

**THE RELATIONSHIP BETWEEN LEISURE BOREDOM  
AND SUBSTANCE USE AMONGST HIGH SCHOOL  
STUDENTS IN CAPE TOWN**

**LISA WEGNER**

Submitted in partial fulfillment of the requirements for the degree M.Sc.(Occupational  
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Supervisors:

Dr. Alan Flisher

Prof. Ruth Watson

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## ABSTRACT

The purpose of the study was to determine the relationship between leisure boredom and substance use in adolescents attending high school in Cape Town. The degree of leisure boredom experienced by adolescents was investigated, as well as the extent to which boredom is associated with alcohol use, cigarette smoking and cannabis use, gender, grade and race. A stratified sample of 39 high schools in and around Cape Town was selected, using the postal distribution areas as stratification criteria. Students were then randomly selected from two Grade 8 and two Grade 11 classes at these schools, producing a sample of 621 adolescents. Data were gathered using two instruments: the Leisure Boredom Scale which is a self-report scale consisting of 16 items, with demonstrated reliability and validity (Iso-Ahola and Weissinger, 1990); and a questionnaire which was used to obtain demographic data and substance use data (Fisher et al. 1993). These were self-report questionnaires, available in English, Xhosa and Afrikaans, and were completed by students during two consecutive school periods. Administrations took place during the second and third school quarters of 1997. The results of the study showed that leisure boredom was significantly associated with gender ( $p = 0.003$ ), race ( $p = 0.000$ ) and alcohol use ( $p = 0.031$ ). Further analysis showed no significant association between leisure boredom and substance use when controlling for demographic variables. Female adolescents, younger adolescents and black adolescents experienced the highest degree of leisure boredom and may be at risk of using substances as an exciting way of alleviating boredom.

Recommendations are that leisure education programmes should be incorporated into lifeskills programmes at high schools, as part of a "lifestyles approach" (Flisher et al. 1996) to dealing with substance use in adolescents. Leisure education programmes should enable adolescents to explore different leisure activities, structure their leisure time constructively, and to become aware of the value of leisure in personal development. Occupational therapists, as part of their role in health promotion, should form partnerships with teachers and parents in order to implement these programmes effectively. Finally, adequate leisure resources for adolescents should be developed, particularly within the more disadvantaged communities in Cape Town.

KEYWORDS: LEISURE BOREDOM / SUBSTANCE USE / ADOLESCENTS

NOTE A: This study was undertaken as part of a larger study called the South African Community Epidemiology Network on Drug Use (SACENDU): School Survey. The main aim of the SACENDU: School Survey was to investigate the epidemiology of risk behaviour among students in Grade 8 and Grade 11 at schools in Cape Town and Durban (Flisher and Evans, 1997).

NOTE B: I am aware that the use of terminology such as "black", "coloured" and "white" is a contentious issue in current research. However, the terms are used as social constructs in this study, and are not in any way intended to promote racial stereotypes.

## DECLARATION

I, LISA WEGNER, hereby declare that the work on which this thesis is based is my original work (except where acknowledgements indicate otherwise), and that neither the whole work nor any part of it has been, is being, or is to be submitted for another degree in this or any other university.

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# CHAPTER 1

## INTRODUCTION

Along with adolescents in most other countries in the world, South African adolescents are using dangerous substances such as alcohol and cigarettes, and illicit substances such as cannabis, in steadily increasing amounts. This is a matter of great concern in society, due to the effect of these substances on behaviour and health. The cost to families and to society in general must not be under-estimated.

Many factors are thought to be associated with substance use in adolescents, such as socio-economic status, personality, values, religion, environment, role models, peer pressure, gender, and age. However in South Africa, studies to date have tended to focus more on the prevalence of adolescent substance use, rather than on the possible reasons for substance use. One exception is a qualitative study that explored the reasons for alcohol misuse in male adolescents (Ziervogel et al., 1997/8). It was found that a significant reason for use of alcohol was to alleviate boredom.

Iso-Ahola and Crowley (1991) stated that substance use usually occurs during leisure time and in leisure settings. Thus, substance use can be considered to be a leisure activity as it is a freely chosen activity perceived by participants to be pleasurable. This is of interest to occupational therapists, as one of the three main domains of concern in occupational therapy is the occupation of leisure (the other two domains being the occupations of work and self-care).

Occupation is defined by Christiansen and Baum (1991, p.26) as "...engagement in activities, tasks and roles for the purpose of productive pursuits (such as work and education), maintaining oneself in the environment, and for purposes of relaxation, entertainment, creativity, and celebration...all goal-oriented behaviour related to daily living is occupational in nature". Occupational therapy is based on the philosophy that individuals achieve a sense of well-being through their participation in occupations and that "...occupation is recognised as having a basic role in creating, affirming and experiencing meaning in life" (Kielhofner, 1992, p.53). Individuals who demonstrate satisfactory performance in occupations are regarded as functional. Failure to engage in healthy patterns of occupation - due to factors such as disease, disability, skill deficits and/or lack of opportunities - results in occupational dysfunction.

The health care system in South Africa is being restructured and transformed, the purpose being to provide effective health care to all people by means of a primary health care approach (Department of Health, 1995). These changes require health professions to redefine their roles and their approaches to intervention. Traditionally the role of occupational therapy has been based on the medical model, with the focus being on curing or rehabilitating patients. I believe that the time is right for South African occupational therapists to adopt a more social approach to health care. Occupational therapists should seize the opportunity to expand their role to include health promotion and prevention of ill health in at-risk populations, such as adolescents living in disadvantaged communities. The occupational therapist's perception of the value of engaging in meaningful occupations to the well-being of the individual, combined with an understanding of how to facilitate individual and group participation in occupations, places her/him in a position to enable people to promote their own health and prevent ill health.

As an occupational therapist working with adolescents living mainly in disadvantaged areas of the Western Cape, I was concerned about the impact of substance use on their performance in daily occupations. This observation, combined with an awareness of the scarce leisure resources available to these adolescents, resulted in a desire to find out how substance use and leisure boredom are related. The purpose of this study was to investigate whether dissatisfaction or boredom with leisure activities is related to adolescent substance use, and to determine whether variables such as gender, grade and race are associated with leisure boredom.

The study was undertaken as part of a larger study called the South African Community Epidemiology Network on Drug Use (SACENDU): School Survey. SACENDU is an initiative set up to monitor drug and alcohol use across the nation and collects data from a variety of different sources such as school surveys, trauma units, specialised treatment centres, acute psychiatric admissions units, police arrests, mortuaries, sex workers and street children (Parry, Bhana and Bayley, 1997). The SACENDU: School Survey presented the opportunity to participate in a large research study led by Dr. Alan Flisher (principal investigator) from the University of Cape Town, and comprising a multidisciplinary research team with members from provincial health and education departments, universities, a statutory research organisation, hospitals and clinics.

The main aim of the SACENDU: School Survey was to investigate the epidemiology of risk behaviour among students in Grade 8 and Grade 11 at schools in Cape Town and Durban (Flisher and Evans, 1997). My study was incorporated into this study as a sub-project - the aim being to determine the relationship between leisure boredom and substance use.

The aims of the other sub-projects were to:

- examine the relationship of risk and protective factors as defined in the Social Development Model to selected risk behaviours,
- investigate the nature and extent of exposure to violence and its relationship with substance use, post-traumatic stress disorder, anxiety and depression,
- investigate the nature and extent of physical abuse within sexual relationships,
- investigate the relationship between school climate, risk-behaviour and help-seeking behaviour (Flisher and Evans, 1997).

The SACENDU: School Survey questionnaire comprised four parts (see Appendix 1 for details); Part 4 contained the Leisure Boredom Scale relating to my study.

## CHAPTER 2

### LITERATURE REVIEW

Adolescence - the transition from childhood to adulthood during which adolescents search for a personal identity (Erikson, 1959) - and the accompanying biological, psychological and sociological changes, can be both an exciting and a difficult phase of life. It is during adolescence that the capacity for abstract thought develops, enabling the adolescent to form a personal value and belief system, in preparation for the assumption of adult roles and tasks. The adolescent needs to learn skills required for assuming the role of worker, and a sense of responsibility and concern for other people should develop. This is also the phase during which the adolescent explores various leisure interests, which facilitate the development of socialisation skills and foster a sense of self-efficacy. Adolescence is a time of experimentation during which the adolescent defines his/her personal identity and self-concept. Because so much development occurs during this phase, it can be a very vulnerable stage of life.

Moreillon (1992) described a number of factors that effect the socialisation process and the transmission of values in adolescents, many of which are relevant to the situation of adolescents living in the Western Cape. As the family nucleus shrinks, there is a lessening of contact with the extended family. Often this results in the lack of available and/or appropriate role models. Parental absence from the home due to work commitments and/or divorce means that many of the tasks of parenthood are delegated to other people and to institutions, or are simply neglected.

Many adolescents live in poor socio-economic areas and are faced with problems such as gangsterism, substance abuse, violence and crime on a daily basis. The instability created by these problems in the adolescent's home, school and neighbourhood environments may impact on functional performance in daily occupations.

In addition, there is an association between these problems and substance use. Plant and Plant (1992) categorised factors that can be associated with psychoactive drug use among youth into environmental factors such as those mentioned in the previous paragraph; individual factors such as personality, stress and curiosity; and constituent factors such as biological predisposition to use drugs.

## 2.1 SUBSTANCE USE IN ADOLESCENTS

The review of literature for this section was confined to South African studies of the prevalence of substance use among youth, for practical reasons. As these studies show that the most widely used substances within the adolescent population group are alcohol, cigarettes and cannabis, it was decided that this study would focus on these three substances.

Adolescence is a time of experimentation and exploration, and the potential for risk-taking behaviour is high. Often experimentation with substance use such as alcohol, cigarettes and drugs is short-lived as the adolescent matures; however, the consequences of substance use and other risk-taking behaviour on adolescent mortality and morbidity must not be under-estimated.

Flisher et al. (1996) confirmed that the notion of a syndrome of adolescent risk behaviour is valid for Cape Peninsula high-school students. This means that there is a relationship between certain behaviour including problem drinking, cannabis use, cigarette smoking, having experienced sexual intercourse, general deviance, suicidal behaviour and behaviour that exposes the adolescent to injury. This is of great concern to society, especially as the prevalence of substance use appears to be increasing. A review of 25 South African studies identified youth as a group that is particularly at risk for alcohol-related problems, the greatest prevalence occurring among older youth and high-school drop-outs (Parry in Foster et al. 1997, Parry and Bennetts 1998). Definite patterns for adolescent substance use emerged from the relevant literature:

- the incidence of substance use, specifically alcohol and cannabis, is greater in males than in females (Du Toit 1991; Flisher et al. 1993; Flisher and Chalton 1995; Parry et al. 1994; Parry & Bennetts 1998; Rocha-Silva et al. 1996). However, two studies on White high-school students showed the incidence of cigarette smoking to be greater in females (Disler 1990; Prout and Benatar 1983)
- for males and females there is an increase in substance use with age (Flisher et al. 1993)
- alcohol is the most widely used substance, followed by cigarettes (Du Toit 1991; Flisher et al. 1993)

- cannabis is the most widely used illicit drug (Fisher et al. 1993; Parry et al. 1997; Rocha-Silva et al. 1996)
- white English-speaking males show the highest rates of binge drinking, defined as five or more drinks on at least one occasion in the past 14 days (Du Toit 1991; Flisher et al. 1993) followed by Xhosa-speaking males (Flisher et al. 1993; Rocha-Silva et al. 1996). Xhosa-speaking females showed the lowest rates of alcohol use (Du Toit 1991; Flisher et al. 1993).

