* London: Allyn and Bacon.

Newby, T.J., Stepich, D.A. & Lehman, J.D. 2000. *Instructional technology for teaching and learning.* (2nd ed). New Jersey, Upper Saddle River: Merrill - Prentice Hall Russell.

Office of National Drug Control Policy (ONDCP). 2011. Prevention. [Online]. Available at http://www.whitehousedrugpolicy.gov/prevent/index.html [Accessed on 27 March 2011].

Oprah. Feb. 2008. [Online]. Available at http://www.oprah.com/ [Accessed on 05 February 2008].

Pajares, F. 2002a. *Overview of social cognitive theory and of self-efficacy.* [Online]. Available at http://www.emory.edu/EDUCATION/mfp/eff.html and http://www.uky.edu/~eushe2/mfp.html [Accessed on 29 December 2009].

Pajares, F. 2002b. *Self-efficacy beliefs in academic contexts: An outline*. [Online]. Available at http://des.emory.edu/mfp/efftalk.html and http://www.uky.edu/~eushe2/mfp.html [Accessed on 18 June 2010].

Piasecki, M. & Zucker, J.P. 2008. "Tobacco." *Encyclopedia of Substance Abuse Prevention, Treatment, & Recovery.* [Online]. Available at http://0-www.sageereference.com.oasis.unisa.ac.za/substance/Article_n350.html [Accessed on 23 December 2010].

Pond, M.H. 2011. Increasing outreach, feedback, and virtual communities. SAMHSA News, January/February 2011. [Online]. Available at http://www.samhsa.gov/samhsaNewsletter/Volume_19_Number_1/BehavioralHealthSocialMedia.aspx [Accessed on 15 March 2011].

Randall, G., Redmond, C., Shin, C., Spoth, R.L. & Trudeau, L. 2008. Substance use outcomes 5 1/2 years past baseline for partnership-based, family school preventive interventions. *Drug and Alcohol Dependence,* 96:57-68.

Redmond, C., Shin, C., Spoth, R.L. & Trudeau, L. 2002. Longitudinal substance initiation outcomes for a universal preventive intervention combining family and school programs. *Psychology of Addictive Behaviors,* 16:129-134.

Reynolds, L.R., Rodman, J., Sells, S.P. & Smith, T.E. 2006. Reducing adolescent substance abuse and delinquency pilot research of a family-oriented psychoeducation curriculum. *Journal of Child and Adolescent Substance Abuse,* 15(4):104-115.

Rosenfarb, I.S. & Smerud, P.E. 2008. The therapeutic alliance and family psychoeducation in the treatment of schizophrenia: An exploratory prospective change process study. *Journal of Consulting and Clinical Psychology,* 76(3):505-510.

Ryan, B., (ed). 2006. Catalyst. *U.S. Department of Education,* 7(2):12.

Saisan, J. & Smith, M. 2010. HELPGUIDE.org. *Drug abuse and addiction.* [Online]. Available at http://www.helpguide.org/mental/drug_substance_abuse_addiction_signs_effects_treatment.htm [Accessed on 26 December 2010].

Sambrano, S., Schwartz, S.J., Szapocznik, J. & Tolan, P. 2007. Preventing youth substance abuse: An overview. In: Sambrano, S., Szapocznik, J. & Tolan, P. (eds.). *Preventing youth substance abuse. Science-based programs for children and adolescents.* Washington, DC: American Psychological Association:3-17.

Sambrano, S., Szapocznik, J. & Tolan, P. 2007. Developmental opportunities for prevention of substance abuse. In: Sambrano, S., Szapocznik, J. & Tolan, P. (eds.). *Preventing youth substance abuse. Science-based programs for children and adolescents.* Washington, DC: American Psychological Association:239-251.

Schuld, N. 2006. *Substance abuse: A resilience prevention programme for Grades 7, 8 and 9.* Unpublished DEd- thesis. Pretoria: University of South Africa.

Schulze, S. & Lessing, A.C. 2002. *Lecturers' experience of postgraduate supervision in the faculty of education.* Pretoria: University of South Africa.

Sigmon, S.C. 2008. "Prescription drugs." *Encyclopedia of Substance Abuse Prevention, Treatment, & Recovery.* [Online]. Available at http://0-www.sage-ereference.com.oasis.unisa.ac.za/substance/Article_n270.html [Accessed on 23 December 2010].

SOUTH AFRICA. 2011a. Department of social development. *SA: Dlamini: Address by the minister of social development, at the inter-ministerial committee on substance abuse, in the national assembly.* [Online]. Available at http://www.polity.org.za/article/sa-dlamini-address-by-the-minister-of-social-development-at-the-inter-ministerial-committee-on-substance-abuse-in-the-national-assembly-10032011-2011-03-10 [Accessed on 10 March 2011].

SOUTH AFRICA. 2011b. Department of social development. *SA: Dlamini: Remarks by the minister of social development, at the opening of the second biennial summit on substance abuse, Durban.* [Online]. Available at http://www.polity.org.za/article/sa-dlamini-remarks-by-the-minister-of-social-development-at-the-opening-of-the-second-biennial-summit-on-substance-abuse-durban-15032011-2011-03-15 [Accessed on 15 March 2011].

SOUTH AFRICA. 2011c. South African government information. Department of social development. *35 resolutions statement on the resolutions of the second biennial substance abuse summit held at the ICC Durban, KwaZulu-Natal 17 March 2011.* [Online]. Available at http://www.info.gov.za/speech/DynamicAction?pageid=461&sid=17094&tid=30258 [Accessed on 3 April 2011].

SOUTH AFRICA. 2011d. Government communication and information system (GCIS resource centre). *An integrated approach: towards a drug-free society.* [Online]. Available at http://www.gcis.gov.za/ [Accessed on 10 March 2011].

South African Community Epidemiology Network on Drug Use (SACENDU). 2011a. Update December 2010. *Alcohol and drug abuse trends: January – June 2010, Phase 28.* [Online]. Available at http://www.sahealthinfo.org/admodule/sacendu/updatedec2010.pdf [Accessed on 17 January 2011].

South African Community Epidemiology Network on Drug Use (SACENDU). 2011b. Volume 13(2), 2010. *Monitoring alcohol & drug abuse trends in South Africa, July 1996-June 2010, Phase 28.* [Online]. Available at http://www.sahealthinfo.org/admodule/sacendu/sacendubriefdec2011.pdf [Accessed on 12 April 2011].

South African National Council on Alcoholism and Drug Dependence (SANCA). 2011. [Online]. Available at http://www.sancadbn.co.za/comdev_main.htm [Accessed on 10 March 2011].

Spencer, K. 1999. Educational technology – An unstoppable force: a selective review of research into the effectiveness of educational media. *Educational Technology & Society,* 2(4):1999. [Online]. Available at http://www.ebiblioteka.lt/resursai/Uzsienio%20leidiniai/IEEE/English/2006/Volume%202/Issue%204/Jets_v2i4_07.pdf [Accessed on 21 September 2006].

Steyn, H. 2006. *A psycho-educational programme to facilitate the coping with aggression by educators in secondary schools in the South African society.* Unpublished DEd thesis. Johannesburg: University of Johannesburg.

Stockwell, T. 2005. Introduction. In: Gruenewald, P.J., Loxley, W., Stockwell, T. & Toumbourou, J.W. (eds.). *Preventing harmful substance abuse. The evidence base for policy and practice.* England: John Wiley & Sons Ltd:17-23.

Strydom, H. 2005. Ethical aspects of research in the social sciences and human service professions. In: De Vos, A.S. (ed.). *Research at grassroots for the social sciences and human service professions.* 3rd Edition. Pretoria: Van Schaik:56-69.

Substance Abuse and Mental Health Services Administration (SAMHSA). 2011a. Substance Abuse and Mental Health Services Administration. *Publications – Treatment-Prevention-Recovery.* [Online]. Available at http://store.samhsa.gov/facet/Treatment-Prevention-Recovery/term/Education [Accessed on 18 January 2011].

Substance Abuse and Mental Health Services Administration (SAMHSA). 2011b. Substance Abuse and Mental Health Services Administration. SAMHSA News, January/February 2011. [Online]. *Increasing Outreach, Feedback, and Virtual Communities,* by Meredith Hogan Pond. Available at http://www.samhsa.gov/samhsaNewsletter/Volume_19_Number_1/BehavioralHealthSocialMedia.aspx [Accessed on 15 March 2011].

