

Substance use Among In-School Adolescents in Gweru, Zimbabwe: Perceived Predictive and Protective Factors.

Mpikелеlo Mpawusi Maseko; Florence Ngwenya

Midlands State University
Gweru, Zimbabwe

and

Levison Maunganidze

University of Venda,
Thohoyandou, South Africa

Abstract

This study examined Zimbabwean adolescents' beliefs on perceived predictive and protective factors for substance use. Using a qualitative descriptive design, researchers collected data from a maximum variation sample of 160 participants. Data was obtained using essay type open ended questionnaires. The researchers isolated themes by identifying recurrent words and phrases and then sorted the data into thematic categories. A number of subthemes emerged. Specifically; peer pressure, life stress, disinhibition, boosting self-image, negative affect, parenting practices, perceived benefits and symbolic expressionism emerged as perceived predictive factors for adolescent substance use. Parental support, religiosity, self-control, school based guidance and counselling, and minimising substance availability emerged as perceived protective factors. The findings suggest that intervention programmes for preventing adolescent substance use should factor in these predictive and protective factors if they are to be efficacious.

Key words: Adolescence, substance use, risk factors, protective factors, prevention

Introduction

Over the past several years public concern has greatly increased over mind altering substance use among adolescents. That concern has been evoked by a flow of reports from individuals, mass media, and government agencies.

The reports in Zimbabwe are consistent in telling of a remarkable expansion in student interest in and use of substances (Mutsvaga, 2011; WHO, 2011; Rudatsikira, 2009; Eide, Butau, and Acuda, 1999). This is despite many innovative and on-going programmatic interventions targeted at reducing adolescent substance use.

The problem of underage adolescent substance use is accentuated by the fact that young people often come in contact with licit and illicit substances at a time when they are not fully capable of weighing the bio-psychosocial implications of their actions. It is now well established that many of the behaviours which are associated with adult morbidity and mortality such as substance use begin during adolescence (Millstein, Petersen, Nightingale, 1993). In fact over 80% of substance use begins at adolescence (Johnstone et al., 2006). Mutsvaga (2011) indicated that the substance use culture in Zimbabwe is fast spiralling out of control, sucking into its vortex adolescents. In seeking to understand adolescent substance use, it is quintessential to know the sequential nature of the phenomenon. Adolescents do not just start using cannabis. The sequence tends to follow a pattern, which is not invariant, but 80% to 90% of youngsters fit this kind of pattern (Johnston, Bachman and O'Malley, 1994). Yamaguchi and Kandel, (1984) outlined the sequential stages in the movement from a non-substance user to the use of illegal substances such as cannabis. The sequencing proposition suggests that substance use involvement includes "trying different classes or categories of drugs in an ordered fashion" (Kandel and Jessor, 2002, p. 365). Empirical evidence suggests that substance use typically starts with alcohol or cigarettes, followed by drunkenness, cannabis and other hard drugs (Collins, 2002).

Individuals, families, communities and societies experience profound consequences from underage use of licit and illicit substances by adolescents. For example, tobacco products are often the first psychoactive substances young people come in contact with and up to a quarter use the products in many countries (Mackay and Ericksen, 2002). This habit usually carries into adult life. Substance use has been recognised as a major contributor to death and illness (Bayer and Brigden, 2003). Every 6 seconds, someone dies of a substance use related disease and if current smoking patterns continue tobacco will cause 10 million deaths each year (WHO, 2008; WHO 2010). By 2020,

tobacco is expected to have killed over 175 million people worldwide, causing more deaths than HIV, tuberculosis, maternal mortality, automobile crashes, homicide and suicides combined (Bayer and Brigden, 2003; Crofton and Simpson, 2002). "Estimates derived from current smoking rates indicate that approximately 250 million adolescents worldwide will die prematurely from a tobacco related disease" (Ammerman, 2008, p. 888).