The University of Cape Town and the Medical Research Council carried out a prevalence study of risk-taking behaviour among 7,340 high-school students in the Cape Peninsula during 1990 (Flisher et al. 1993a). This is the biggest South African study of this nature to date and was representative of the three education departments in the Cape Peninsula at the time. A limitation of the study was that results could not be presented according to education department i.e. by racial classification, at the request of one of the education departments. Thus results were presented by language as a proxy for race. The risk-taking behaviour that was investigated included cigarette smoking, alcohol consumption, drug use, suicidal behaviour, road-related behaviour, violent behaviour and sexual behaviour. The instrument used was a self-administered questionnaire, which could be completed in a 35-minute school period. The study provided reliable statistics concerning the prevalence of adolescent risk-taking behaviour, including the prevalence of substance use (Table 2.1).

A high-school survey of 328 coloured and black students in Port Elizabeth (Parry et al., 1997) showed similar trends to the study by Flisher et al. (1993), despite it being a much smaller sample.

Among Standard 9 students, 66% of males and 54% of females reported "still drinking alcohol", and 3% of males and 4% of females reported "still using dagga". Substance use increased with age; in comparison with Standard 9 students, 67% of males and 57% of females in Standard 10 reported "still drinking alcohol". The percentage of males "still using dagga" rises steeply to 29% but drops very slightly to 3% of females.

A study that, although fairly outdated, is useful because it compares drug and alcohol use in high school seniors in 1974 and again in 1985, was carried out in Durban (Du Toit, 1991). Results (Table 2.2) showed a general increase in drug and alcohol use, except for black students where the frequency of cannabis use decreased. Despite this decrease in overall use, black students and coloured students also showed the highest percentage of students who had used cannabis twenty times or more, which is of concern because it can be indicative of habitual or "life-time use".

**Table 2.1: Prevalence rates (percentages) of high school students in the Cape Peninsula reporting substance use**

Language	Cigarette use *		Alcohol use †		Cannabis use ‡	
	Male	Female	Male	Female	Male	Female
Afrikaans	19.1	12.9	28.1	23.7	2.7	1.1
Afrik. & Eng.	29.0	19.8	27.0	22.1	3.2	1.4
English	23.5	18.2	37.7	28.2	3.3	1.8
Xhosa	20.8	2.2	29.2	7.7	10.0	0.7

Source: adapted from Flisher et al. (1993).

\* "use" defined as 'at least one cigarette a day'

† "use" defined as 'in the past 7 days'

‡ "use" defined as 'at least once in the past 7 days'

**Table 2.2: Percentage of high-school students in Durban using substances in 1974 compared with 1985**

Race	Alcohol		Cigarettes		Cannabis	
	1974	1985	1974	1985	1974	1985
Black	46.3	29.3	36.7	14.3	14.9	5.6
Coloured	71.3	81.1	55.8	52.2	12.2	17.2
White	88.3	95.1	70.1	51.9	13.3	16.5
Indian	43.3	64.2	45.7	42.8	15.6	17.3

Source: Du Toit (1991).

Attendance at rave parties by adolescents, and the associated use of substances such as the drug Ecstasy has received much attention in the media recently. Parry et al. (1997) have taken the initiative in researching this phenomenon using qualitative research methods, conducted among male rave party-goers in Cape Town. Their findings indicated that at raves, Ecstasy and LSD are the most popular drugs, and "Dagga" (Cannabis), hashish and cocaine are moderately used. It is of interest to note that alcohol use at rave parties is not common.

Relatively few South African studies have been done to determine the reasons for adolescent substance use. Ziervogel et al. (1997/8) carried out a qualitative study to gain insight into the social context of alcohol misuse in school-going male adolescents. Two focus groups were held with eight binge drinkers who attended a high school in Cape Town and who were from varied racial backgrounds. Factors which facilitated alcohol consumption were that alcohol use conferred adult and manhood status, that it altered their state of consciousness, that it allowed them to feel more confident and helped them cope, and that it satisfied their curiosity about alcohol. They also reported the need to conform and identify with peers and the need to demonstrate their manhood in the company of girls. However, one of the most significant motives for drinking was that it was pleasurable and relaxing, and that it alleviated boredom which "...stemmed primarily from a lack of participation in other activities and alcohol drinking was therefore perceived as an enjoyable, time-consuming activity to indulge in..." (ibid. p. 30).

Parallels exist between this study and a study by Rocha-Silva et al. (1996) of 1,378 Black youths aged 10-21 years, which found the main reasons for using illicit drugs to be habit, to alter mood states, to improve health, to cope with problems and for enjoyment.

Of major significance from these two studies, is that adolescents regard substance use as being a pleasurable and enjoyable way of dealing with boredom. Considering this, as well as that substance use probably occurs most frequently during adolescents' leisure time, causes one to question the nature of the association between substance use and leisure.

## 2.2 LEISURE

One of the underlying assumptions of occupational therapy is that it is healthy to have a balance between work, leisure and self-care occupations in daily life. This raises the question of what exactly is a healthy balance, and how does this differ from individual to individual? In order to answer this occupational therapists need to consider not only what people do, but why people engage in occupations, the nature of this engagement and how occupational behaviour occurs (Christiansen, 1994). Much of the research currently being undertaken in the profession is looking at issues such as these. It can be argued that it is not necessarily a balance in occupations, but rather a balance in the meaning or quality of experience that is important for the well-being of the individual. This concept must be considered when attempting to understand leisure, and may explain why defining leisure has proved so difficult. Leisure can be thought of as a modern Western concept because it was only with the advent of industrialisation that leisure became distilled from work. Leisure activities were seen to take place in a different environment and at a separate time from work activities.

This explains why different theories of leisure fall into three broad categories 1) leisure as time 2) leisure as activity, and 3) leisure as an experience or state of mind. The main criticism against the first two categories is that regarding leisure in this light creates a false dichotomy between leisure and other activities such as work, which suggests that leisure should rather be considered in terms of quality of experience (Hamilton-Smith 1992; Primeau 1996). As an occupational therapist my opinion is that it is necessary to consider what leisure activities the individual engages in, and how much time he/she devotes to leisure, but most importantly to understand the meaning and quality of the leisure experience for the individual.

The difficulty in defining leisure can be partly attributed to the subjective nature of leisure activities: for example gardening may be a leisure activity for one person but a work activity for another. Many authors writing about leisure tend to agree that the individual's subjective experience of leisure constitutes an acceptable operational measure of leisure. Samdahl (1991) showed that the theoretical meaning of leisure, as represented by the literature, is reassuringly similar to the connotative meaning of leisure as it is known and described in daily life. Agnew and Petersen (1989, p.338) defined leisure as "...any activity so defined by the respondent..." and found that some respondents listed favourite leisure activities not usually thought of as leisure, for example homework and baby-sitting.

Common qualities for defining leisure in terms of the quality of the experience emerge from the literature; that is leisure activities are subjectively experienced by an individual as being freely chosen for enjoyment, pleasure and relaxation, being free from external constraints, having low work-relation, and being intrinsically motivating (Bundy 1993; Cynkin 1979; Iso-Ahola 1979; Møller 1991; Roberts 1983; Tinsley et al. 1993).

Intrinsic motivation refers to feelings of self-determination and competence achieved when leisure activities are satisfying for the individual (Weissinger et al. 1992).

The perception that one is competent and in control of one's leisure activities, that one's needs are being met, that one feels a depth of involvement and that one feels able to be playful and spontaneous when performing leisure activities, are all factors contributing to a sense of satisfaction through constructive use of leisure time (Ellis and Witt, 1994). When a person experiences the environment as containing sufficient opportunities for action (challenges) balanced by the person's own capacities to act (skills), the quality of the experience is usually highly positive. Csikszentmihalyi (1975, 1990) referred to this optimal experience as "flow".

Mannell et al. (1988, p.289) used the experience sampling method (which is a method of randomly sampling self-reports from respondents throughout the day for a given time period) to collect data regarding the daily lives of 92 retired adults. Their findings showed that "...freely chosen but extrinsically motivated activities produced the highest levels of intrinsically rewarding flow". The authors termed these "...serious leisure..." activities because they "...appeared to demand more effort, commitment and obligation..." than "...pure leisure..." activities. Csikszentmihalyi and LeFevre (1989) researched the quality of experience in work and leisure on a sample of 78 adult workers, using the experience sampling method. They found that regardless of whether the respondent was working or in leisure, when the person perceived both the opportunities for action and the skills in the situation to be high, the quality of the experience was likely to be highly positive. Conversely, the experience tended to be negative when both challenges and skills were low.

If this concept is extrapolated to the quality of the leisure experience for adolescents, it may be hypothesised that if adolescents perceive their leisure activities as not challenging enough, or if they feel that their skills are insufficient, a sense of dissatisfaction with the quality of the leisure experience may result. Dissatisfaction may lead to boredom, which has been described in the literature as a subjectively experienced negative mood state associated with feelings of frustration, displeasure, monotony, demotivation and lethargy, combined with a sense that time stands still (Hill and Perkins 1985; Iso-Ahola and Weissinger 1990; Patrick 1982). Iso-Ahola and Weissinger (1990, p.4) specifically define leisure boredom as "...the subjective perception that available leisure experiences are not sufficient to instrumentally satisfy needs for optimal arousal".

Iso-Ahola and Weissinger (1987) carried out a study on 134 adults (average age was 44 years) to determine sociological and psychological predictors of boredom in leisure. They found that "...men and those with high incomes were more likely to perceive leisure as boredom than women and those with low incomes" (ibid. p. 360). Psychological predictors which had a significant effect on leisure boredom included a lack of awareness of the value of leisure, a high work ethic, lack of self-motivation, and finally the presence of constraints on leisure such as lack of friends, time and money. This raises questions about how adolescents experience their leisure-time and to what extent they feel satisfied or bored during leisure.

### 2.2.1 Adolescent experience of leisure time

Numerous studies have shown the developmental benefits for adolescents of leisure activities which are interesting and satisfying, and which involve challenge, effort and concentration (Carlini-Cotrim and de Carvalho 1993; Coleman and Iso-Ahola 1993; Kleiber et al. 1986; Møller 1991). Involvement in leisure activities provides adolescents with the opportunity to explore new roles and interests, develop social skills, gain autonomy and improve self-esteem. Mastery of these tasks enables the adolescent to move towards assuming a more responsible adult role, leaving the world of childhood play behind.

Leisure research amongst adolescents has been a neglected issue in South Africa. An exception to this is a comprehensive study carried out by the Youth Centre Project of the Centre for Social and Development Studies at the University of Natal between 1988 and 1991, which investigated the leisure prospects of black urban youth aged 16-24 years (Møller, 1991). This multiple phase research project investigated youth's leisure activities and attitudes towards leisure, leisure resources and leisure needs. Although this study was undertaken during the apartheid era and reflected the problems of the time, findings are still relevant to the current situation in South Africa, because for many people, circumstances have not changed. Political violence has been replaced with gang-related and criminal violence, state repression has been replaced with repression caused by poverty, and choices are limited by a lack of resources and opportunities.