Substance Abuse and Mental Health Services Administration (SAMHSA). 2011c. Substance Abuse and Mental Health Services Administration. *National Registry of Evidence-based Programs and Practices Web site.* [Online]. Available at http://nrepp.samhsa.gov/ViewAll.aspx [Accessed on 24 March 2011].

Substance Abuse and Mental Health Services Administration (SAMHSA). 2011d. Substance Abuse and Mental Health Services Administration. *Prevention of Substance Abuse and Mental Illness Video PSA Contest.* [Online]. Available at http://challenge.gov/SAMHSA/128-prevention-of-substance-abuse-and-mental-illness-video-psa-contest [Accessed on 15 March 2011].

Substance Abuse and Mental Health Services Administration (SAMHSA). 2011e. Substance Abuse and Mental Health Services Administration. *Prevention of Substance Abuse and Mental Illness.* [Online]. Available at http://www.samhsa.gov/prevention/ [Accessed on 24 March 2011].

Substance Abuse and Mental Health Services Administration (SAMHSA) Blog. 2011. [Online]. Available at http://blog.samhsa.gov/ [Accessed on 15 March 2011].

Substance Abuse and Mental Health Services Administration (SAMHSA) on Facebook. 2011. [Online]. Available at http://www.facebook.com/samhsa [Accessed on 15 March 2011].

Substance Abuse and Mental Health Services Administration (SAMHSA) on Flickr. 2011. [Online]. Available at http://www.flickr.com/samhsa [Accessed on 15 March 2011].

Substance Abuse and Mental Health Services Administration (SAMHSA) Store. 2011. [Online]. Available at http://store.samhsa.gov/home [Accessed on 15 March 2011].

Substance Abuse and Mental Health Services Administration (SAMHSA) on Twitter. 2011. [Online]. Available at https://twitter.com/samhsagov [Accessed on 15 March 2011].

Substance Abuse and Mental Health Services Administration (SAMHSA) on YouTube. 2011. [Online]. Available at http://www.youtube.com/samhsa [Accessed on 15 March 2011].

Teachers' TV. 2008. [Online]. Available at http://www.teachers.tv/ [Accessed on 02 February 2008].

Thombs, D.L. 2006. *Introduction to addictive behaviours.* (3rd ed.) New York: Guilford Press.

Thombs, D.L. 2008. "Moral Model." *Encyclopedia of Substance Abuse Prevention, Treatment, & Recovery.* [Online]. Available at http://0-www.sage-ereference.com.oasis.unisa.ac.za/substance/Article_n223.html [Accessed on 23 December 2010].

Truter, I. 2009. Prescribing of methylphenidate to children and adolescents in South Africa. *South African Family Practice,* 51(5):413-417.

Wagner, E.F. & Macgowan, M.J. 2006. School-based group treatment for adolescent substance abuse. In: Liddle, H.A. & Rowe, C.L. (eds.). *Adolescent substance abuse: research and clinical advances.* Cambridge, UK. New York: Cambridge University Press:333-356.

Web4Health. 2010. *Psychoeducation.* [Online]. Available at http://web4health.info/fa/answers/psy-therapy-education.htm [Accessed on 19 January 2011].

Whitehead, D. 2005. In pursuit of pleasure: health education as a means of facilitating the “health journey” of young people. *Health Education,* 105(3):213-227.

Wicks-Nelson, R. & Israel, A.C. 2003. *Behavior disorders of childhood.* New Jersey: Prentice Hall.

Wisdom, J.P. 2008. Adolescents, Substance Abuse and Treatment. *Encyclopedia of Substance Abuse Prevention, Treatment, & Recovery*. [Online]. Available at http://0-www.sage-ereference.com.oasis.unisa.ac.za/substance/Article_n9.html [Accessed on 23 December 2010).

Woodhouse, K. 2004. Young people and smoking. In: Crome, I.B., Ghodse, H., Gilvarry, E. & McArdle, P. (eds.) *Young people and substance misuse.* Glasgow: The Royal College of Psychiatrists:114-128.

Yin, R. 2003. *Case study research.* (3rd ed.) Thousand Oaks, CA: Sage Publications.

Zervogiannis, F.H. 2003. *The ‘E’ in Rave. A profile of young ecstasy users and its implications for educators.* Pretoria: University of South Africa.

APPENDIX A

LETTER OF INVITATION

INVITATION TO ALL ADOLESCENTS IN ONE GRADE 10 **OR** 11 CLASS

A Pietermaritzburg teacher, Bruce Calder, is to be presenting a programme for adolescents in one grade 10 or 11 class. This forms part of his research for his Doctorate in Education (Psychology of Education). Bruce has taught previously at primary and secondary schools in Pietermaritzburg. More recently, he lectured English in Oman, and in Saudi Arabia, working as an instructor in a preparatory year English college programme. He also taught in Korean secondary schools as a native English speaker, and in Cambridgeshire, England.

THE PROGRAMME: The course is: "AN AUDIO-VISUAL PROGRAMME FOR ADOLESCENTS"

- The content of the course will be facilitated by social media, focus group discussions and individual interviews.
- All details of the programme will be provided confidentially to the selected participants.
- Candidates must be able to type on a computer keyboard and be computer literate on the internet.
- Due to logistical reasons, a limited number of participants will be selected initially, based on criteria related to the purpose of the research.
- The availability of as many potential participants as possible will be welcomed, as this will assist in finding suitable candidates.

DATES AND TIMES

The programme is to be offered in the fourth KwaZulu-Natal school term, commencing on **Wednesday, 16 November 2011**, or as soon thereafter as possible. It will consist of **weekly sessions** for each group of approximately 10-12 participants (preferably from one grade 10 **or** 11 class) to be selected in consultation with the principal. Sessions will be approximately 90-120 minutes each, to be held on consecutive Monday and Thursday afternoons, from 15h00 pm to 16h30-17h00 pm or at times indicated by the principal. The **focus group sessions** (online/in-person) will be followed by **individual interviews** after each session, at times convenient to the participants and the researcher, to evaluate the programme. At the beginning and end of the programme participants will answer **brief open-ended questions** on their impressions of the intervention.

VENUE: The school's computer room or other venue (TBA).

HOW TO RESPOND

If you are interested in participating in this course please complete the attached application form. Due to logistical reasons, it has been decided to limit the size of the adolescent group.

APPLY NOW FOR THE PROGRAMME

Only those candidates most suited to the programme will be selected and contacted by the researcher.

APPENDIX B

PARTICIPANT APPLICATION FORM

AUDIO-VISUAL PROGRAMME FOR ADOLESCENTS

Thank you for your interest in the programme. After completing this form, please hand it to the researcher or to the school's secretary.

Name: _____ Age: _____

E-mail address: _____

Telephone: _____ Cell-phone: _____

Gender: _____ Grade: _____

_____ _____

Signature (participant) Signature (parent/legal guardian consent)

NB. After programme sessions the adolescents would also take part in some individual interviews to discuss and evaluate the programme. NO NAMES OR PLACES WILL BE IDENTIFIED IN REPORTING ON THIS RESEARCH. ALL RESPONSES WILL BE CONSIDERED AS CONFIDENTIAL AND REPORTED ON ANONYMOUSLY TO PROTECT YOUR PRIVACY. Your cooperation will be much appreciated. Many thanks.

APPENDIX C

PARTICIPANT INFORMATION AND CONFIDENTIALITY PLEDGE

ADOLESCENT AUDIO-VISUAL PROGRAMME

PRESENTER: BRUCE CALDER

Name: _____

Grade level of education: _____ **School:** _____

Age: _____ **Interests:** _____

Number of years in Pietermaritzburg area: _____

Postal address: _____

PLEDGE OF CONFIDENTIALITY

I, _____ a participant in this interview held in _____on the ____ day of _____ 2011, promise to maintain the confidentiality of this discussion.

_____ _____

Signature (participant) Signature (parent/legal guardian consent)

_____ _____

Date Date

APPENDIX D

PRINCIPAL – LETTER

Secondary School

Registration Number:

Examination Centre Number:

Physical Address	
Postal Address	
Telephone Numbers	

12 January 2012

TO WHOM IT MAY CONCERN

This letter confirms that Mr. Bruce Calder, teacher, presented an adolescent audio-visual programme at our *Secondary School* in Pietermaritzburg, between 16 November 2011 and 12 January 2012.