This qualitative study examines the perceived predictive and protective factors for adolescent substance use. The dynamics underlying adolescent substance use need further investigation. Knowledge of adolescents' insights on the factors that may precipitate or prevent substance use is essential for informing interventions to reduce adolescent substance use. Intervening among adolescents gives the opportunity not only to prevent the onset of health damaging behaviour but also to intervene with the health compromising behaviour before it is firmly established as part of the lifestyle which becomes difficult to reverse.

A landmark study of risk and protective factors for substance use in adolescents and early adulthood by Hawkins et al (1992) firmly established the scientific validity of the psychosocial perspective by identifying risk and protective factors that precede substance use. Seventeen clusters of risk and protective factors were identified by these researchers in their review of hundreds of aetiological studies. Risk factors include laws and norms, availability, extreme economic deprivation, neighbourhood disorganisation, physiological factors (biochemical, genetic and personality traits such as sensation seeking), family drug behaviour ,family management practices , family conflict, low bonding to family ,early and persistent problem behaviour , academic failure, low bonding to school, peer rejection in elementary grades, association with substance using peers, alienation and rebelliousness, attitude favourable to substance use and early onset of substance use.

Although valuable, the study by Hawkins and others was steeped towards the traditional nomothetic perspective. Qualitative studies can permit in-depth understanding of the perceived predictive and protective factors for adolescent substance use. Studies that have been conducted in Zimbabwe (Maseko, 2012; Rudatsikira, 2009; Eide, Butau, and Acuda, 1999; Eide and Acuda, 1996; Zindi,

1992; Chambwe, Slade, and Dewey, 1983) have similarly been steeped towards the etic perspective expressing more or less universally valid knowledge which unfortunately does not get into the life-world of participants and lets the participants' words and accounts lead the researcher to understandings that would remain hidden without deep and open minded exploration (Munhall, 2007). As such, the study sought to ascertain adolescent insights on perceived predictive and protective factors for adolescent substance use.

Methodology

Research Design

In seeking to gain insight on the perceived predictive and protective factors for adolescent substance use, we used the qualitative descriptive design (Sandelowski, 2000; 2010). The qualitative descriptive method is a somewhat eclectic approach that 'evolved' from 'traditional' qualitative research approaches. It seeks to produce a straightforward description of participants' perceptions or experiences with minimal inference or re-presenting of phenomena by researchers as is the case in other qualitative methods (such as phenomenology or grounded theory). As Sandelowski (2000, p. 337) states, this method is "especially amenable to obtaining straightforward and largely unadorned answers to questions of special relevance to practitioners and policy makers".

Participants and Setting

The participants comprised 163 in school adolescents aged between 12 and 18 years (Males, n=83; females, n=80). The participants were selected using the maximum variation sampling technique (Patton, 1990). This strategy for purposive sampling aims at capturing and describing the central themes that cut across diverse participants. The logic behind this technique is that "any common patterns that emerge from great variation are of particular interest and value in capturing core experiences and central shared aspects" (Patton, 2001, p. 264). Thus the participants were drawn from a wide age spectrum and from 4 schools in Gweru urban located in the low density suburbs, medium density suburbs, high density suburbs and in town (Gweru is the third largest city in Zimbabwe which is also the provincial capital for the Midlands Province).

Instruments

An open ended questionnaire was used to gain insight into the participants' perceptions on predictive and protective factors for adolescent substance use. It consisted of the following questions:

In your opinion why do some adolescents of your age use substances such as alcohol, tobacco or cannabis (mbanje)?

In your opinion why do some adolescents of your age abstain from using substances such as alcohol, tobacco or cannabis (mbanje)?

The questions were addressed in an open ended essay format and each participant completed approximately a page of written narrative feedback.

Procedure

Permission to carry out the study was sought from the Ministry of Education, Midlands Province. Passive consent was granted and school principals acted in *loco parentis* in line with the Child Protection Act. Participants were selected using the school register across the school divide to ensure maximum variation. The selected participants were grouped into classes under supervision from the research team. Teachers were not allowed near the classrooms so as to minimise evaluation apprehension. Active consent was sought from the adolescents at the time of administering the open ended questionnaire. They were informed that they have the right not participate in the study. Eight chose not to participate. Participants were enlightened on the purpose of the study and were assured of anonymity and confidentiality. They were given 30 minutes to answer as fully as possible the two questions as well as provide demographic information.