In terms of time usage, the study showed that approximately one-third of the youths' time was spent sleeping, one-third was spent working or at school and one-third was spent on leisure activities (which included obligatory domestic duties). A study by Shaw et al. (1995) on a sample of 73 Grade 10 students (mean age = 15.8 years) showed similar findings: approximately half of their daily time (excluding sleep and personal care) was spent in obligatory activities and the other half of their daily time was spent in non-obligatory or leisure activities. Both studies found that females spent more time than males in obligatory activities.

A definite pattern emerges regarding the leisure activities most popular with adolescents. "Discretionary spare time" activities most enjoyed by black South African youths, were social interaction and conversation, followed by television watching, listening to music, and sporting activities - soccer in particular (Møller, 1991). Barnard and Alers (1996) found that adolescents favoured sports and passive activities (reading, listening to the radio). Shaw et al. (1995) found that the highest proportion of non-obligatory time for males and females was spent socialising with friends, followed by television watching, and then participating in sports and physical activities. Chang et al. (1993) used the Leisure Interest Checklist to determine the leisure preferences of 559 high school and college students. Findings for the high-school group showed that the most popular leisure activity for both sexes was social fun, followed by sports (for males) and hobbies (for females), cultural activities, trips, games and lastly, church activities.

However, apart from investigating the time devoted to leisure and the types of activities done, it can be argued that the most important factor to consider is the adolescent's experience of leisure. It is the meaning attributed to the performance of the activity, and the purpose or goal that the individual achieves, that is significant. Møller (1991) found that youths viewed leisure activities that provided a means to an end – termed “semi-leisure”, such as education and moneymaking activities, more worthwhile than “pure” leisure activities. Møller (1991, p.7) suggested that this is typical of developing societies, where “...pure leisure as recuperation or entertainment is the prerogative of the privileged few”.

A study by Carlini-Cotrim and de Carvalho (1993) showed that it is not so much the number of leisure activities participated in, but rather the satisfaction derived from the leisure experience that is important. In a study on high-school students in Brazil (N = 16,117), they found that it is not the quantity of extracurricular activities but the quality, defined as “...experience, creativity and opportunities for reflection” (ibid. p.102), that is important for leisure satisfaction. This finding may explain why adolescents who are fortunate enough to have a wide variety of leisure resources available to them, may still experience dissatisfaction with their leisure activities.

A disturbing finding by Møller was that “...one-quarter to one-third of the youth participating in the nationwide survey reported that they suffered from excessive boredom and restlessness” (1991, p.12). Møller proposed that in the absence of meaningful activities, it is no wonder that many youths (especially those who are unemployed) engage in socially deviant activities.

Wasson (1981) found a significant positive correlation between susceptibility to boredom and deviant behaviour at school in a sample of 483 high school students in Grades 9 - 13 (modal age was 16 years) with males engaging in deviant behaviour more frequently than females. A study investigating the relationship between leisure and delinquency included not only the type of leisure activities, but with whom the leisure activity was performed and the extent to which the leisure activity was liked by the respondent (Agnew and Petersen, 1989). Findings indicated that delinquency was positively related to time spent in unsupervised social activities and leisure activities with peers, and negatively related to time spent in organised leisure activities, passive entertainment and non-competitive sports. A limitation of this study was that the sample of 600 adolescents in Grades 9 - 12 was drawn from a White middle-class area, and is therefore only representative of this group.

These studies indicate the probability of a relationship between boredom, deviant or delinquent behaviour, and leisure. However, neither of the studies stated exactly which negative behaviours were included under "deviant" or "delinquent" behaviour, so it is assumed that substance use could probably be included under these terms.

### 2.2.2 Leisure and adolescent substance use

Considering the benefits of constructive use of leisure for adolescents on the one hand, and the increase in adolescent substance use on the other, it is surprising that so few studies have investigated the association between these two constructs among adolescents. More often than not, substance use by adolescents is leisure related i.e. engaged in voluntarily for pleasure, and occurs during leisure time in leisure settings (Iso-Ahola and Crowley 1991; Cato 1992).

Cato (1992) carried out a study to investigate the motives for adolescents' use of drugs and their participation in leisure. The sample included 200 high school students in Grade 11 (100 from a city school and 100 from a nearby rural school in Florida USA). Findings showed no significant overall association between the pleasures sought in recreational pursuits and those found in drug usage. However, four individual motives had statistical significance: "enhancing popularity" was found to be a significant positive association in the rural group, whilst "self-discovery" and "achievement of personal goals" were significant negative associations in the city group. Both groups showed a significant association in that neither drugs nor recreation were used as a "means to rebel against parents". The students in this sample reported very little drug-use behaviour which is surprising considering that both schools were selected because they were identified as high-risk schools; even Cato (1992, p. 299) described the group as "...somewhat ideal". The author attributed the low prevalence of drug usage to the high value system existing in the city and the fact that many of the students' parents were university, college or school staff.

However it may be for these same reasons that students under-reported their drug usage for fear of being discovered. In any case students who reported not using drugs were instructed to rely on their perceptions of motives for drug usage, which makes the reliability of the results questionable.

Iso-Ahola and Crowley (1991) carried out a study that examined the relationship between adolescent substance abuse and leisure boredom. The sample consisted of 39 adolescent substance abusers (mean age 16.6 years) diagnosed with psychoactive substance abuse attending a private psychiatric hospital, and 81 non-substance abusing adolescents (mean age 16.1 years) selected from a private school. Both groups were found to be statistically similar on sex, race, socio-economic status and family systems. Results supported the hypothesis that adolescents who were substance abusers were more likely to experience leisure as boredom than non-substance abusers. In addition, findings revealed that substance abusers had a significantly higher total leisure participation score than non-substance abusers, participating more frequently in certain physical recreation activities, going to concerts and for drives. Although this result appears paradoxical, Iso-Ahola and Crowley (1991, p.268) attributed this to the sensation-seeking personalities of substance abusers and stated that "in order to satisfy their need for optimal arousal, substance abusers pursue leisure but become more easily bored with it because of their personality disposition". Obviously this increases the potential for risk-taking behaviour including substance use, especially as boredom proneness and impulsivity have been shown to have a significant positive correlation (Watt and Vodanovich, 1992).

Gordon and Caltabiano (1996) carried out a leisure study of 140 adolescents to investigate how leisure experiences were mediated by factors such as urban-rural differences and leisure boredom. Findings for urban adolescents showed that they experienced lower leisure boredom than rural adolescents, that urban males showed greater leisure boredom than urban females, and that older adolescents showed greater leisure boredom than younger adolescents.

Research has indicated an association between the constructs of leisure boredom and substance use; however a shortcoming is that these studies are representative of mainly American populations, and no studies of this nature have been carried out in South Africa. Considering the steadily increasing prevalence of substance use in this country, I felt that there was a definite need to research the association between leisure boredom and substance use within the adolescent population.

# CHAPTER 3

## METHODS

### 3.1 PURPOSE

The purpose of the study was to determine the relationship between adolescent substance use and leisure boredom.

### 3.2 AIM AND OBJECTIVES

The aim of the study was to determine the degree of leisure activity boredom experienced by adolescents attending high-school in the Western Cape, and to investigate the extent to which boredom is associated with selected substance use, as well as various demographic variables.

The objectives were:

- 1) to ascertain the degree of leisure activity boredom experienced by adolescents,
- 2) to determine whether gender is associated with leisure activity boredom,

- 3) to determine whether race is associated with leisure activity boredom, to determine whether school grade is associated with leisure activity boredom,
- 4) to examine the association between degree of boredom with leisure activities and substance use,
- 5) to examine the association between degree of boredom with leisure activities and substance use, controlling for gender, race and school grade.

### **3.3 METHODOLOGY**

#### **3.3.1 Study type**

This is a cross-sectional analytical study.

#### **3.3.2 Study population and sample**

The study population consisted of male and female adolescents attending non-private high schools in Cape Town, who were in either Grade 8 or Grade 11 at the time of the administration of the questionnaire. These grades were selected because Grade 8 is the most junior class in high school, with the average age being 13 years (early adolescence), and Grade 11 is the second most senior class, with the average age being 16 years (middle adolescence). Grade 12 was excluded due to the time and study pressures at this level.

In order to produce a sample that was representative of the study population, a stratified sample of 39 schools was selected, using the postal distribution areas as stratification criteria. Within each stratum, the number of schools selected was directly proportional to the total population of students in that stratum, and the probability of selection of a school was directly proportional to the size of the school.

Two Grade 8 classes and two Grade 11 classes were randomly selected from each school, from which forty-five students per Grade were randomly selected, giving a maximum total of 90 students per school. Selected students who were absent at the time of the administration, were not replaced but if fewer than 36 students per selected Grade were present, the administration was postponed. This gave an estimated sample of 3,000 for the SACENDU: School Survey. The four parts of this study (referred to in Chapter 1 and in Appendix 1) required different sample sizes. Part 1 required a sample of 3,000, so all of the subjects completed the Part 1 questionnaire. By packing Part 2, Part 3 and Part 4 questionnaires in boxes according to a ratio of 3:2:1 respectively, a method of systematic random sampling was used to allocate subjects. The estimated sample size for Part 4, which included the Leisure Boredom Scale, was 600 subjects. The actual sample size was 621 subjects.

### 3.3.3 Measurements

Two instruments were used to obtain data. The first instrument was the Leisure Boredom Scale (LBS) which was used to measure "...individual differences in perceptions of boredom in leisure" (Iso-Ahola and Crowley, 1991 p.264). The LBS is a self-administered questionnaire, consisting of 16 items to which subjects respond on a 1 - 5 scale with higher numbers equaling greater boredom. Total scores could range from 16 (lowest boredom) to 80 (highest boredom). Reverse coding applied to items 2, 4, 7, 8, 9, 12, 13, and 16. The LBS was adapted for the purpose of this study by changing the wording of three items in the following way:

- to make the LBS relevant for use with adolescents, item 4 "*If I could retire now with a comfortable income, I would have plenty of exciting things to do for the rest of my life*" was changed to "*If I could leave school now and have enough money, I would have plenty of exciting things to do for the rest of my life*".
- American colloquialism was changed to South African colloquialism. Item 5 "*During my leisure time I feel like I'm just spinning my wheels*" was changed to "*During my leisure time I feel like I'm just bored and hanging around*".
- Item 15 "*I do not have many leisure skills*" was changed to "*I do not have many leisure activities available to me*". The term "leisure skills" was felt to be rather vague and was therefore open to misinterpretation by the subjects.

Results from a previous study showed that the LBS had both reliability and construct validity (Iso-Ahola and Weissinger, 1990). Chronbach's alpha coefficients for the total scale were .85, .88 and .86 in three respective studies, indicating high internal consistency (Iso-Ahola and Weissinger, 1990). In these same three studies, theoretically meaningful constructs were significantly correlated with the LBS as predicted ( $p < 0.001$ ), providing strong support for construct validity of the LBS (Iso-Ahola and Weissinger, 1990). In a study of adolescent substance abuse and leisure boredom, findings indicated that the LBS had predictive validity ( $p < 0.001$ ) (Iso-Ahola and Crowley, 1991).