After initial consultation with Mr. Calder, it was decided that the research programme would be presented to our Grade 10 and Grade 11 students, whom we considered might benefit most from this type of intervention.

We are of the opinion that this programme was most beneficial to the students who participated. It will certainly help them all considerably in their future studies, academic careers, social relationships, as well as with good decision making in their lives, especially in responding to the peer pressures of adolescence.

We wish Mr. Calder all the best with his endeavours and also trust that other schools and learners may have the opportunity to experience the use of this programme within their schooling environments.

Yours sincerely

_____
PRINCIPAL

LETTER FROM NATIONAL YOUTH ANTI-DRUG MEDIA CAMPAIGN

Subject: Re: Response from the National Youth Anti-Drug Media Campaign
From: Bruce Calder (redlacbruce@yahoo.com)
To: Aya_T._Collins@ONDCP.EOP.GOV;
Date: Fri, 10 Jun 2011 20:55:03

Dear Ms. Collins
Thank you for the prompt and encouraging response to my request. I am most grateful and look forward to receiving the DVD which you mentioned.
Best regards,
Bruce Calder

From: "Collins, Aya T." Aya_T._Collins@ONDCP.EOP.GOV

To: "redlacbruce@yahoo.com" redlacbruce@yahoo.com

Sent: Friday, June 10, 2011 8:19 PM

Subject: Response from the National Youth Anti-Drug Media Campaign

Greetings Mr. Calder:

Thank you for contacting us. We received your request from our website and I wanted to personally follow up. Per your request, you may use all requested video-clips and print advertisements from our site for your research project.

As your request indicated, your research is strictly for educational purposes and all content will be for internal, private viewing only. The advertisements may not be broadcast or displayed in any other way. They may not be distributed or copied in any way.

We will be sending you a DVD of the requested ads. For the print ads, please download the pdfs from the website.

Wishing you all the best with your project and thank you for the wonderful comments on the strength of the Campaign.

Here's educating and empowering all of our youth.

Best Regards,
Aya
Aya T. Collins
National Youth Anti-Drug Media Campaign
White House Office of National Drug Control Policy
acollins@ondcp.eop.gov
<http://www.mediacampaign.org>

APPENDIX F

INTERVIEW GUIDE

(Questions adapted from the ATI campaign, 2011)

SESSION ONE, WEEK ONE (IN-PERSON FOCUS GROUP) "OPEN THEIR EYES TO INFLUENCE":

Part 1: Above the Influence programme DVD (20 minutes) with videos, TV advertisements and flash video adverts (ATI campaign, 2011; National Youth Anti-Drug Media Campaign, 2011c)

Part 2: Open ended questions for written responses (prior to focus group discussions) (20-25 minutes)

Question 1: What was the first thing that popped into your mind as you watched these videos?

Question 2: What is the main message that you are getting from them?

Question 3: What did you learn from this activity?

Question 4: What were some of the influences that were referenced in the videos?

Question 5: What causes people your age to become under the influence?

Part 3: Focus group discussion

(ATI campaign, 2011; National Youth Anti-Drug Media Campaign, 2011c)

NB. (ATI set questions)

- What was the first thing that [entered] your mind as you watched these videos?
- What is the main message that you are getting from them?
- What were some of the influences that were referenced in the videos? Were they positive, negative? [Continue until drugs are mentioned or probe on this topic.]
- Thinking about drugs, to what extent do you consider them a similar influence in your life? (Please explain.)
- What have you heard or seen about the "Above the Influence" campaign?
- What does "ABOVE the Influence" mean to you?
- What does "UNDER the influence" mean to you?
- What causes people your age or like you to become under the influence?
- What happens to them if they become under the influence?
- What are some bad influences that you encounter on a regular basis? They can be things you see or experience in your life that make you think about doing things that you know aren't good for you.
- Where do you encounter negative influences most often?
- To what extent do you feel pressured to do things you know are not good for you?

Additional questions (Above the Influence questions)

- What did you see?
- What was wrong/not wrong with the behaviour?
- What would you recommend? (Please explain.)
- Our philosophy is called 'Above The Influence.' What kind of influence do you think we mean? What does influence mean to you?
- Why is it better to make your own decisions?
- When it comes to your feelings about drugs and alcohol, who influences you more? Friends or Family? (Please explain.)
- How would you show your parents that you deserve more freedom?
- When the peer pressure is up how do you keep your cool?
- Who do you think has influenced you the most when it comes to living Above the Influence? (Please explain why.)
- When you're out of high school, do you think you'll stay where you're from, or move away? If you want to move, where would you go? (Please explain.)
- What advice would you give to someone who feels like he or she is not confident enough to say no to drugs or alcohol?
- To what extent does the media have a more positive or negative influence over how people think about their looks? (Please explain.)
- Talking about bettering yourself, yesterday was an inspiration to a lot of people who want to better their world. What makes someone a role model? Name two characteristics.
- Who is a role model to you when it comes to sports, music, art, politics, etc? Who do you think sets a really good example for teens your age? (Please explain.)
- How do you think adults should talk to teens about drugs? What have adults in your life done right or wrong?
- Venting to friends is a huge stress reliever. What makes someone a good listener?
- From bench-pressing to ballet, exercise relieves stress. What's your sport or exercise to relieve stress? (Please explain.)
- When the stresses of life seem overwhelming, music can be a refuge. If you're feeling upset, what music do you put on? (Please explain.)
- School is here for some, and just around the corner for others. Who influences your attitude the most about school? Your friends, teachers, your parents? (Please explain.)
- The things adolescents read and watch can definitely affect the way they think and act. Which influence has the biggest impact on your life? Why do you think that is? Music, TV, movies, books, Internet, video games?
- Parents and friends aren't the only people who influence us. What about coaches, teachers, mentors or counselors? Who do you see as someone who looks out for you? (Please explain.)
- When and where do you think you have the most influence in your family? Dinner, fashion, movies, TV, trips, technology? (Please explain.)

- Part of going out prepared is knowing how you'll get home. If the person who drove got too messed up to drive, who would you call to pick you up? (Please explain.)
- "Why aren't you drinking?" Just being asked this question puts you on the defensive. Have you ever had to explain to someone why you don't drink or use drugs? (Please explain.)
- What would you do if your boyfriend or girlfriend wanted you to drink or try drugs? How would you handle it?
- If your boyfriend or girlfriend is going through a difficult time, how do you support him or her? And if you're going through something tough, what's the best thing he or she can do to support you?
- What do you think are the adverse effects of drug use and the potential negative consequences?
- How do you stand up to negative pressures and influences?
- How much do you know about the facts of drugs and alcohol? How do you make smart decisions about drugs and alcohol?
- Are you influenced in any way by your school, home, church, neighbourhood or family relationships? (Please explain.)

SESSIONS TWO AND THREE (WEEKS TWO AND THREE) "OPEN THEIR EYES TO INFLUENCE" (IN-PERSON INDIVIDUAL INTERVIEWS):

Facilitate brief discussions in individual interviews about the videos and influence in general using **preferably the following additional questions,** or the same questions from part 3 of session one above, to evaluate the impact of the programme on students' self-efficacy, also in terms of the conceptual framework of social cognitive theory (These extra questions have particular relevance for SCT/SET).

*** NB* Additional questions that I used, derived from the literature study, that are critically relevant to SCT/SET and for the coaching of self- efficacy in the main (see chapter seven for how I interpreted the participants' comments hereon in the light of SCT/SET)**

- What will drugs and alcohol do for you as an individual?
- How confident are you in coping with specific situations? For example, peer pressure to smoke, to drink alcohol, to take drugs. How do you feel if your peers are drinking and you're placed in that situation? How confident would you be?
- What do you visualise as the positive consequences of sobriety? By staying sober and not drinking. What are the positives of that?
- What would you visualise are the negative consequences of drinking?
- Do you frequent places / social settings where heavy drinking takes place?
- How strong is your self-efficacy not to drink alcohol?
- How important is family communication in influencing your behaviour?
- Would you say that you are more influenced by your peers than by your parents?
- Are you less likely to want to use alcohol or drugs or smoke as a result of this programme?