Data Analysis

The written narrative responses to the questionnaire were analysed qualitatively. The first step involved immersion analysis. The researchers did a repeat, delayed and 'untargeted' reading of all written text responses to become familiar with the participants responses and to allow unexpected knowledge to surface. The written texts were then subjected to qualitative content analysis, an approach that is oriented towards summarising the informational contents of the data with minimal interference (Sandelowski, 2000). Data driven codes which emanated from recurrent words and phrases (noted during manifest analysis) were assigned to the text. Members of the

research team analysed the data independently and met to iron out coding discrepancies. Codes were identified for similarity and where grouped into emergent thematic categories. These were then debated, refined, revised and merged by the research team.

Results and Discussion

This qualitative study was primarily undertaken to investigate the perceived predictive and protective factors for adolescent substance use. The adolescents proffered several explanations for their peers' involvement and abstention from substance use under the following themes and sub-themes.

Perceived Predictors of Adolescent Substance Use

Predictive factors for substance use may be defined as any influence that increases the probability of such behaviours. The following subthemes identify factors which were perceived by the adolescents to have a predictive effect:

Peer Pressure

Peer pressure was by far the most reported predictor of adolescent substance use. Apparently some adolescents are unable to resist pressure from friends and playmates to use substances. The following quotes are illustrative:

"Most teens use substances to be accepted in a group of people and be regarded as having 'swag'."

"I personally believe that peer pressure is the most critical factor affecting teenage use of substances. The pressure from friends makes you believe that what your friends are doing is good for you. One might, especially myself, I felt that I was a failure by not taking alcohol and I felt isolated by my friends which led me to try alcohol and smoking."

"Friends tease you if you don't. They call names so you will be forced to do that because you want to please your friends."

This finding gives meaning to quantitative research conducted in Zimbabwe (Maseko, 2012; WHO, 2011; Rudatsikira, 2009; Eide, Butau and Acuda, 1999;

Eide and Acuda, 1996; Zindi, 1992). This suggests that adolescents rely on peers for validation and direction and assess themselves and their behaviour through the reaction of their peers. Adolescents may be ill-equipped to deal with the evaluation apprehension inherent in pressure to conform to referent group norms.

Stress

Many adolescents opined that stress was a precursor to substance use. Ostensibly, substance use becomes a way of coping with life stress, albeit an iatrogenic coping strategy. This sentiment is evident in the following quote from one participant:

"Life is just not easy especially if you are an adolescent. Some are just stressed up so they try to refresh their minds by taking substances."

This finding suggests that the experience of adolescence might be stressful to some adolescents. Stress is a factor that has not been identified in most studies on predictors of adolescent substance use in Zimbabwe and this will have implications for interventions. Substance use turns out to be the way some adolescents try to 'forget worries' or 'feel good' as stated by other participants.

Recreation and Fun

Pleasure and fun are reportedly one of the dominant explanations for adolescent substance use. Many adolescents reported that they used substances because they believed they resulted in pleasurable consciousness states, made them 'enjoy life to the fullest' and to be happy. The following quotes are illustrative:

"I have experienced a lot of adolescents who take alcohol and tobacco. Some of them are my friends, so when I ask them why they take and abuse alcohol they say it's for fun and recreation."

"Some use substances to instil in themselves a feeling of excitement and having a 'feel good moment' as they describe it as 'cool'."

"It's just fun, there is nothing wrong with it. 'Weed' (cannabis) takes you places."

Ostensibly, these findings suggest that some adolescents are sensation seekers and use substances for pleasure, fun and recreation. This parallels findings obtained in studies which identified sensation seeking as a predictor of substance (Maseko, 2012; Newcomb and McGee, 1991; Zuckerman, Ball and Black, 1990).

Disinhibition

Another common explanation for substance use was that it helps to reduce inhibitions and makes some adolescents feel more confident. Some of the participants reported that:

"I take these substances so that I can feel good and so I could have 'guts' to approach girls and make them happy."