The second instrument, which was used in a previous South African study (Flisher et al. 1993), formed Part 1 of the study (Appendices 1 & 3). This took the form of a questionnaire which elicited demographic data such as school grade, age, gender, race and home language, as well as data regarding substance use (cigarettes, alcohol, cannabis, Mandrax, solvents, crack cocaine, Ecstasy and injectable drugs). In addition this instrument collected data regarding other forms of risk behaviour. However, only specific data was selected for use in this study i.e. item 2 - grade, item 7 - gender, item 8 - racial classification, item 15 - use of cigarettes, item 16 - use of alcohol, item 17 - use of cannabis.

The questionnaire was self-administered, mostly requiring "yes" and "no" answers. Validity was established by asking students if they had ever used a fictitious drug called Derbisol. If a positive response was given, the questionnaire was excluded from the study as the validity of the student's other responses was then questionable.

The questionnaires were available in English, Afrikaans and Xhosa. They were translated into Afrikaans and Xhosa, and then back into English to ensure accuracy. The translated versions were piloted on small groups of adolescents whose home language was either Xhosa or Afrikaans.

#### **3.3.4 Pilot study**

A pilot study was done as part of the main study on a sample of approximately 1,000 adolescents. These adolescents were Grade 8 and Grade 11 students attending four private schools in Cape Town. Test-retest reliability of items in the questionnaire was established by readministering the questionnaire two weeks after the initial administration. The pilot study also served to check the method of administration, to ascertain exactly how long subjects took to complete the questionnaire, and to establish whether subjects understood the questions. Subjects were observed during their completion of the questionnaire, and afterwards a discussion was held to establish the nature of the difficulty subjects had experienced. Data from this pilot study is not yet available.

### 3.3.5 Procedure

Permission to carry out the study was obtained from the Western Cape Education Department. Thereafter, the principals of the selected schools were invited to a joint meeting to discuss the study. Individual meetings were held with the principals who had not attended the joint meeting. It is significant that all selected schools were given permission to participate by their Principals.

Members of the research team administered the questionnaire during the second and third school quarters of 1997, using the same procedure at each of the schools. Depending on the size of the available venues, the subjects either completed the questionnaire in one large group, or in two smaller groups (divided by Grade). The most frequently used venues were classrooms, libraries, or schoolhalls. A member of the research team introduced the study to the students, informed them of the rationale for the study, and instructed them on how to complete the questionnaire. In addition, instructions appeared on the front page of every questionnaire. The administration procedure took approximately one hour (two school periods), although subjects were given extra time if they needed it.

Due to the sensitive nature of many of the questions and to ensure that subjects completed the questionnaire accurately, an important task of the administrators was to assure the adolescents of confidentiality and anonymity.

Methods used to achieve this were as follows:

- the importance of getting accurate results from the research was discussed with the subjects,
- class teachers and principals were not present during the administration,
- subjects were asked to sit at individual desks, although occasionally students had to share desks due to space limitations,
- subjects handed back their completed questionnaires in sealed envelopes.

### 3.3.6 Ethics

Principals gave their permission for their schools to participate and were then free to inform parents if they thought it necessary. In the majority of schools, Principals did not inform parents. This is interesting and can perhaps be explained by the changes in the school curriculum, which are occurring at present. Nearly all of the Principals and the teachers involved, were enthusiastic about the study and were keen to be informed of the results. Many teachers used the opportunity to express their concerns about a variety of problems they faced - from students abusing substances, to violence and gangsterism in their schools, to lack of motivation by teachers and anxiety about the proposed Curriculum 2005. For these reasons, an important follow-up to this research will be to inform Principals and teachers of the results, along with recommendations that could be implemented at the schools.

Any questionnaire of this kind can evoke feelings that may be difficult for the adolescent to handle. Students were informed at the start of the administration that they could choose not to participate. There was only one occasion when four students declined to participate. Administrators observed the subjects carefully whilst they were completing the questionnaire and were available in the venue for a few minutes at the end, if students wished to discuss any problems. In a few cases students were referred to their guidance counsellors or teachers. In addition, all subjects were informed about Life-Line and asked to write down the organisation's telephone number.

### **3.3.7 Analysis of data**

The analysis was done using Statistical Analysis Software (SAS) programmes. The first step in the data analysis was to provide descriptive statistics. A demographic breakdown of the sample was provided according to gender, race, and grade. The prevalence of substance use was expressed as the number of students who had used the substance in relation to the total number of students in the sample (or a subsample) provided as a percentage. "Substance use" was defined as use of that substance in the "past month", i.e. the month preceding the administration of the questionnaire. Prevalence rates for substance use were stratified by gender and race.

The frequency distribution of leisure boredom was obtained. As a graphical display of the data showed the distribution to be asymmetrical, the median and the interquartile range was used as the measures of central tendency and variation respectively.

Logistic regression-type models were used to determine the association between variables. Specifically, the method of generalized estimation equations (GEE) was used to take account of the cluster effect. These models were used to examine the relationship between leisure boredom (the dependent variable) and gender, grade and race (the independent variables). This method of analysis was also used to determine the association between use of each substance (cigarette use, alcohol use, cannabis use) (the dependent variables), and leisure boredom (the independent variable). A result was defined to be significant if  $p < 0.05$ , and a trend was defined to exist if  $0.05 < p < 0.1$ .

If the results of this analysis showed the association between leisure boredom and use of a substance to be significant, or if a trend was noted, a final step in the analysis was taken. A logistic regression-type model was used to investigate whether the significant relationship or the trend was still present when controlling for gender, grade, race and the interaction between gender and race. In each of these analyses, the substance use was the dependent variable, and leisure boredom was the independent variable.

## CHAPTER 4

### RESULTS

#### 4.1 DEMOGRAPHICS OF SAMPLE

A total of 625 students completed questionnaires, including a total of 4 Asian students. The decision was made to exclude these 4 students, as this subgroup was too small to produce any significant results. Thus the sample consisted of 621 students. Table 4.1 indicates the demographic breakdown of the sample. The total number of Grade 8 students was 303 (48.8%) and the total number of Grade 11 students was 318 (51.2%). The number of female students was 372 (59.9%), outnumbering the number of male students, which was 238 (38.3%). There were 11 missing responses for gender (1.8%).

Nearly half of the sample was made up of coloured students (47.4%), with black students (26.6%) and white students (24.2%) each representing approximately one-quarter of the sample. There were 11 missing responses for race (1.8%).

**Table 4.1 Demographics of sample, stratified by gender and race (N = 621)**

Race	Grade 8				Grade 11			
	Male n %	Female n %	Missing n %	All n %	Male n %	Female n %	Missing n %	All n %
<b>Black</b>	21 3.4	51 8.2	3 0.5	75 12.1	29 4.7	60 9.7	1 0.2	90 14.5
<b>Coloured</b>	58 9.3	85 13.7	2 0.3	145 23.3	56 9.0	90 14.5	4 0.6	150 24.1
<b>White</b>	39 6.3	35 5.6	1 0.2	75 12.1	33 5.3	42 6.8	0 0.0	75 12.1
<b>Missing</b>	1 0.2	7 1.1	0 0.0	8 1.3	1 0.2	2 0.3	0 0.0	3 0.5
<b>All races</b>	119 19.2	178 28.6	6 1.0	303 48.8	119 19.2	194 31.2	5 0.8	318 51.2

## 4.2 PREVALENCE OF SUBSTANCE USE

### 4.2.1 Prevalence of alcohol use

**Grade 8:** the overall prevalence of alcohol use by Grade 8 students was 17.5% (Table 4.2). The prevalence rate for females was higher than the rate for males. Black students reported the lowest use of alcohol (6.1%) with coloured students (20.0%) and white students (23.3%) showing similar prevalence rates.

**Grade 11:** the prevalence rate more than doubled in Grade 11 students to 38.4% (Table 4.3). As opposed to Grade 8 students, the prevalence rate for males was higher than the rate for females. In male students, black students (51.9%) and white students (51.5%) showed similar prevalence rates, which were higher than coloured males (41.5%). Black females (6.8%) showed a very much lower prevalence rate than the other Grade 11 students. White females (66.7%) showed the highest prevalence rate of all the subgroups.

**Table 4.2: Prevalence rates for use of alcohol in the past month for Grade 8 students, stratified by gender and race (n = 303\*)**

	Males			Females			Both genders		
	Yes n	No n	Prev. (%)	Yes n	No n	Prev. (%)	Yes n	No n	Prev. (%)
<b>Race</b>									
<b>Black</b>	1	17	5.6	3	45	6.3	4	62	6.1
<b>Coloured</b>	9	44	17.0	18	64	22.0	27	108	20.0
<b>White</b>	8	30	21.1	9	26	25.7	17	56	23.3
<b>All races</b>	18	91	16.5	30	135	18.2	48	226	17.5

\* Missing responses = 29

**Table 4.3: Prevalence rates for use of alcohol in the past month for Grade 11 students, stratified by gender and race (n = 318\*)**

	Males			Females			Both genders		
	Yes n	No n	Prev. (%)	Yes n	No n	Prev. (%)	Yes n	No n	Prev. (%)
<b>Race</b>									
<b>Black</b>	14	13	51.9	4	55	6.8	18	68	20.9
<b>Coloured</b>	22	31	41.5	30	55	35.3	52	86	37.7
<b>White</b>	16	15	51.6	28	14	66.7	44	29	60.3
<b>All races</b>	52	59	46.8	62	124	33.3	114	183	38.4

\* Missing responses = 21

#### 4.2.2 Prevalence of cigarette smoking

**Grade 8:** the overall prevalence of cigarette smoking was 22% (Table 4.4). The prevalence rate for males was higher than the rate for females. Black students reported the lowest use of cigarettes (2.9%) with coloured students (27.6%) and white students (29.7%) showing similar prevalence rates. Black females showed the lowest prevalence rate (1.5%). In coloured and white students, the prevalence rates in males and females was fairly similar.

**Grade 11:** the prevalence rate increased to 34.7% (Table 4.5). The prevalence rate for males was higher than the rate for females. The exception was white females (53.7%) who showed a higher prevalence rate than white males (37.5%), as well as showing the highest prevalence rate of all the subgroups of Grade 11 students. In male students, black students (44.4%) and coloured students (42.9%) showed similar prevalence rates. Black females (1.8%) showed a very much lower prevalence rate than the other Grade 11 students.