- If you're entering into a risky environment, let's say you're going to a party, would you in your mind rehearse the flexible plans of action, so that if you are going to get into a difficult situation you can have a suitable response?
- With this programme, what is your opinion of the use of the DVD video and the audio-visual media for learning about the substance abuse prevention? What do you think of the programme? What's your experience of watching the video?
- Do you think that your Life Orientation teachers, and the other teachers would find it interesting to participate in this Above the Influence Campaign?
- Do you feel well-informed about the dangers of alcohol and drugs?
- Why is it what that the teenagers turn to these type of things, like alcohol and drugs? What is it? Is it because they don't have the strength and perseverance?
- How do you set goals and create motivating incentives with whatever you do?
- What would you suggest to the other adolescents who have got a problem? Now, how can they improve on this?
- Would you say the programme has helped you with social skills training and assertiveness?
- In your neighbourhood are there any negative influences placing you at risk where you stay?
- Do you feel that your parents help you? Within your family, does the family communication, help to influence your behaviour positively?
- Have you got any questions that you would like to ask about this programme?
- What about those children who don't have a support structure, who don't have their family to support them, and are maybe not a good example. How can they respond in that situation, when they don't have the support?
- What about these others that are not a good example, how can one get the message across to them so to put them onto a good track?
- What about these adolescents who don't have in their minds the reality of life? They look to celebrities and famous people as role models? What is it about adolescents that actually causes this?
- What was your experience of the Facebook online interactions?
- The idea was that we would change the language and put Zulu or Xhosa or Sotho or Nguni or other sub-titles for the other groups. Do you think that type of thing can help maybe?
- One of the learners had suggested a story-line with a movie, so it would be interesting for the learners? What do you think?
- With your future career and study goals and things like that. How do you get information about these different types of careers?
- What makes you feel well? Your emotional and physical well-being?
- What more could we do taking into consideration that we now dealing with South African adolescents, we're not actually dealing with Americans?
- Let's see, what influences your perseverance in any situation? Perseverance. You know, to have the strength of character to persevere in a given situation?
- The question to ask is, why are they not implementing these ideas to greater effect already? Why doesn't the government already have a better plan?

SESSIONS FOUR, FIVE AND SIX (WEEKS FOUR, FIVE AND SIX)" ONLINE CHAT-ROOM SESSIONS":

The abovementioned in-person interview questions from sessions one, two and three above, can be used again as online questions or other questions, mentioned below, from Above the Influence on Facebook, which are updated on the internet regularly, can be shared, for example:

- 'Like this post if you're staying Above the Influence this New Year's Eve'.
- 'What's your opinion of New Year's resolutions? Are they a waste of time, or do they actually do some good?'
- 'Everyone's talking about New Year's resolutions. But what are some of the things you resolve NOT to change about yourself in 2012?'
- 'What was the biggest lesson you learned from a negative experience in 2011? Share your words of wisdom with us'.
- 'There's a difference between dwelling on the past and learning from it. Here's to looking—but not stepping—back. Like this if you agree'.
- 'Is there such a thing as positive peer pressure?'
- 'Like this if you are proud to be one of the 500,000 fans of Above the Influence!'
- 'Certain people in our lives help make us who we are. Who has helped shape who you are, and how have they done so?'
- 'What important lesson has a friend helped you learn this year?'
- 'Your friends are in your life for a reason. What percent of your Facebook friends would you say are truly positive influences in your life?'
- 'Who's the first person you turn to when something's upsetting you?'
- 'How do you give support to your friends?'
- 'Dealing with divorce, the death of someone close to you, moving to a new school or state—all of these things are challenging to deal with. What's been the hardest thing you've had to face so far this year?'

SESSION SEVEN (WEEK SEVEN) CLOSING (IN-PERSON AND/OR BRIEF OPEN-ENDED QUESTIONS):

How helpful did you find the audio-visual programme? (Please explain)**:**

1. The classroom focus group discussions and DVD videos?
2. The individual interviews?
3. The 'Above the Influence' online Facebook sessions?
4. Your comments on any other aspects of the programme on how it may be improved?

TRANSCRIPT OF AN INDIVIDUAL INTERVIEW

Participant 22, female, 13.03.2012

How confident are you in coping with specific situations? For example, peer pressure to smoke, to drink alcohol, to take drugs. How do you feel if your peers are drinking and you're placed in that situation? How confident would you be? VLE RRME COB

I used to feel like left out and I didn't fit in, but then I realised, I started to realise, that I don't need to fit in, I want to stand out of the crowd. So, now when I see them like all drinking and everything, I don't feel anything. I feel confident and I don't want to go in that direction. I don't need that direction.

And what do you visualise as the positive consequences of sobriety? Like, by staying sober and not drinking. What are the positives of that?

You live longer, and alcohol it makes you do stupid things like some people fall pregnant when they're drunk. They do things that they not supposed to be doing. If you are sober, you going to live healthy, gonna stay free from drugs, and you're not going to fall pregnant or do anything else that you have not previously done. COB CMI RPP

What would you visualise are the negative consequences of drinking, that would be what you've mentioned. For example, maybe the people end up with teenage pregnancies, things like that. COB RPP VLE

And you know people are killed. But you don't even know how they got killed. People are raped.

And there are many negative consequences, the children get….

The children get raped and neglected, they sometimes go for abortion, sometimes they even have the children, but dump them.

And so, if you're entering into a risky environment, let's say you're going to a party, and you end up in a risky environment, would you in your mind you'll rehearse, you will rehearse the flexible plans of action, so that if you are going to get into a difficult situation you can have a suitable response?

Ja, I would like have like planned something. I would in my mind as I was of there now, and I didn't know what was really happening, but I'll be like, I'm not going to do this, I'm going to follow the things that I taught myself to do and I'm not going to go in the wrong direction, even though they doing it, I'm not doing it, even though they are. Furthermore, I wouldn't go there, I wouldn't go to parties like that if I know this is what's happening. I would go to like family parties, and people I really, really trust, I will go with them. But I wouldn't go to like clubs and stuff like that.

You will try and stay away from the risky environment?

I would stay away from people like that, because

Because they would be a negative influence?

Yes, they only, they're not getting you anywhere in life, except failure.

Now, with this programme what's your opinion of the use of the DVD and the video and the audio-visual media for learning about the substance abuse prevention? What do you think of the programme? What was your experience of watching the video and that?

Watching the programme I've learnt a lot. Things that I really, really thought, you know I took it lightly, but then when you watch it, you see it happening, you realise that it is real. And that people go through that, but they can overcome it. So, I learnt that if anything.

Would you say that it's ...

That it's most important to me at school and nothing like drugs and all that they come.

Do you think that your Life Orientation teachers, and the other teachers would find it interesting to participate in this Above the Influence Campaign?

I…. most definitely because I'm sure that they are doing the subject because they love it. They love teaching us that, so I think they would love to participate in this.

So you feel well-informed about the dangers of alcohol and drugs?

Yes I am….

Do they educate you well at school?

Yes, they do because I learnt this from my house, I came to school and I learnt it, and watching this programme, I learnt even more. So, I'm fully equipped with this topic.

Why is it, that the teenagers turn to these type of things, like alcohol and drugs? What is it? Is it because they don't have the strength and perseverance, or is it just the…

No self-confidence.

They not self-confident? What causes this?

Probably their parents. The way their parents are and the friends they join, bad company leads to bad things. If you are joining bad company you're definitely gonna leave them. They're gonna make you follow them. But then if you keep away from them, then you won't go in the wrong direction.

You're trying to seek, within your friends and your peers, you seek a positive example?

Yes, find people that you know are confident and don't involve themselves in drugs and alcohol. Who knows where they're going in life, and not going to sit back and just going to kill themselves.

So, by setting goals for the future and saying this is what you want to achieve and you create a motivating incentive. You say, that if I pass matric, then I can go to university. If I go to university, then I can follow this career, and then I will have a nice future and nice house and family and this type of thing.

Yeah, if you do that then you are going to leave there, and you're going to at the end of the day I said, I know what I want it, and I achieved it. But then if you don't do that you going to end up as a failure and you are not going to achieve anything. So, you have to decide at the end of the day what I want. That's basically the question. What do you want in life?

So some of these children they will turn to drugs because it's like a coping response. They see the drugs as something to help them cope in a difficult situation.