"To have confidence when talking to girls and going to night clubs to party and sleep with them."

"Having sex without realising it."

The association between substance use and sex as implied by the participants is worrying in light of the HIV/AIDS pandemic. This finding is consistent with research conducted in Zimbabwe (Mataure et al., 2002) where the dominant explanations for the substance use and sexual behaviour link was that substances decrease inhibitions and tenseness and have disempowering effects on females. These findings suggest that some adolescents use substances because they perceive them as having a disinhibiting effect. Consequently they use substances in order to engage in behaviours they would not normally participate in.

Media

Consistent with other research (Mackenzie and Kipke, 1998; Johnston and O'Malley, 1986) the media was reported to play a part in adolescent substance use initiation. Adolescents observe a continual stream of entertainers and other high profile individuals engaging in substance use behaviours. The following quote is illustrative:

"Adolescents take alcohol and other stuff because they are influenced by TVs which expose them to programmes which lead adolescents to use substances."

"Media is the other influence; adolescents copy their role models who sing about weed (cannabis), popping bottles (drinking) and the like."

Thus pro-substance images in the media may have an influence on the lives of adolescents. Modelling and imitating admired role models can be one reason why adolescents use substances. Members of the entertainment industry have an important influence on some youngsters who want to be like them.

Symbolic Expressionism

Adolescents variously reported using substances as a form of symbolic expression. Apparently some adolescents use substances because they want to be 'like grown-ups'. This sentiment is echoed in the following quotes:

"Substance use makes me feel like a real man."

"As adolescents we think there is time for everything. We are not kids anymore, we are grown-ups."

It appears substance use has become for some, an improvised *rite de passage*, a dissolver of teenage status and introduction into the life of an adult.

Boosting Self Image

Some adolescents described how substance use is a mechanism of boosting self-image. Several participants reported that they used alcohol 'to appear cooler than other kids' or 'to get attention'. The following quotes are illustrative:

"Most of us feel like we are not 'cool' enough to be recognised by others and taking alcohol is the cool thing to do."

"Some feel that if they are under the influence of drugs they will be more respected and recognised; which in most times is good to be when you are at school."

Clearly certain adolescents experience some form of existential anxiety which comes from not being certain about ones-self or ones standing with one's contemporaries and unwittingly turn to substance use as the panacea.

Negative Affect

Substance use was opined as one of the ways of coping with negative emotional states or avoiding negative mood states. Some participants indicated that they used substances to feel better, deal with rejection and boredom. One participant reported using alcohol to feel better because sometimes they “feel useless”. Other participants stated that:

“Being an adolescent comes with pressure that may lead to depression which sometimes makes the use of substances appealing as an option of escaping the problems facing the adolescent in life.”

“At times adolescents are forced by the situation around them. One powerful thing is getting a heartbreak. Sometimes you just do what will make you feel good at that moment.”

Armstrong and Costello (2002) found that depressive symptoms are common during adolescence and they have demonstrated a consistent and prospective relationship with initiation and frequency of adolescent substance use. It is possible that the more psychologically needy are more susceptible to substance use.

Parenting

Parenting practices have been associated with substance use (Mayberry et al., 2009; Petraitis et al., 1998); a finding that was confirmed in this study. Specifically, parenting plays an additive role in adolescent substance use. One participant stated that ‘some parents are not good examples and adolescents take up after them’. Some even reported drinking alcohol at home with their parents. Further it was suggested that parents make the situation worse by failing to discuss substance use candidly with their children. This view was echoed by a participant who stated that:

“In most cases our parents are not very open about such a topics and tend to ignore or avoid it if asked. Friends then play the major role of influence because you spend most time together.”

In line with parenting practices, participants indicated that low parental monitoring is a factor that may also lead to adolescent substance use. The following quote is illustrative:

“Some parents allow adolescents go to parties without any monitoring resulting in some being pressured by other adults to take alcohol”

This parallels studies that have shown that adolescents whose parents care about them, monitor their whereabouts and friendships and use effective discipline tend to develop self-control that is associated with less involvement in risky behaviours such as substance use (Gottfredson and Hirschi, 1990).