**Table 4.4: Prevalence rates for use of cigarettes in the past month for Grade 8 students, stratified by gender and race (n = 303\*)**

	Males			Females			Both genders		
	Yes n	No n	Prev. (%)	Yes n	No n	Prev. (%)	Yes n	No n	Prev. (%)
<b>Race</b>									
<b>Black</b>	1	17	5.6	1	50	1.5	2	67	2.9
<b>Coloured</b>	14	40	25.9	23	57	28.8	37	97	27.6
<b>White</b>	12	27	30.8	10	25	28.6	22	52	29.7
<b>All races</b>	27	84	24.3	34	132	20.5	61	216	22.0

\* Missing responses = 26

**Table 4.5: Prevalence rates for use of cigarettes in the past month for Grade 11 students, stratified by gender and race (n = 318\*)**

Race	Males			Females			Both genders		
	Yes n	No n	Prev. (%)	Yes n	No n	Prev. (%)	Yes n	No n	Prev. (%)
Black	12	15	44.4	1	56	1.8	13	71	15.5
Coloured	24	32	42.9	31	50	38.3	55	82	40.2
White	12	20	37.5	22	19	53.7	34	39	46.6
<b>All races</b>	<b>48</b>	<b>67</b>	<b>41.7</b>	<b>54</b>	<b>125</b>	<b>30.2</b>	<b>102</b>	<b>192</b>	<b>34.7</b>

\* Missing responses = 24

### 4.2.3 Prevalence of cannabis use

**Grade 8:** the overall prevalence of cannabis use by Grade 8 students was 2.7% (Table 4.6). The prevalence rate for males was slightly higher than the rate for females. Overall the prevalence rate is highest for white students (4.5%) and lowest for black students (1.5%). Black males (5.6%) and white females (6.3%) showed the highest prevalence rates. The prevalence rate for black females was 0.0%.

**Grade 11:** the overall prevalence rate by Grade 11 students increased to 8.4% (Table 4.7). Coloured students (10.9%) and white students (10.6%) showed similar prevalence rates, which were higher than the rate for black students (2.5%). The prevalence rate for males was higher than the rate for females. Coloured male students (22.5%) showed the highest prevalence rate, with white females students (16.2%) showing the second highest rate. Once again, black females showed a prevalence rate of 0.0%.

**Table 4.6: Prevalence rates for cannabis use in the past month for Grade 8 students, stratified by gender and race (n = 303\*)**

	Males			Females			Both genders		
	Yes n	No n	Prev. (%)	Yes n	No n	Prev. (%)	Yes n	No n	Prev. (%)
<b>Race</b>									
<b>Black</b>	1	17	5.6	0	47	0.0	1	64	1.5
<b>Coloured</b>	1	53	1.9	2	74	2.6	3	127	2.3
<b>White</b>	1	34	2.9	2	30	6.3	3	64	4.5
<b>All races</b>	3	104	2.8	4	151	2.6	7	255	2.7

\* Missing responses = 41

**Table 4.7: Prevalence rates for cannabis use in the past month for Grade 11 students, stratified by gender and race (n = 318\*)**

Race	Males			Females			Both genders		
	Yes n	No n	Prev. (%)	Yes n	No n	Prev. (%)	Yes n	No n	Prev. (%)
<b>Black</b>	2	23	8.0	0	55	0.0	2	78	2.5
<b>Coloured</b>	11	38	22.5	3	77	3.8	14	115	10.9
<b>White</b>	1	28	3.5	6	31	16.2	7	59	10.6
<b>All races</b>	14	89	13.6	9	163	5.2	23	252	8.4

\* Missing responses = 43

## 4.3 THE DEGREE OF LEISURE BOREDOM AND ITS ASSOCIATION WITH DEMOGRAPHIC VARIABLES

### 4.3.1 Leisure boredom and gender

Females showed a greater degree of leisure boredom than males in both Grade 8 and Grade 11 (Table 4.8). The exception was black Grade 8 students, with males and females reporting exactly the same degree of leisure boredom, which was also the highest degree of leisure boredom overall (median = 46).

Leisure boredom was shown to be significantly associated with gender ( $p = 0.003$ ) (Table 4.9).

### 4.3.2 Leisure boredom and grade

In general, Grade 8 students experienced a greater degree of leisure boredom than Grade 11 students (Table 4.8).

There was a trend for leisure boredom and grade to be associated ( $p = 0.055$ ) (Table 4.9).

### 4.3.3 Leisure boredom and race

In both Grade 8 and Grade 11, black students showed the highest degree of leisure boredom and white students showed the lowest degree of leisure boredom (Table 4.8). Out of all the students, white Grade 11 male students reported the lowest degree of leisure boredom (median = 35).

Leisure boredom was shown to be significantly associated with race ( $p = 0.000$ ) (Table 4.9).

**Table 4.8: Degree of Leisure Boredom, stratified by gender and race (N = 621\*)**

	Grade 8				Grade 11			
	Males		Females		Males		Females	
<b>Race</b>	Median	IQR	Median	IQR	Median	IQR	Median	IQR
<b>Black</b>	46	41 - 48	46	42 - 51	42	36 - 48	45	40 - 49
<b>Coloured</b>	43	39 - 50	45	42 - 50	40	36 - 46	41	36 - 48
<b>White</b>	36	33 - 41	40	33 - 45	35	30 - 44	39	35 - 46

\* Missing responses = 21

† IQR = interquartile range

**Table 4.9: Results of logistic regression analysis for the association between leisure boredom and demographic variables (N = 621)**

	n	Coeff.	Std. Error	p
<b><u>Gender:</u></b>				
Female	372	-	-	-
Male	238	-2.01	0.67	0.003**
<b><u>Grade:</u></b>				
11	318	-	-	-
8	303	1.99	1.03	0.055*
<b><u>Race:</u></b>				
White	150	-	-	-
Coloured	295	4.84	1.00	0.000**
Black	165	6.13	1.17	0.000**

\*\* indicates significance

\* indicates a trend

## 4.4 THE ASSOCIATION BETWEEN LEISURE BOREDOM AND SUBSTANCE USE

### 4.4.1 Leisure boredom and alcohol use

Leisure boredom and alcohol use were found to be significantly associated ( $p = 0.031$ ) (Table 4.10). Students who reported not using alcohol showed a higher degree of leisure boredom than students who did use alcohol.

### 4.4.2 Leisure boredom and cigarette smoking

There was a trend for leisure boredom and cigarette smoking to be associated ( $p = 0.093$ ) (Table 4.10). Students who reported not smoking cigarettes showed a higher degree of leisure boredom than students who did report smoking cigarettes.

### 4.4.3 Leisure boredom and cannabis use

There was no evidence of a significant association between leisure boredom and cannabis use ( $p = 0.303$ ) (Table 4.10).

Leisure boredom and alcohol use were shown to be significantly associated, and there was evidence of a trend for leisure boredom to be associated with cigarette smoking. Therefore, further logistic regression was used to determine the association between leisure boredom and these two substance use variables, adjusting for race, gender, grade, and the interaction between race and gender.

The results of this analysis showed there to be no significant association between leisure boredom and substance use, when adjusting for race, gender, grade, and the interaction between race and gender (Table 4.11).

**Table 4.10: Results of logistic regression analysis for the association between leisure boredom and substance use variables (N = 621)**

	n	Coeff.	Std. Error	p
<b><u>Cigarette use:</u></b>				
No	420			
Yes	172	-1.19	0.71	0.093*
<b><u>Alcohol use:</u></b>				
No	422			
Yes	168	-2.10	0.97	0.031**
<b><u>Cannabis Use:</u></b>				
No	524			
Yes	30	-2.08	2.02	0.303

\*\* indicates significance

\* indicates a trend

**Table 4.11: Results of logistic regression analysis for the association between leisure boredom and substance use, adjusting for race, gender and grade**

(N = 621)

	<b>Coeff.</b>	<b>Std. Error</b>	<b><i>p</i></b>
<b><u>Cigarette use:</u></b>	-0.00	0.01	0.915
<b><u>Alcohol use:</u></b>	-0.01	0.01	0.288

# CHAPTER 5

## 5.1 DISCUSSION

Occupational therapy focuses on the performance of people in their daily occupations - leisure, work and self-care, and is concerned with how functional or dysfunctional this performance may be. In order to achieve this, it is necessary to understand how people experience their occupations. Therefore this study investigated the degree of leisure boredom experienced by adolescents, and determined the association between adolescent substance use and leisure boredom. As will be discussed below, I feel that the aim and objectives (Chapter 3) were clearly achieved.

The study was part of a larger study (refer to Chapter 1); therefore the results should be considered with respect to those from the rest of the study. However, the only results available to date are those relating to school climate. A significant association was shown to exist between cigarette smoking and school climate, which comprised of factors such as order, discipline and teacher-student interpersonal relationships (Ahmed, 1998). School climate should be considered as an important part of the context in which the study occurred. The study population consisted of adolescents attending high schools in and around Cape Town. Cape Town is a large urban city with a high rate of crime, violence and gangsterism, all of which are often apparent within schools. Many schools have to deal with these problems on a daily basis, as well as difficulties due to factors such as a shortage of teachers, budget constraints and vandalism. The schools in Cape Town reflect the varying socioeconomic status of the different areas and include affluent, middle-class and poor schools.

Integration in schools and communities is growing, but racial groups continue to inhabit certain areas, many of which remain under-resourced.

The study sample was representative of the three main racial groups residing in the area i.e. black adolescents, coloured adolescents and white adolescents. The sampling strategy allowed a range of schools to be selected, including affluent, middle-class and poor schools. A satisfactory balance between Grade 8 students and Grade 11 students was obtained.

#### **5.1.1 Prevalence of substance use**

The results clearly showed that Grade 11 students reported greater use of all three substances than Grade 8 students (Tables 4.2 to 4.7). If Grade is taken as a proxy for age, then it can be stated that the prevalence of substance use increased with age. Flisher et al. (1993) reported a similar finding.

In general, male students showed a higher prevalence of substance use than females. This was an expected finding because it was a common result in other South African prevalence studies (Du Toit 1991; Flisher et al. 1993; Parry & Bennetts 1998). However, some important variations to this general finding warrant mention. In Grade 8, female students overall showed a higher prevalence rate than males for use of alcohol. White females in Grade 11 showed a consistently higher prevalence rate than white males for all three substances.

In fact they showed the highest prevalence rate of all the subgroups for use of cigarettes and alcohol (Tables 4.3 & 4.5), and the second highest prevalence rate after coloured males, for cannabis use (Table 4.7). This could be explained by a process described as "diffusion of innovations" (Aarø et al., in press) which refers to the rate at which individual consumer groups adopt new habits, fashions, products or ideas. It would appear that white females have caught up, and overtaken their male contemporaries, and we can expect a similar occurrence in coloured and black females. This would place these groups at-risk especially as black females showed a very low prevalence rate of substance use, in general. This was a common finding in previous studies (Du Toit 1991; Flisher et al. 1993).

Finally, white students in general reported a higher prevalence rate for substance use than coloured students, with black students, in particular grade 8 females, showing the lowest prevalence rates.

There was a relatively high number of missing responses for cannabis use (Grade 8 = 41 and Grade 11 = 43) compared to the missing responses for alcohol use (Grade 8 = 29 and Grade 11 = 21) and use of cigarettes (Grade 8 = 26 and Grade 11 = 24). The missing responses could have been students that under-reported their use of cannabis for fear of being found out.

### 5.1.2 Degree of leisure boredom

Black Grade 8 students showed the highest degree of leisure boredom (median = 46, IQR 41 - 48) and white male Grade 11 students showed the lowest degree of leisure boredom (median = 35, IQR 30 - 44) (Table 4.8). In comparison, Gordon and Caltabiano (1996) found that the median score for the Leisure Boredom Scale for urban adolescents was 36; the range = 16 to 59. Thus in general, adolescents in Cape Town reported a higher degree of leisure boredom.