They apparently think that it will help them with stress, and when they come to school they smoke, they say it helps them, it keeps them calm. Then I think that's all, that's not all, that's not right at all.

It might help them cope initially but in the long-term, then they become addicted.

Once they're done, once they start, then they can't cope at all. When you can just stay away from some of those things and you will be fine.

What would you suggest to the other adolescents who have got a problem? Now, how can they improve on this?

People who are going through this, I think people that are like me now, I don't do those things. You could talk to them. Get them to go to counselling and once you go there, they are going to help you, rehab centre, and also you going to get reformed, and once you come out of that you'll be a completely new person. I think the parents should take the first step and help their children if they know their children are going through this.

Would you say the programme has helped you with the social skills training and assertiveness, because assertiveness you have to have that, in your own mind, it's your choice, you can decide.

It made me think a lot about life and things that we take for granted, and if I had to take anything for granted, I wouldn't go there now. Watching the movie, I would like change my life. I wouldn't do the bad things. If I did anything bad I would like change for the better.

And in your neighbourhood are there any negative influences placing you at risk? Where you stay?

Not really. I wouldn't say anything. So far I haven't heard of anything bad happening in my area.

And your parents? Do you feel that your parents, they help you?

They do because they always talk to me and tell me, you know what, don't go there, it's not the best place to go. If you need help, if you need anyone to talk to, speak to us. Don't associate yourself with drugs, because it's not going to get you anywhere.

So within your family, the family communication, it helps to influence your behaviour positively?

It gives me a positive attitude towards life.

What about those children who don't have the support structure, and they don't have the family to support them, and maybe their fathers' drink or within their family, they are not a good example. Then how can they respond in that situation, when they don't have the support?

Definitely, in school and I mean sometimes you do know children who go to that. Don't be selfish, go to them, go after them, be their friends, and have what your parents taught you. Teach them and then in the end they will come, they will see the light. They will see at least somebody cares about me, I think I've got a friend, okay, who cares about me, so I'm not alone.

Have you got any questions that you'd like to ask about this programme?

I would like to know, why can't people just be their selves. Their simple selves. Don't go to the extent that you are not, don't be somebody you're not. I want to know why they go there. It must be like something that is entering them. They should come out with it and tell us, at least then we know.

It's better to be honest and open.

Ja, it's better to be honest and open, don't bottle your feelings inside, because then it tends to like really damage you out there.

Ja, that's very true. Maybe, if one can talk and discuss things with people to be more….

Then other people learn from you …

It helps to have a parent whom you can speak with or, friends that you can share with, but if you don't have that opportunity to actually see. If you find it difficult to share those difficult emotions then they surface in other areas which cause all these problems.

Like in school you can't go slow, you lose faith in school, the school work, your grades go down. You don't focus after that, when you bottle your feelings.

But part of being successful is to set a goal, to have your goals, to have an incentive, but then also….

You've got to work for your goals and stuff, you can't set it and not do it without working.

And that's where you have to have perseverance. You have to have put in the effort. The effort expenditure and persistence, you cannot just expect things just to arrive.

You can't do that and expect everything go well.

That's very true. So, one must be prepared to put in the effort and try and work towards your goal. But in the process it won't also be easy, sometimes it will be difficult.

It will, but then you got to make, so everybody goes through bad times, and then you have to like work more harder. Successes, you have to work with success, you don't just earn it unless you've worked for it.

What about these teenagers who, they maybe don't have in their minds the reality of life. They look to maybe the celebrities and famous people and they say that these people they got their money easily. They didn't have to work. They drink, they take drugs, we can do that and we'll also get money. We'll also get…but that isn't really true, because they are the isolated…..the majority of people have to….

They are just like us at the beginning, they worked their way up, and no, I don't think, if you're not logical, they're not being logical if they want to be like them. No-one wants to be like singers and models because the things they do is totally distasteful, no-one wants to go in that path. I don't know, if people want to go in that path, they not really thinking logically.

And there were a lot of harmful side-effects because now some of these drugs can destroy your mind. Then one's whole life can be destroyed by this type of thing. But, it starts with smoking and drinking and then it moves to marijuana and then after that then they think, let's try this and that and then sometimes then they don't realise what the consequences are.

Ja, the simple things they start with, then they get addicted later.

What is it about adolescents that actually causes this? They want to make their own choices of life. Some people have got the ideas that, they have idea that this is what they want from life. They have

the ideas of that, they aspire to, perhaps they want to go to college, they have some career. And if you work towards that, it is a reality, you can actually achieve your objectives. For example, real estate, qualify as an estate agent, there are many careers without even university. Then, of course if one goes to university there are many other careers with a tertiary education. What about sport and extra-mural activities, do you think that could be of any help?

I think it could, because like if they, like say, associate with sports and always with their family and all, with sport, they won't like go smoking and everything. They can accept that instead of smoking, then they can play sports. They won't really have the time to go and smoke and drink, because most of their time will be like watching sports with their families and their friends. So playing sports in a way also helps them. It can help them.

With this programme, it's called Above the Influence. Now you've seen the DVD, video. The DVD video with the example of the teenagers, setting a good example to study and not to drink and smoke. And then also there were the other interactions with interviews and…what was your experience for example of the Facebook interaction? Using that as a means of discussion. We tried to put the programme across. Any aspects of the programme you can comment on, because, this programme is from America. Now, in South Africa many of the teenagers they are perhaps not English speaking, they are Xhosa or Zulu. So, the idea was that we would maybe, we'd change the language and we would put Zulu or Xhosa or Sotho or Nguni or other sub-titles for the other groups. Do you think that type of thing can help maybe?

I think it could because there's people who don't understand English, so they don't want to watch it. When they know it's their language, they are going to want to watch it, and then they are going to like learn from them. If it's just in English, then they are going to say that it's only catering for the whites and the Indians, what about us?

One of the teachers at the school remarked to me and said that, he thought that to try and get some of the adolescents of today to actually adhere to these ideas is very difficult, because out there, maybe in some cases you have parents that support you, but in many cases many of these adolescents they don't really abide by their parents, and then they take, they have cellphones and all these type of things, and then they are not focussing on their schoolwork. So, it's a real battle, some of the teachers, they're saying it's very difficult to discipline the children, they sleep in the class, they don't concentrate, they don't want to study. But, then they there are others that do want to study. So, maybe as you say, to associate yourself with those people that do want to study and have got a good example, that can help a lot. But, what about these others that are not a good example, how can one get the message to them so to put them on a good track?

I don't think we should leave them out, even though they're like that. Talk to them, if they're unsure they will see that what they doing is wrong at the end. As you talk to somebody at the end they're going to come to some understanding. So, when you see people like that, the teachers see them doing that, call them one side and talk to them, ask them, where are you going wrong, and do you

need help? If you need anything, I'm here to help. So, then they know then at the end of the day, you know what these teachers are also worried about me, so I'm not alone. So, we shouldn't leave them one side and say to hell with you, that's your life. No, we should be there for them, because they all are just like us, just that they are going through different problems compared to what we are. So we should involve them.

And if the teachers had the resources, for example, if there was a TV screen, with speakers, and we could show this programme where they could watch the example with the audio-visual media in their language, with the Zulu or Xhosa sub-titles then they would see the reality. One of the learners suggested a story-line with a movie. Something like that. So, it would be interesting for the learners. But, in your classes at school do the teachers actually, do they discuss all this type of thing or how….?

They discuss it, but they don't really go into details like what we doing now.

But now, you say you've got all the information, you're educated, you have the necessary knowledge of the dangers and of the harmful effects. So, in your case, you're able to make a decision, you are cognisant, you've got the necessary kind of comprehension of what it's all about. But some of them don't comprehend.

The teacher could form a group and have like a discussion and make everybody put their own point of view. Maybe the people that don't like to talk with God, make them point out what they feel. And then it's going like make them open up, they're going to want to open up.

More interactive discussion?

Ja with people, with everybody they know.

With your future career and study goals and things like that, you have some goals in mind. You've set goals, you've created motivating incentives. You've said, for example, you go to the library, with sometimes some of your more studious types of friends. They will encourage you to go to the library to study. And that helps you because then you focus on what you doing.