Perceived Benefits

A less commonly mentioned reason for substance use related to perceived benefits of using substances. Cannabis is viewed by some adolescents as a performance enhancement substance. Some reported using cannabis to 'do well academically'. The following quotes are illustrative:

"Cannabis is not as bad as people see it. It has been proven to increase focus, relaxation and strain."

"Some youths smoke mbanje (cannabis) in order to get wisdom and see life differently."

It is apparent that some adolescents believe that certain substances are beneficial to them which may have implications for their propensity towards substance use. What is even more worrying is empirical evidence, which contrary to the views of the adolescents, suggests that the use of cannabis has adverse effects. One study of adolescents who smoked cannabis at least once reported that these adolescents thought about killing themselves three times more often than non-users, felt more lonely and unloved and were six times more likely to run away from home (SAMHSA, 2001). Other studies indicate that regular use of cannabis can have adverse effects on learning. Users are reportedly unable to concentrate, are unmotivated, lack ambition and are not achievement oriented (cannabis amotivational syndrome) (Joff and Morris, 2008). All this suggests that some adolescents may have been 'miseducated' on the utility of cannabis.

Protective Factors against Substance Use

Protective factors against substance use may be defined as "influences that prevent, limit or reduce substance use and that may counter, buffer, neutralise and interact with risk factors within or across time" (Newcomb & Felix-Ortiz, 1992, p. 281) The adolescents identified a number of factors they felt played

an important role in preventing substance use. They are presented under the following sub-themes:

Parental Support and Communication

One dominant protective factor cited by adolescents relates to parental support and communication. Some indicated that a family characterised by, love, care, support and open communication inoculates adolescents from substance use. One participant stated that;

“Parents must be free and not frightening for the child to be free to talk and express feelings, what she is experiencing at school and in the neighbourhood.”

This view was echoed by another participant who indicated that adolescents who do not use substances,

“Receive parental guidance. They get to talk about the harms of these substances and effects so that adolescents find it not good to indulge in them”

These views are consistent with other studies that indicate that parents who provide little affection, lack parental supervision and support contribute to a weak adolescent personality and involvement with substance using peers (Brook, et al., 1990).

Peer Pressure Resistance

The participants reported that individuals who did not use substances were individuals that are able to withstand pressure from peers. This sentiment is evident from the following quote:

“I once tried mbanje (cannabis) because of the crew I used to hang with despite coming from a Christian family. I tried one pull but I just felt it was wrong. It’s all about choices. We just have to have the guts to resist peer pressure without thinking about how friends would react because we know good from bad. Hapana nyaya apa (It’s not a big deal), everyone has a brain.”

Apparently adolescents who are resilient and assertive may be able to withstand pressure from their peers to use substances which gives meaning to earlier studies by Hawkins et al (1992) on protective factors.

Religiosity

Many adolescents stated that a 'strong religious background', 'moral uprightness' or 'knowing God' were factors that made them abstain from substance use. This belief was expressed by one participant who stated:

"I have never drank alcohol or smoked. I go to church. I will never do it. It's against my religious convictions. I read the bible in my spare time."

Religiosity (especially religions such as Christianity and Islam which abhor substance use) can be a protective factor against substance use.

Self-Control

Self-control is another factor cited with the potential to help prevent adolescent substance use. The following quotes are illustrative:

"Adolescents who do not use these intoxicating substances are those who generally have self-control because let's face it, alcohol is everywhere and is very much available and affordable."

"Knowing what you want, what your future holds and that your future is in your hands."

These sentiments suggest that self-efficacy which is related to self-control can play a critical role in inoculating adolescents from substance use.

Guidance and Counselling

Adolescents felt that being educated on the adverse effects of substances can help reduce substance use. Others felt that counselling was needed in schools to help counteract negative affectivity and stress. The following are illustrative:

"Careful guidance and counselling from teachers and adults makes some adolescents to know and decide what's good for them."

"Schools should have a counsellor who will take time to talk to kids personally and lets the kids talk about their issues and what's bothering them and so on."