### 5.1.3 Leisure boredom and gender

The study showed that female adolescents experienced leisure boredom to a greater extent than male adolescents ( $p = 0.003$ ) (Tables 4.8 and 4.9). The only other study reflecting gender differences for leisure boredom in adolescents found that male adolescents had greater leisure boredom than females (Gordon and Caltabiano, 1996). Other studies found that females tended to have less time available for leisure activities than males, and spent more of their free time engaged in domestic chores, such as cooking, and caring for younger children (Møller 1991; Shaw et al. 1995). This could mean that males have more time available in which to engage in leisure activities, and to develop their leisure interests and skills. It may also imply that males are not bound to the home as much as females, and therefore may have more freedom. The greater independence granted to males might enable them to socialise more with peers, and have more fun in their free time.

Parental fears about their children's safety - females in particular - may also play a role in limiting female adolescents' engagement in leisure activities outside of the home, and in the evenings. Male adolescents may have later curfews and be allowed to make use of public transport more readily than females.

The type of leisure activities engaged in may also effect how adolescents experience their leisure time. Societal norms actively encourage the involvement of boys in sports, many of which entail team participation. Sporting activities by nature are usually exciting and stimulating, allowing the adolescent to match his skills against different challenges. In addition, they provide the opportunity for socialising and to receive positive feedback from peers.

Considering that socialising is the most favoured leisure activity of adolescents (Chang et al. 1993; Møller 1991; Shaw et al. 1995), it could be assumed that adolescents might perceive activities that enable socialising to occur as more enjoyable, and therefore less boring. A study by McMeeking and Purkayastha (1995) showed that girls expressed a preference for more one-to-one contact with friends than boys who were happier joining any neighbourhood group activities. This means that for girls living in a spatially dispersed community, socialising becomes more difficult than for boys, since girls would be less likely to join in informal neighbourhood leisure pursuits if their friends were not involved. Obviously, where opportunities for social interaction are restricted or limited, the chances of the adolescent experiencing greater leisure boredom are greater.

#### 5.1.4 Leisure boredom and race

Black students reported the greatest degree of leisure boredom, and white students reported the lowest degree of leisure boredom ( $p = 0.000$ ) (Tables 4.8 and 4.9). This result may be better understood by considering the residual effects of apartheid which are apparent in the Western Cape. Perhaps this finding should be attributed to socio-economic status rather than to racial differences, as socio-economic status is still very much related to race in South Africa.

The Group Areas Act, which was one of the major apartheid policies of the previous government, resulted in areas such as Khayelitsha and the Cape Flats being specifically established for black and coloured people. This Act, combined with an inequitable distribution of resources, has caused these areas to be characterised by poorly developed infrastructures, minimal resources and poverty. Unfortunately, the legacy of apartheid is still evident as improvements proposed by policies such as the Reconstruction and Development Programme are occurring slowly in these areas. Communities and schools still show a marked lack of resources, especially when it comes to leisure facilities, which are often regarded as non-essential "luxuries". Many of the disadvantaged schools are barely coping with teaching large numbers of students as they have to contend with staff shortages and budget cuts; therefore after-school programmes such as sport and recreation programmes are not a priority at this stage.

The consequences are that many black adolescents, and to a lesser extent coloured adolescents, may have limited opportunities to participate in leisure activities at school, at home and in the community; compared to many of their white contemporaries who may reside in more well-resourced areas of Cape Town.

Freedom of choice is an important characteristic of leisure (Gunter 1987, Iso-Ahola 1979). There are many factors that can effect the adolescent's choice of leisure activities, such as socio-economic and cultural factors. The impact of cultural attitudes and perceptions on adolescents' involvement in leisure warrants discussion. For example, devoting time and energy to leisure activities may be considered to be "...a waste of time" (personal communication, Moslem university student). Møller (1991) found that although black township youths had found creative ways of dealing with a lack of leisure resources, as many as one-third of the youths in the nationwide survey indicated feeling excessively bored. Møller (1991, p.9) considered the greatest leisure constraint for Black youths to be "semi-leisure" activities, defined as "...time-off from work activities which is consumed by activities one feels obliged to do". Although semi-leisure activities, such as education-related activities or involvement in youth groups, were found to play a role in the personal development of black youths (Møller, 1991), these could also restrict the adolescent's freedom to choose leisure activities which are more enjoyable, and less serious.

It is debatable to what extent semi-leisure activities can be considered to be fun, pleasurable, intrinsically motivating and free of external constraints - according to the common qualities used to define leisure (Bundy 1993; Cynkin 1979; Iso-Ahola 1979; Møller 1991; Roberts 1983; Tinsley et al. 1993). Therefore, to what extent might involvement in semi-leisure activities contribute to the experience of leisure as boring?

It is evident that further research is needed to explore cultural attitudes and perceptions regarding leisure, and to determine how this effects adolescents' leisure activity choices and leisure experiences.

#### **5.1.5 Leisure boredom and grade**

The results of this study showed that Grade 8 students experienced a greater degree of leisure boredom than Grade 11 students ( $p = 0.055$ ) (Tables 4.8 and 4.9). Using grade as a proxy for age, it can then be assumed that younger adolescents experienced greater leisure boredom than older adolescents. Gordon and Caltabiano (1996) found a similar result amongst rural adolescents. From a developmental perspective, the younger adolescent in Grade 8 (approximately 13 years old) is experiencing many physical changes. These may occupy much of the adolescent's energy and attention, leaving little time for other issues such as establishing a leisure pursuit. At this stage the adolescent may only be exploring potential leisure activities. The possibilities could appear to be either overwhelming, or alternatively be of little value or interest, thus evoking a feeling of boredom towards leisure in general.

Gordon and Caltabiano (1996) found that the higher subjects' self-esteem, the lower their leisure boredom. Therefore, younger adolescents with lower self-esteem may experience greater leisure boredom, which might in turn contribute to a decreased self-efficacy, or belief, in their ability to perform a desired leisure activity.

By the time adolescents reach Grade 11, they are in the stage of middle to late adolescence (approximately 16 years old). A sense of personal identity should be developing, enabling the adolescent to be more selective about personal choices such as leisure. Many adolescents at this age have established a preference for particular leisure activities, and may be competently performing the activities. This provides the adolescent with a sense of satisfaction, promotes self-esteem and structures the adolescent's leisure time, all of which combat feelings of boredom.

Grade 8 students, being the most junior grade in high school, may still be adapting to their new school environment. They may have to establish new friendships with a different set of peers. These factors could result in fewer opportunities for them to engage in organised school activities and other leisure activities than the Grade 11 students. Grade 8 students may have more free time available after school and on weekends than the Grade 11 students, who may have homework, extramural activities, and domestic chores which structure their free time. A large amount of unstructured free time could contribute to a feeling of boredom especially if the adolescent does not have the skills or resources to use the time constructively.

Younger adolescents may have less access to transport because of having to rely on family members for transport, or having to use public transport which can be dangerous as well as costly. Restricted independence due to a lack of available transport was found to be the main barrier to involvement in leisure activities by 14-year-old adolescents (McMeeking and Purkayastha, 1995).

Another practical barrier to leisure involvement might be a lack of money. Younger adolescents may have less money at their disposal than older adolescents who may have part-time jobs, or who might receive a bigger allowance from parents. Although money should not be the determining factor in leisure, unfortunately it does have an impact on the opportunities available to the adolescent. These practical barriers may result in adolescents feeling a sense of dissatisfaction towards their leisure activities, and thus the perception that leisure is boring.

#### **5.1.6 Leisure boredom and substance use**

There was no evidence of a significant association between leisure boredom and substance use when controlling for gender, race, grade, and interactions between race and gender (Table 4.11). Using logistic regression without controlling for these demographic variables showed a significant association between leisure boredom and alcohol use ( $p = 0.031$ ), and a trend for leisure boredom to be associated with cigarette use ( $p = 0.093$ ) (Table 4.10). As gender, race and grade showed a significant association with leisure boredom (Table 4.9) as well as with substance use (Flisher et al. 1993), these demographic variables are most likely acting as confounders.

A definite pattern emerges if prevalence rates for substance use are compared with the degree of leisure boredom. White Grade 11 students showed the highest prevalence of alcohol use (60.3%) (Table 4.3) and cigarette smoking (46.6%) (Table 4.5), and the lowest degree of leisure boredom (median = 35 for males; median = 39 for females) (Table 4.8).

On the other hand, black Grade 8 students showed the lowest prevalence of alcohol use (6.1%) (Table 4.2) and cigarette smoking (2.9%) (Table 4.4), and the highest degree of leisure boredom (median = 46 for males and females) (Table 4.8). Although many reasons could account for this finding, there is the possibility that the use of substances such as alcohol and cigarettes may be alleviating leisure boredom by providing adolescents with the excitement and stimulation they seek. Ziervogel et al. (1997/8) found that school-going male adolescents reported this to be a significant reason for their use of alcohol.

The context in which substance use occurs most frequently is in leisure settings and in leisure time (Iso-Ahola and Crowley, 1991). If individuals subjectively define their own leisure activities (Agnew and Petersen, 1989), then substance use may be regarded as a leisure activity by some adolescents. In addition, most substance use by adolescents occurs with friends (Iso-Ahola and Crowley, 1991), providing the adolescent with an opportunity for socialization and conformity with peers (Ziervogel et al. 1997/8). Flisher et al. (1995) showed that substance use was significantly associated with other forms of risk-taking behaviour in adolescents, such as sexual risk-taking and dangerous road-related behaviour.

Engaging in risk-taking behaviour meets certain needs of the adolescent, such as the need for excitement and stimulation, and as a means of rebellion. Gordon and Caltabiano (1996) found that high sensation-seekers experienced a low level of leisure boredom. Considering this, it is not surprising that adolescents who reported using substances experienced a lower degree of leisure boredom.

This concept appears to contradict the findings by Iso-Ahola and Crowley (1991), who found that adolescent substance abusers were more likely to experience leisure boredom than non-substance abusers. However, it is important to recognize that the substance abusers in the study had been diagnosed with substance abuse according to the DSM-IV, for which they were receiving psychiatric intervention. Iso-Ahola and Crowley (1991) partly attributed their findings to the personality characteristics of substance abusers as sensation seekers who became easily bored with repetitive or constant experiences. Once the *use* of substances becomes more regular *abuse* or even *dependence* on substances, leisure boredom may result as drugs become the "...primary source of daily 'highs'...rather than intrinsically rewarding leisure activities" (Iso-Ahola and Crowley, 1991, p. 269). Further research is needed to determine the degree of leisure boredom in adolescents diagnosed with, and being treated for, substance abuse/dependence in South Africa.

The fact that leisure boredom and gender, grade and race are significantly associated may have a potential impact on adolescent substance use.

Adolescents who experience a higher degree of leisure boredom and who are not using substances, may be at risk of initiating substance use in order to alleviate their boredom. Black adolescents, younger adolescents and female adolescents should be considered as high-risk groups because of their higher degree of leisure boredom, and should therefore be priority groups for leisure education programmes (refer to Recommendations).