We focus on what we are doing. So, like in our school now, we've got our own group, our study group like most of the girls who are with me. We started our own study group, and every day we go for like about two hours to the library to study and for all our work. And we help each other and we talk about things. So, at the end of the day that's what makes us very confident, because we know we've got each other. So, I think that people who don't feel like they've got anyone, they can join us in order to feel confident, self-confident.

What careers, what subjects would you like, sciences, the business, mathematics. And there are many careers that you can study in that field. How do you get information about these different types of careers?

Internet, the internet. It like helps you, even if you're taught like stage 1 and like for example, I say, I want to be a doctor. So, people that I know that are doctors, I talk to them, the hospitals, they tell me more about it. You get help with some hospitals. You read more about it and that like brings you to a more better understanding of what you want to do. And if you really want to go in that field.

What makes you feel well? Your emotional and physical well-being? What makes you feel well? Promotes your well-being, as a person, how… do you play tennis…or…have you got some interest in some types of things…reading…watch TV or what do you do?

I play sport, doing ballet, when I've got free time with my family, my brother and then I play scrabble, when I'm done with my schoolwork I read a lot. I love reading, because there's a lot of interesting things when you read. You learn a lot. And listen to music. Sometimes I watch TV. On the internet, and like when you're playing sports a lot you like get to learn, get to meet new people. And those people are like motivating you, because most people play sports in my life, are like very energetic and they like tell you more about….and then you get to be like…..everybody gets to know more about each other. So, it's in a good way, because we are not learning about drugs, now you're learning about basically everything in a good positive way.

With learning, one can learn from books, you can learn from people, there are various ways of learning, and the idea of learning from audio-visual media, using DVD resources and that type of resource. Basically, in this case, this programme already exists, the programme is already in existence, and as I say, it's an American programme. So, it's not a question of creating a new programme, it's a question of selecting and implementing and evaluating, so this is the purpose of the discussion. It actually evaluates in the sense of getting a feedback from those that participated with it, and their opinion as to the value of the programme and how can it be best adapted. The one idea which I had was the sub-titles, as I said. But, more feedback on the actual programme in the sense of….there are many programmes in America of this type, but it's a unique programme to South Africa, in the sense that it doesn't cost, it's actually supported by the office of National Drug Control Policy in America, so it's a programme that can be adapted within a South African environment. But, it has an American cultural connection. So, some of the questions of the programme were created by Above the Influence. What more could we do..ok…we could approach the people in America and we can ask them if they will let us use this in South Africa. They've already agreed that I could interview the adolescents, which is what I'm doing now. They agreed for that, for the implementation to get the feedback from you people and that's so why I'm doing this now, but we have to take it further, we have see what can we do with this programme. This is why any ideas that you can think of that, how it can be used, particularly taking into consideration that we now dealing with South African adolescents, we're not actually dealing with Americans. But there's not very much difference between the Americans and the South Africans it's just the implementation is within the South African environment. It looks to me as if one of the problems is that the schools don't have all the resources. Sometimes they don't have a library, or we don't have the audio-visual media, so the government needs to

actually allocate more money to pay for the TV's and these type of things that can be used in the schools.

We can make our own movie. It would be nice to if we make one in South Africa.

That's right, we could use the adolescents within South Africa. But, what this is also about is, it's about you as an adolescent. Your career, your future. It's a question of, does it make a difference to you? You've already said that it does. You said that it does help you. It's going to help you because it will help you to set goals, it will keep you on the direction where you say, ok you are less likely to take drugs, because now….. But, why is it that you'll be less likely to take drugs? What is the reason? Because you've got in your own mind, you have some goal for the future. Is that right?

Yes, and you don't want to go down.

And if you make the wrong decision. What happens if you are with a group of adolescents and they are all drinking, all of them, and they say it's all good. Now, you're not drinking, but you…it may be four or five others and they drink and smoke. Then, you'll say, ok, well then it's better to find the others that do not do that type of thing. But, there are also many that don't want to drink and smoke too.

There are many, it's not like there are just a few.

Now they're starting to recognise that it's not good for them in the long run.

And it changes you for the better.

Let's see, what influences your perseverance in any situation? Perseverance. You know, to have the strength of character to persevere in a given situation. Because, in life, maybe one's parents can support you. They say, ok, you can do this, you will be able to do this. Your peers say that you can, and then you also look to other people. Maybe famous people. There are famous people that have achieved things, and they also do well.

If people motivate you and keep you up, they don't put you down, you're going to aim for it, you're going to know, I've got people who like, are with me, and who are like motivating me in all this business. Then you will eventually achieve what you want.

In the South African environment you could maybe say that it's a unique environment in comparison to perhaps some of the areas in America. America maybe they have more money, they can actually afford to provide the schools with better facilities. But often in South Africa you have some of these rural schools, where they've got almost nothing. They're out there in the sticks and they've got no resources and sometimes they don't even have classrooms. And yet it's in those environments that they actually need a lot of help. So, it's all very well to say that the government should give more

money but the fact of the matter is maybe they won't allocate enough money to the schools, to provide them with the libraries and all the facilities. So, if you have a programme that can be put across without it costing too much and you can let the teachers have all the information on the programme, and it's not going to cost them too much time or effort to implement. This programme it's not very costly, is doesn't take too much money to put it across. All you need is a TV and a DVD and you need a teacher to ask some questions and discuss things with them… so it doesn't cost too much. But, if we could get the government to actually agree to give some money towards this programme, so when I'm finished with this and I've prepared the report I'm going to say to the education department, I think it's about time they should actually try and help because otherwise… They can actually save money in the long-term because they'll have less people going to the hospitals for severe drug problems and this. If the people are not going to these hard drugs and taking the severe drugs the government will save a lot of money there. So, they should actually put some money into prevention rather than dealing with the problem afterwards.

At the end of the day they are saving many lives too, it's not just the money, they are actually saving children's lives. They are not thinking of that.

But the question to ask is why are they not implementing these ideas to greater effect already? Why doesn't the government already have a better plan? You know that there was a substance abuse summit in Durban, and it was last year. The Minister of Health was presiding at this conference, at the international conference centre in Durban, and they said that one of the objectives that they have is to in fact to create better prevention programmes. That was one of the goals that the government has got. They want programmes that will investigate the perception and experiences of adolescents.

TRANSCRIPT OF A SMALL GROUP DISCUSSION ON FACEBOOK (EXERPT THEREOF)

Notifications

On

School

Closed group

- 12 members
- Photos
- Docs

Search this

See all

Members (12)

L M
Staying above the influence of negative people

Unlike · · Follow post · 14 hours ago via Mobile

- You like this.

- 

Aries Endeavour
To all the learners who participated in the adolescent audio-visual programme at School, please check with the principal, as your certificates are waiting for you. Thanks again for your input and good luck with your studies.
Like · · Unfollow post · 21 hours ago

Aries Endeavour

Above the Influence
What is one thing you want to accomplish by the end of this school year?
Like · · Unfollow post · 15 January at 10:04

N K I want to accomplish being a Radio & T.V Personality
15 January at 15:09 via Mobile · Unlike · 1

Aries Endeavour
Drug Facts | Alcohol
apps.sms.contextoptional.com

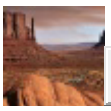
Alcohol is a depressant that affects every part of your body. The damage it does now can impact the rest of your life.
Like · · Unfollow post · Share · 15 January at 10:07

-

L M
Are we getting certificates for the interviews?

Unlike · · Unfollow post · 4 January at 11:19 via Mobile

- You like this.
-

- 

Aries Endeavour Most definitely! Those who contributed well will be noted with commendation.
4 January at 15:59 · Like

- 

Aries Endeavour Did you find the programme helpful?
4 January at 16:04 · Like

-

L M okey thats great. Yes i did..it helped to distinguish good from bad influence etc
4 January at 16:34 via Mobile · Like

Aries Endeavour
If you could invite any celebrity role model to participate in this group, who would you choose?

Add an option...

Like · · Unfollow post · 27 November 2011 at 13:34

o

-

N M HHP because he produces great music.

28 November 2011 at 09:28 · Unlike · 2

- 

P M Will Smith because he's a good actor with good morals.

29 November 2011 at 14:32 · Unlike · 1

▪

S S Jabu Pule the footballer. He could motivate the learners about how drugs are bad as he has had to overcome drinking and drugs problems himself.