In light of these view it is apparent that interventions that target the adolescents themselves and other intrapersonal factors may have a protective effect. School based guidance and counselling is one of those interventions situated in the intrapersonal domain

Community Centres

Related to school based guidance and counselling, the need for community centres was cited by one participant as a protective factor. The view is echoed in the following quote:

“Creating community centres for people to talk about their problems to qualified people.”

This sentiment suggests that community mental health centres may help to abate problems that lead adolescents to substance use. Drop in facilities which are located in the community may be a viable alternative to augment school based guidance and counselling given that some of the in-school adolescents may not utilise the facility for fear of victimisation. Similarly community based centres may also be available to out of school adolescents.

Minimising Substance Availability

The participants opined that their peers used substances like alcohol because of their availability.

“To tell the truth nothing at all can stop us from the use of substances since it only takes a few minutes to obtain them.”

“The law should be implemented, e.g. they don’t check if you are under 18 or not.”

What is clear from these views is that retailers are not abiding by the dictates of legislation. The Child Act [Chapter 5: 06] prohibits sales of alcohol, tobacco and drugs to individuals under the age of 18. If adolescents cannot get substances, they cannot use them. This has critical implications for prevention.

Implications for Prevention

Adolescent substance use is a multi-layered problem which is clearly multi casual. The implications of this study for prevention can be quite profound. Findings from this study suggest the need for prevention programmes to meet the specific needs of adolescents. It is therefore recommended that primary prevention that seeks to help adolescents resist substance use be instituted. Primary prevention efforts are usually directed at a time before the unwanted behaviour begins. These efforts can be directed at individuals

(the host), the substances themselves (agent) and community conditions (the environment). These prevention efforts can target basic intra-personal influences such as basic knowledge about the harmful effects of substance use and life skills building (e.g. substance use refusal skills and decision making). Schools can implement evidence based programmes aiming to develop the above mentioned skills such as Drug Abuse Resistance Education (DARE) .

At structural (environmental) levels, policy makers can monitor the enforcement of the Liquor Act and Child Act to reduce availability of substances to adolescents as well as monitor alcohol and tobacco industries to ensure that the addictive properties of the agents are not strengthened. Access to substances can be restricted by (1) raising taxes on liquor and tobacco thereby increasing the price and effectively reducing consumption, (2) raising the drinking age to 21 and (3) ensuring that alcohol and tobacco is sold exclusively by people with liquor licenses as these are more likely to follow regulations regarding the sale of these substances to under- aged clients. Unlike supply reduction efforts which focus on the aftermath of substance use these strategies are essentially demand side strategies.

The significance of the role of familial suggests that interventions that ignore the home environment will fall short of the mark. The responses of participants suggest that parents and significant others in the family have a central role to play in educating adolescents about the risks of substance use given that they spend more time with them and have stronger bonds. Parenting interventions designed to facilitate building healthy families such as parent education, parent support, behavioural parent training, family skills training, and family therapy can be effective in this endeavour. These interventions will foster positive bonding among family members, stable families, emotionally supportive family involvement, parental attention to children's needs and orderly and structured parent-child relationships.

Conclusion

Adolescent substance use continues to draw attention from scholars, policy experts and government officials. It is a universal phenomenon affecting all

strata of society, raising significant public health concerns. This study was primarily undertaken to investigate the perceived predictive and protective factors for adolescent substance use. This qualitative investigation gives meaning to multilevel and hierarchical modelling studies on predictors of adolescent substance use (Mayberry et al., 2009; Brooke et al., 2006) by getting into the life world of the participants.

The participants identified a number of predictive and protective factors for adolescent substance use. Specifically peer pressure, stress, recreation and fun, disinhibition, the media, boosting self-image, negative affect, parenting practices, perceived benefits and symbolic expressions emerged as perceived predictive factors for adolescents substance use. These factors are believed to play a part in the initiation and continual use of substances by adolescents. They also identified a number of factors they believed inoculated adolescents from substance use. These included parental support and communication, resisting peer pressure, religiosity, self-control, and school based guidance and counselling, community mental health centres and minimising substance availability.

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