## 5.2 LIMITATIONS

As stated previously, this study was done in the context of the current educational crisis, which gave rise to several problems. At a few of the schools the available venues were too small for the number of students, forcing them to share desks. It was difficult to prevent students from communicating with one another in such instances, which was made even harder by the fact that the students were excited by the prospect of completing the questionnaires. This could have resulted in under-reporting of information, especially substance use, as confidentiality was decreased.

Although every effort was made by the administrators to enforce the random selection of students at each school, the precision with which these selected students presented in the venues to participate in the study was at times doubtful. However, this occurred at only a very small number of the schools and has not effected the results.

The inclusion of a research administrator who spoke Xhosa would have facilitated the presentation of the research at the Xhosa schools. Some of the Xhosa-speaking adolescents, in particular the Grade 8 students, appeared to have difficulty understanding the verbal instructions which were given in English. The fact that the instructions appeared in written format in Xhosa on the front page of every questionnaire alleviated the problem to some extent.

Although Grade 8 students were selected to participate in the study, as they are the most junior students in high school, some of them appeared to experience difficulty concentrating for the length of time required to complete the questionnaire. Administering the questionnaire in two parts on separate occasions might have solved this problem, but was not considered to be cost-effective or practical. Surprisingly, many Grade 8 students seemed unfamiliar with the format for answering the questionnaire and required detailed instructions. Although this was time-consuming it does not appear to have had any adverse effect on the results.

## **5.3 RECOMMENDATIONS**

### **5.3.1 Leisure programmes for adolescents**

It is obvious that substance use among adolescents in the Western Cape is an escalating problem that cannot be denied. Adolescents are a high-risk population and urgent attention needs to be given to health promotion programmes aimed at combating the problem.

As indicated by the findings of this study, adolescents in Cape Town are experiencing a degree of boredom with their leisure activities; younger adolescents, black adolescents and females showed the highest degree of leisure boredom and are therefore most at-risk. Although drug and alcohol prevention programmes do exist, I feel that their effectiveness may be limited because they occur infrequently or as "once-off" sessions, and because they focus specifically on substance use as a problem. These programmes may make an impression on the adolescent at the time they are presented, but do they have a lasting impression?

For substance use programmes to be effective they should be ongoing, occur within the adolescent's daily context, and be part of a comprehensive approach aimed at promoting healthy living in all aspects of life, instead of only focusing on isolated problem behaviours. Flisher et al. (1996) termed this a "lifestyles approach" to health promotion amongst adolescents.

The most convenient place for such programmes to occur is at schools and in local communities. The proposed Curriculum 2005 includes the implementation of lifeskills, aimed at enabling students to develop the skills required to cope with the challenges of daily life (Rooth, 1997). These lifeskills programmes have the potential to become part of a "lifestyles approach" to health promotion in adolescents, however a major disadvantage is that many teachers have either very little, or no training in lifeskills and groupwork (personal communication). By forming partnerships with teachers, occupational therapists could use their understanding of how to promote wellness and healthy living through occupation, as well as their experience in groupwork, in order to implement effective lifeskills programmes in schools.

Leisure education programmes should form part of lifeskills programmes. These programmes should aim to enable adolescents to actively explore a variety of different leisure activities as well as the resources necessary to pursue the leisure activities. In the more advantaged schools this may happen automatically as part of the extracurricular activities and sports programmes but in many schools these resources need to be developed. Unfortunately, current problems such as budget restrictions and a decrease in the number of teachers due to rationalization are a severe handicap in the implementation of such processes.

Nevertheless, adolescents (and their teachers and parents) need to become more aware of the advantages that are a result of participating in a satisfying leisure occupation, and be encouraged to actively pursue a leisure activity in their free time. Naturally, the involvement of parents in the development of their children's leisure activities is vital. A creative way of dealing with budget and teacher limitations might be to involve parents, especially those who are not working, in the co-ordination and presentation of leisure programmes, based either at the schools or elsewhere in the local community. It would be preferable for these leisure programmes to include organised activities that would structure the adolescents' use of time during the week, as well as non-competitive sports and passive entertainment activities (Agnew and Petersen, 1989).

An advantage of including leisure education in lifeskills programmes is that a wide variety of skills, which effect the adolescent's involvement in leisure activities, could also be developed. These should include strategies such as boredom coping skills, leisure preparedness and anxiety coping skills (Smith and Weissinger, 1992), stress management, time management, social skills and conflict resolution.

The definition of leisure should be the guiding factor when planning leisure education programmes. Most importantly, involving adolescents in decision-making and programme planning would ensure freedom of choice. The activities must be stimulating and fun, involving challenges to match the adolescents' skills. The activities should be intrinsically motivating and allow for a sense of satisfaction and competence to develop. The opportunity for social interaction should be a major component of leisure programmes.

The programme planner should bear in mind the process by which individuals make choices about activities, as this could provide a useful guide for leisure education programme development: awareness, knowledge, skills, resourcefulness, strategies, assertion (doing) and reflection (Knox, 1998).

### **5.3.2 Future research**

In terms of future research, several recommendations can be made. It would be worthwhile investigating the association between leisure boredom and substance use in adolescents diagnosed as substance dependent according to the DSM-IV, as well as in adolescents who have dropped out of school.

The prevalence of substance use has been shown to be higher in adolescents who have dropped out of school than in school-going adolescents (Flisher and Chalton, 1995).

The need to establish cultural attitudes and perceptions towards leisure became evident in this study. Qualitative research methods such as ethnography could be used most effectively for this purpose. This has particular relevance in the Western Cape where people from a variety of different ethnic and cultural groupings interact in communities, and requires consideration in order for any type of programme to be effective.

Another area requiring research is to determine the barriers preventing adolescents from engaging in leisure activities, because this information would facilitate the development of measures to counteract these barriers, as well as ways of enabling adolescents to overcome them.

#### **5.4 CONCLUSION**

In conclusion, it is important that the attitude of adolescents towards life in general should be taken into consideration. McMeeking and Purkayastha (1995, p.366) suggested that there is "...a universal belief, held by adolescents, which crosses cultural divides and persists through time that there is 'nowhere to go, and nothing to do". Through many discussions with colleagues, parents and adolescents, it appears to me that adolescents believe it is "cool" to be bored. Møller (1991, p.11) stated that "...boredom is the curse of youths all over the world".

The results of my study supported these statements - adolescents were indeed experiencing a high degree of leisure boredom. The concern is that substance use, particularly use of alcohol and cigarettes, is providing many adolescents with the stimulation and excitement that they seek, as opposed to more healthy ways of meeting these needs.

The challenge of enabling adolescents to deal constructively with their leisure time should not be ignored. The threat of substance use ought to be sufficient motivation to mobilise the necessary resources.

Finally, I would like to say that the experience of working with a research team proved to be most beneficial, due in part to the complexity that could be achieved by participating as part of a larger study. In addition the support and suggestions of the team members were very valuable. I would recommend this experience to anyone wishing to embark on a research project.

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# APPENDICES

## APPENDIX 1

Brief description of the content of Parts 1, 2, 3, & 4 of the SACENDU: School Survey (Flisher and Evans, 1997, p.20).

PART #	DESCRIPTION OF CONTENT
Part 1	Demographic information  Data regarding alcohol, tobacco, and other drug use  Data regarding other risk behaviours (suicidality, road-related behaviour, violent behaviour, sexual behaviour)
Part 2	Questionnaire for Social Development Model
Part 3	Questionnaire involving exposure to violence and correlates thereof
Part 4	Leisure Boredom Scale  Questionnaire concerning the nature and extent of physical abuse in sexual relationships  Questionnaire involving school climate

## APPENDIX 2

### THE LEISURE BOREDOM SCALE

(adapted from Iso-Ahola and Crowley, 1991).

This part of the questionnaire is concerned with how you feel about your leisure time.

Please respond to each of the following statements by ticking the box that shows how much you agree or disagree with the statement.

1. For me, leisure time just drags on and on.      Strongly Disagree  
Disagree  
Neutral  
Agree  
Strongly Agree
  
2. During my leisure time, I become highly  
involved in what I do.      Strongly Disagree  
Disagree  
Neutral  
Agree  
Strongly Agree
  
3. Leisure time is boring.      Strongly Disagree  
Disagree  
Neutral  
Agree  
Strongly Agree

4. If I could leave school now and have enough money, I would have plenty of exciting things to do for the rest of my life.
- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree
5. During my leisure time, I feel like I'm just bored and hanging around.
- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree
6. In my leisure time, I usually don't like what I'm doing, but I don't know what else to do.
- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree
7. Leisure time gets me aroused and going.
- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

8. Leisure experiences are an important part of my quality of life.
- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree
9. For me, leisure time just drags on and on.
- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree
10. I am excited about leisure time.
- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree
11. In my leisure time, I want to do something, but I don't know what to do.
- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

12. I waste too much of my leisure time sleeping.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

13. I like to try new leisure activities that I have never tried before.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

14. I am very active during my leisure time.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

15. Leisure time activities do not excite me.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

16. During my leisure time, I feel like I'm just bored and hanging around.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

17. I do not have many leisure activities available to me.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

18. During my leisure time, I almost always have something to do

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

## APPENDIX 3

### PART 1



QUESTIONNAIRE ON RISK BEHAVIOR

PART 1

FOR OFFICE  
USE ONLY

Line one

Please will you fill in this questionnaire. It is not nearly as long as it looks.

We are trying to find out if the way you live could affect your health. Your responses are very important to us. We would like to make suggestions about what could be done to improve the health of young people.

This is not a test and there are no right and wrong answers.

You can make any comments you wish, to the researchers, when you have completed.

You are not asked to give your name on the questionnaire and nobody will know who filled in this questionnaire.

In questions where there are boxes, please tick the box next to the answer that you want to give.

Please do not write to the right of the line going down the right hand side of the page.

Once you have finished filling in the questionnaire, please put it in the envelope.

**THANK YOU VERY MUCH FOR YOUR COOPERATION !**

*Before we start we need to know a few things about you*

**FOR OFFICE  
USE ONLY**

Line one

1. Which school do you attend?

\_\_\_\_\_

7

10

2. In which class are you (for example, 7f)?

\_\_\_\_\_

13

3. Have you ever repeated a school year?

Yes  No

4. During the first school term of this year, on approximately how many days were you absent?

\_\_\_\_\_ days

5. What was your aggregate (average mark) last year?

\_\_\_\_\_

6. How old are you?

\_\_\_\_\_ years

7. What is your sex?

Male  Female

19

8. What was your racial classification under the previous government?

Asian

Black

Coloured

White

23

9. Which of the following languages are spoken at home? Please mark as many as necessary.

Afrikaans

English

Xhosa

Zulu

Other- please specify

28

10. What is the total number of years you have lived in a city since birth?

\_\_\_\_\_ years

30

11. With whom do you live? Please mark as many as necessary.

Biological mother

Biological father

Step mother

Step father

Grandmother(s)

Grandfather(s)

Aunt(s)

Uncle(s)

Sister(s)

Brother(s)

Other(s) - please specify

41

12. Who raised you or brought you up? Please mark as many as necessary.

<i>Biological mother</i>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Biological father</i>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Step mother</i>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Step father</i>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Grandmother(s)</i>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Grandfather(s)</i>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Aunt(s)</i>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Uncle(s)</i>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Sister(s)</i>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Brother(s)</i>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Other(s) - please specify</i>		<input type="checkbox"/>

\_\_\_\_\_

52

13. Which of the following do you or your family have at home? Please mark as many as necessary.

<i>Telephone</i>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Television</i>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Motor car</i>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Electricity</i>	<input type="checkbox"/>	<input type="checkbox"/>

56

14. How many people besides you sleep in the room with you at night, when you are at home?

\_\_\_\_\_

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

59

*This part of the questionnaire is concerned with the use of tobacco, alcohol, and other drugs.*

15. Have you ever smoked a whole cigarette?

Yes  No

60

**IF YES:**

a. How old were you when you smoked a whole cigarette for the first time?  
\_\_\_\_\_ years

62

b. In the *past year* have you smoked a whole cigarette?