5 December 2011 at 21:23 · Unlike · 1

T S
Stop blaming otherz 4 ur foolish mistakes! STAY ABOVE DA INFLUENCE nd take responsibility 4 ur own actions!!

Unlike · · Follow post · 2 December 2011 at 21:23 via Mobile

o

o You, S D and N K like this.

MODEL OF VIRTUAL GROUP WORK

Table 6.3 Model of virtual group work

Stage	Group member activities	Tutor activities
Stage 1 Access and motivation	Accessing the system Finding their way around	Welcome and encouragement Guidance on where to find technical support
Stage 2 Online socialization	Sending and receiving messages Getting to know each other Starting to develop a group culture	Introductions Icebreakers Ground rules Netiquette
Stage 3 Information exchange	Exploring roles, responsibilities, project tasks Carrying out activities Reporting and discussing findings	Facilitating structured activities Assigning roles and responsibilities Encouraging discussions Summarizing findings and/or outcomes
Stage 4 Project or learning activities	Completing project tasks or learning activities Giving and receiving feedback Problem solving	Facilitating online activities Monitoring process within overall programme Facilitating the process Asking questions Encouraging reflection
Stage 5 Informing	Disseminating findings Giving and receiving feedback Reflecting on outcomes and learning process	Facilitating the process Asking questions Encouraging reflection
Stage 6 Closure	Completing all tasks and activities Completing review and evaluation processes Goodbyes	Leading review and evaluation process Ensuring loose ends are completed Leading closure
Adapted from the work of Gilly Salmon (2000)		

APPENDIX J

NREPP PROGRAMMES

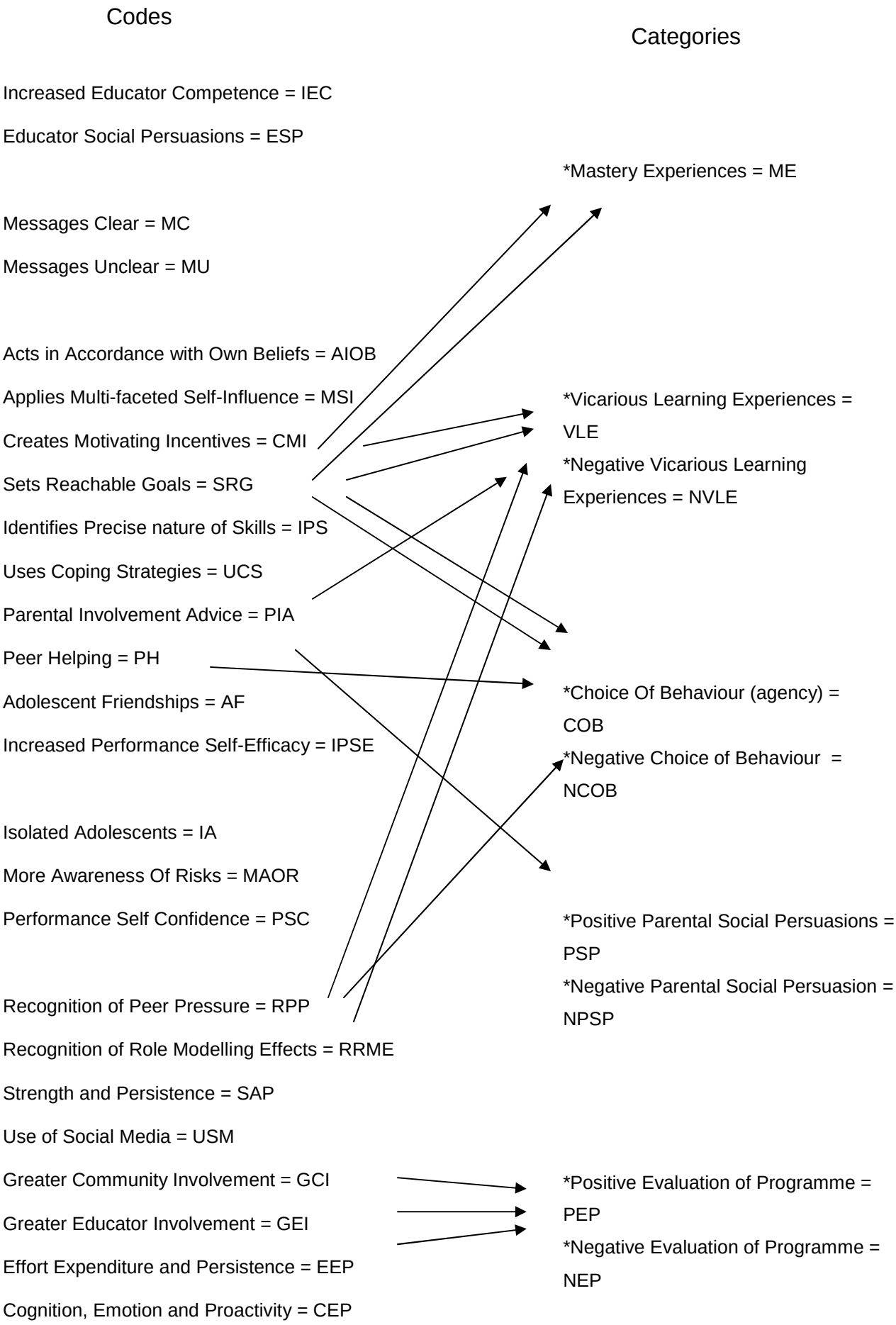
Intervention	Website addresses	Audio-visual media	Prices ($USD)
Across Ages	www.acrossages.org	Mentor training video.	$25-$65
Active Parenting	www.activeparenting.com	Set of 6 DVD's for parents of teens and pre-teens.	$349
AlcoholEdu	http://www.outsidetheclassroom.com/	Interactive exercises in a school's computer lab.	Variable
All Stars	http://www.allstarsprevention.com	Prevention ABC's course: 7-DVD's.	$99-$699
ATLAS	http://www.ohsu.edu/hpsm/	Coach instructor package including training DVD.	$280
BARR	http://www.search-institute.org/BARR	Paperback and CD Rom – 'Helping Teens'.	$30
CASASTART	http://www.casacolumbia.org	Colorado Department of Education project.	$3000
Celebrating Families	http://www.celebratingfamilies.net	Curriculum: 5 volumes and 'Recovering Hope' DVD.	$228
Class Action	http://www.hazelden.org/ http://www.hazelden.org/bookstore	29 prevention DVD's on drug and alcohol abuse.	$99-$595
Community Trials Project	http://www.pire.org/communitytrials/index.htm http://www.prev.org/prc/outcomes.wmv	Prevention Research Centre online video.	N/App
CLFC/CLC	http://www.copes.org	CLFC complete video series – 5 DVD's.	$799
Guiding Good Choices	http://www.channing-bete.com/ggc	GGC core programme and workshop DVD's.	$839
Hip-Hop 2	http://www.ypci.org/products.html	Hip-Hop 2 Prevent Drugs Digitally CD ROM.	$60
Life Skills Training	http://www.lifeskillstraining.com	Prevention manuals and DVD's.	$130 - $1100
Media Ready	http://www.irtinc.us/products/mediaready/	Media Ready Curriculum Kit CD ROM.	$100

Intervention	Website addresses	Audio-visual media	Prices ($USD)
Parenting Wisely	http://www.familyworksinc.com	Parenting Wisely CD-ROM programme kit and video series.	$858
Project Alert	http://www.projectalert.com	Eight classroom videos of 7-minutes each.	$150
Project EX	http://tnd.usc.edu/ex	Educator's manual and audio CD.	$60
Project Northland	http://www.hazelden.org/web/go/	Alcohol use prevention CD-ROM and Audio CD.	$195
Project SUCCESS	http://www.sascorp.org	Implementation manual and power point presentation handouts	$175
Project TND	http://tnd.usc.edu	Educator's manual, workbooks and video.	$205
Project TNT	http://tnd.usc.edu/tnt/	Tobacco prevention videos and educator training.	$120 - $2000
Reconnecting Youth (RY)	http://www.reconnectingyouth.com	Educator leader curriculum, PowerPoint RY slideshow and workbooks.	$300 - $660
RSAP	http://www.sascorp.org	Residential Student Assistance Programme implementation manual and video.	$220
Say it Straight (SIS)	http://www.sayitstraight.org	Trainer manual and set of DVD's.	$180 - $430
SPORT	http://www.briefhealthprograms.com/	Interventionists start-up, PowerPoint slides and video, phone or online support.	$2600+

APPENDIX K

DATA ANALYSIS STRATEGIES AND SYNTHESIS EXAMPLE (see attachment)

See page 230-231


Codes
Categories
Increased Educator Competence = IEC
Educator Social Persuasions = ESP
*Mastery Experiences = ME
Messages Clear = MC
Messages Unclear = MU
Acts in Accordance with Own Beliefs = AIOB
Applies Multi-faceted Self-Influence = MSI
Creates Motivating Incentives = CMI
Sets Reachable Goals = SRG
Identifies Precise nature of Skills = IPS
Uses Coping Strategies = UCS
Parental Involvement Advice = PIA
*Vicarious Learning Experiences = VLE
*Negative Vicarious Learning Experiences = NVLE
Peer Helping = PH
Adolescent Friendships = AF
Increased Performance Self-Efficacy = IPSE
*Choice Of Behaviour (agency) = COB
*Negative Choice of Behaviour = NCOB
Isolated Adolescents = IA
More Awareness Of Risks = MAOR
Performance Self Confidence = PSC
*Positive Parental Social Persuasions = PSP
*Negative Parental Social Persuasion = NPSP
Recognition of Peer Pressure = RPP
Recognition of Role Modelling Effects = RRME
Strength and Persistence = SAP
Use of Social Media = USM
Greater Community Involvement = GCI
Greater Educator Involvement = GEI
Effort Expenditure and Persistence = EEP
Cognition, Emotion and Proactivity = CEP
*Positive Evaluation of Programme = PEP
*Negative Evaluation of Programme = NEP

APPENDIX L

OPEN ENDED QUESTIONS – SESSION ONE - OPENING

NAME _____ AGE_____ GRADE _____

ID No. _____ FACEBOOK _____ TEL/CELL _____

HOME ADDRESS _____ E-MAIL ADDRESS _____

TOPIC: ABOVE THE INFLUENCE

QUESTION 1: WHAT WAS THE FIRST THING THAT POPPED INTO YOUR MIND AS YOU WATCHED THESE VIDEOS?

_____

_____

_____

_____

QUESTION 2: WHAT IS THE MAIN MESSAGE THAT YOU ARE GETTING FROM THEM?

_____

_____

_____

_____

QUESTION 3: WHAT DID YOU LEARN FROM THIS ACTIVITY?

_____

_____

_____

QUESTION 4: WHAT WERE SOME OF THE INFLUENCES THAT WERE REFERENCED IN THE VIDEOS? WERE THEY POSITIVE, NEGATIVE? PLEASE EXPLAIN.

_____

_____

_____

_____

QUESTION 5: WHAT CAUSES PEOPLE YOUR AGE TO BECOME UNDER THE INFLUENCE?

_____

_____

_____

APPENDIX M

OPEN ENDED QUESTIONS – (SESSION SEVEN – CLOSING)

NAME: _____ AGE: ____ GRADE: ____

PARTICIPANT EVALUATION OF ADOLESCENT AUDIO-VISUAL PROGRAMME

HOW HELPFUL DID YOU FIND THE AUDIO-VISUAL PROGRAMME?

(1) THE CLASSROOM FOCUS GROUP DISCUSSIONS AND DVD VIDEOS?

_____
_____
_____
_____

(2) THE INDIVIDUAL INTERVIEWS?

_____
_____
_____
_____

(3) THE 'ABOVE THE INFLUENCE' ONLINE FACEBOOK SESSIONS?

_____
_____
_____
_____

(4) YOUR COMMENTS ON ANY OTHER ASPECTS OF THE PROGRAMME OF HOW IT MAY BE IMPROVED?

_____
_____
_____
_____

APPENDIX N

In the empirical investigation various themes and sub-themes were identified and discussed appropriately. In Figure 6.1 these themes are indicated by means of an illustration as follows.

EMPIRICAL INVESTIGATION THEMES AND SUB-THEMES

Positive aspects of the programme and audio-visual resource

- Adolescent learning was enhanced *(cf.* principle 6*)*
- Communication skills were enhanced (*cf.* principle 8)
- Peer relationships were strengthened
- Adolescent self-efficacy increased
- Assertiveness increased (self-reflectiveness, forethought, choice, intentionality) (*cf.* principle 6)
- Resistance against drugs increased (*cf.* principle 6)
- Anti-drug attitudes were enforced (*cf.* principle 2)
- Positive feedback from online chat sessions and interactive life-skills training components (*cf*. principles 4, 8 & 1)

The programme in the light of SCT/SET

- The influence of *role modelling* on participants' self-efficacy (see sections 2.2, 2.3.2, 2.3.5)
  Friends as role models (section 2.4.9.1)
  Famous people as positive and negative role models (section 2.3.5)
  Family and community as role models (sections 2.3.5, 2.4.9.1 & 4.5.2) (principle 5)
- The influence of *social persuasions* on participants' self-efficacy (see section 2.3.3).
  Media and social persuasions, including the social media and control self-efficacy (see section 2.4.4)
  The role and influence of peers in social persuasions and in increasing adolescents' self-efficacy
  The role of parents in social persuasions (section 2.3) coaching and encouragement by significant others
- The influence of extra-mural activities to address *emotions* on participants' self-efficacy beliefs (see section 2.4)
- The influence of *choice of behaviour* on participants' self-efficacy (see sections 2.3.5 & 2.5)

Positive processes experienced by the adolescents

- *Processes of self-reflection, outcome expectations and learning from vicarious experience* (see also sections 2.4.5 and 2.4.6)
  Visualising the positive consequences of sobriety, enduring abstinence self-efficacy to resist drinking alcohol (see section 2.4.8.2)
  Visualising the negative consequences of drinking as a reflective outcome expectation process (see section 2.4.8.2)
- *Processes of predicting the likelihood or expectation of taking drugs or alcohol in the future*
  Persevering, maintaining and sustaining the effort needed to succeed. Envisaging positive outcomes in the future, in terms of their self-confidence and an enduring abstinence to consistently stay 'above the influence' (see section 2.4.8.2).
- *Withstanding peer pressure in specific situations in the future* (section 2.4.9.1) building a personal intention and expression of commitment to stay drug-free
- *Processes of planning alternative strategies (forethought) and self-regulation* (section 2.3.1) Controlling drinking behaviour by developing self-regulative skills and rehearsing flexible plans of action
  Dealing with progressively more risky drinking situations to remedy vulnerabilities and to increase their abstinence self-efficacy
- *Processes of perseverance and effort expenditure in adversity* (section 2.3.6.2 & 2.3.7.2). The importance of persevering when confronting obstacles and reflecting on this in the interviews had been helpful in increasing adolescents' self-efficacy and strength of character

Challenges or difficulties experienced

- Recognising the negative and positive role modelling effects
- A sense of maturity
- Carefully evaluating their assumptions, cognitions, emotions, and taking a proactive stance
- Chat-room sessions - limited availability of internet facilities at home
- The wish for anonymity/ signing up under a pseudonym with the chat room sessions

Recommendations for improvements

- *Recommendations for improvements to the resource (the audio-visual media*) suggested a storyline with actors, using adolescents as role model participants in the DVD, the use of sub-titles within the DVD resource and indigenous languages subscripts as well (e.g. Xhosa, Sesotho, Nguni, Zulu)
- *Recommendations for improvements to the presentation of the programme by teachers* indicated inclusion of teacher training (section 4.5.2) (principle 11). Also, long-term use with regular repeated reinforcing sessions over time as part of Life Orientation with more interactive practical classroom discussions (see section 4.5.2 & principle 10)
- *Recommendations for greater community and parental involvement in the presentation of the programme* (section 4.5.2, principle 3, principle 5)

Figure 6.1 Illustration of empirical investigation themes and sub-themes

Figure 6.1 indicates themes such as positive aspects of the programme and audio-visual resource (section 6.4.1); the programme in the light of SCT/SET (section 6.4.2); positive processes experienced by the adolescents (section 6.4.3); challenges or difficulties experienced (section 6.4.4) and, recommendations for improvements (section 6.4.5). Sub-themes are also indicated within each of these mentioned themes, for example, that adolescent learning was enhanced (*cf.* principle 6).