Yes  No

c. During the *past month*, on how many days did you smoke cigarettes?

\_\_\_\_\_ days

d. During the *past month*, on the days you smoked, how many cigarettes did you smoke per day?

\_\_\_\_\_ cigarettes

67

16. Have you ever used alcohol (including beer and wine), other than a few sips?

Yes  No

**IF YES:**

a. How old were you when you used alcohol for the first time, other than a few sips?

\_\_\_\_\_ years

b. In the *past year*, did you use alcohol other than a few sips?

Yes  No

c. During the *past month*, on how many *days* did you have at least one drink of alcohol?

\_\_\_\_\_ days

d. During the *past 14 days*, on how many days did you have 5 or more drinks on one occasion?

\_\_\_\_\_ days

71

75

17. Have you ever smoked dagga on its own?

Yes  No

**IF YES:**

a. How old were you when you smoked dagga on its own for the first time?

\_\_\_\_\_ years

b. In the *past year*, did you smoke dagga on its own?

Yes  No

c. During the *past month*, on how many days did you smoked dagga on its own?

\_\_\_\_\_ days

78

Line two

1

18. Have you ever smoked dagga and Mandrax together ("white pipes", "buttons")?

Yes  No

**IF YES:**

a. How old were you when you smoked dagga and Mandrax together for the first time?

\_\_\_\_\_ years

b. In the *past year*, did you smoke dagga and Mandrax together?

Yes  No

c. During the *past month*, on how many days did you smoked dagga and Mandrax together?

\_\_\_\_\_ days

7

19. Have you ever sniffed glue, petrol or thinners?

Yes  No

**IF YES:**

a. How old were you when you sniffed glue, petrol or thinners for the first time?

\_\_\_\_\_ years

b. In the *past year*, did you sniff glue, petrol or thinners?

Yes  No

c. During the *past month*, on how many days did you sniff glue, petrol or thinners?

\_\_\_\_\_ days

11

20. Have you ever used crack cocaine?

Yes  No

14

**IF YES:**

a. How old were you when you used crack cocaine for the first time?

\_\_\_\_\_ years

b. In the *past year*, did you ever use crack cocaine?

Yes  No

c. During the *past month*, on how many days did you use crack cocaine?

\_\_\_\_\_ days

19

21. Have you ever used derbisol?

Yes  No

**IF YES:**

a. How old were you when you used derbisol for the first time?

\_\_\_\_\_ years

b. In the *past year*, did you ever use derbisol?

Yes  No

c. During the *past month*, on how many days did you use derbisol?

\_\_\_\_\_ days

23

22. Have you ever used Ecstasy?

Yes  No

26

**IF YES:**

a. How old were you when you used Ecstasy for the first time?

\_\_\_\_\_ years

b. In the past year, did you ever use Ecstasy?

Yes  No

c. During the *past month*, on how many days did you use Ecstasy?

\_\_\_\_\_ days

31

23. Have you ever used any other type of illegal drug, such as cocaine, heroine, stimulants, hallucinogenics such as LSD, Nexus, MDMA?

Yes  No

24. Have you ever injected any illegal drug (i.e. mainlining)?

Yes  No

25. During a typical week, how much do you spend on each of the following?

Cigarettes R \_\_\_\_\_

36

Alcohol R \_\_\_\_\_

Dagga R \_\_\_\_\_

Mandrax R \_\_\_\_\_

45

*This part of the questionnaire is concerned with other things that some young people may do that may harm their health.*

26. In the last 12 months, did you ever travel in the front passenger seat of a motor vehicle?

Yes  No

**IF YES:**

On the last occasion you were travelling in the front passenger seat of a motor vehicle, was there a seat belt available?

Yes  No

If yes, did you actually wear the seat belt for the whole journey?

Yes  No

27. In the past 12 months, have you ridden on a motor-bike or motorscooter as a passenger or a driver?

Yes  No

**IF YES:**

In the past 12 months, did you ever ride without a helmet?

Yes  No

28. In the past 12 months, have you travelled in a motor vehicle as a passenger?

Yes  No

**IF YES:**

In the past 12 months, have you travelled in a motor vehicle knowing or strongly suspecting that:

a. the vehicle was overcrowded?

Yes  No

b. the driver did not have a license?

Yes  No

c. the driver was affected by alcohol or dagga?

Yes  No

46

51

54

29. In the *past 12 months*, have you driven a motor vehicle (excluding a motor bike) on a public road?

Yes  No

**IF YES:**

In the past 12 months, have you driven:		
a.	a vehicle that was overcrowded?	Yes <input type="checkbox"/> No <input type="checkbox"/> <input type="checkbox"/>
b.	without a license?	Yes <input type="checkbox"/> No <input type="checkbox"/> <input type="checkbox"/>
c.	while affected by alcohol or dagga?	Yes <input type="checkbox"/> No <input type="checkbox"/> <input type="checkbox"/>

30. During the past *12 months*, have you ever stolen anything from anybody?

Yes  No

31. During the past *12 months*, have you caused serious damage to property?

Yes  No

32. During the past *4 weeks* at school, did you ever carry a knife to be used as a weapon?

Yes  No

33. During the past *4 weeks*, did you go out at night beyond your neighborhood and walk home alone?

Yes  No

34. During the past *12 months*, have you bullied anybody at school?

Yes  No

35. During the past 12 months, have you ever been bullied at school?

Yes  No

36. During the past 12 months, have you been involved in any physical fights?

Yes  No

37. During the past 12 months, did you ever seriously think about harming yourself in a way that may result in your death?

Yes  No

38. During the past 12 months, did you ever tell someone that you intend putting an end to your life?

Yes  No

39. During the past 12 months, did you actually ever try to put an end to your life?

Yes  No

**IF YES:**

<p>Did any attempt result in injury, poisoning, or overdose that had to be treated by a doctor or nurse?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/> <input type="checkbox"/></p>
---

40. Have you ever had sexual intercourse? [This means intimate contact with someone of the opposite sex during which the penis enters the vagina (female private parts)]

Yes  No

**IF YES:**

a. How old were you when you first had sexual intercourse?

\_\_\_\_\_ years

b. With how many different partners have you had sexual intercourse in the last 12 months?

\_\_\_\_\_ partners

c. How long ago did you last have sexual intercourse?

\_\_\_\_\_ weeks

d. On the *last occasion* that you had sexual intercourse, had you known your partner for more than 7 days?

Yes  No

e. On the *last occasion* that you had sexual intercourse, did you or your partner use anything to prevent pregnancy (family planning) or prevent disease?

Yes  No

74

f. On the *last occasion* that you had sexual intercourse, if you did do anything to prevent pregnancy (family planning) or disease, what did you or your partner use? (Indicate more than one if necessary)

Condom ("rubber")

Injection

Contraceptive pill ("the pill")

Cap or diaphragm

Spermicidal gel or foam

IUCD, IUD, "Copper T", loop

Withdrawal, coitus interruptus

Line three

79

1

5

# APPENDIX 4

## PART 4





QUESTIONNAIRE ON RISK BEHAVIOR

PART 4

FOR OFFICE  
USE ONLY

Line one

1  4

Please will you fill in this questionnaire. It is not nearly as long as it looks.

We are trying to find out if the way you live could affect your health. Your responses are very important to us. We would like to make suggestions about what could be done to improve the health of young people.

This is not a test and there are no right and wrong answers.

You can make any comments you wish, to the researchers, when you have completed.

You are not asked to give your name on the questionnaire and nobody will know who filled in this questionnaire.

In questions where there are boxes, please tick the box next to the answer that you want to give.

Please do not write to the right of the line going down the right hand side of the page.

Once you have finished filling in the questionnaire, please put it in the envelope.

**THANK YOU VERY MUCH FOR YOUR COOPERATION !**

*This part of the questionnaire is concerned with how you feel about your leisure time.*

*Please respond to each of the following statements by ticking the box that shows how much you agree or disagree with the statement.*

FOR  
OFFICE  
USE  
ONLY

7

1. For me, leisure time just drags on and on.

*Strongly Disagree*

*Disagree*

*Neutral*

*Agree*

*Strongly Agree*

8

2. During my leisure time I become highly involved in what I do.

*Strongly Disagree*

*Disagree*

*Neutral*

*Agree*

*Strongly Agree*

3. Leisure time is boring.

*Strongly Disagree*

*Disagree*

*Neutral*

*Agree*

*Strongly Agree*

4. If I could leave school now and have enough money, I would have plenty of exciting things to do for the rest of my life.

*Strongly Disagree*

*Disagree*

*Neutral*

*Agree*

*Strongly Agree*

5. During my leisure time, I feel like I am just bored and hanging around.

*Strongly Disagree*

*Disagree*

*Neutral*

*Agree*

*Strongly Agree*

6. In my leisure time, I usually don't like what I am doing, but I don't know what else to do.

*Strongly Disagree*

*Disagree*

*Neutral*

*Agree*

*Strongly Agree*

7. Leisure time gets me aroused and going.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

14

8. Leisure experiences are an important part of my quality of life.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

9. For me, leisure time just drags on and on.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

16

10. I am excited about leisure time.

<i>Strongly Disagree</i>	<input type="checkbox"/>	
<i>Disagree</i>	<input type="checkbox"/>	
<i>Neutral</i>	<input type="checkbox"/>	
<i>Agree</i>	<input type="checkbox"/>	
<i>Strongly Agree</i>	<input type="checkbox"/>	<input type="checkbox"/>

11. In my leisure time, I want to do something, but I don't know what to do.

<i>Strongly Disagree</i>	<input type="checkbox"/>	
<i>Disagree</i>	<input type="checkbox"/>	
<i>Neutral</i>	<input type="checkbox"/>	
<i>Agree</i>	<input type="checkbox"/>	
<i>Strongly Agree</i>	<input type="checkbox"/>	<input type="checkbox"/>

12. I waste too much of my leisure time sleeping.

<i>Strongly Disagree</i>	<input type="checkbox"/>	
<i>Disagree</i>	<input type="checkbox"/>	
<i>Neutral</i>	<input type="checkbox"/>	
<i>Agree</i>	<input type="checkbox"/>	
<i>Strongly Agree</i>	<input type="checkbox"/>	<input type="checkbox"/>

13. I like to try new leisure activities that I have never tried before.

*Strongly Disagree*

*Disagree*

*Neutral*

*Agree*

*Strongly Agree*

14. I am very active during my leisure time.

*Strongly Disagree*

*Disagree*

*Neutral*

*Agree*

*Strongly Agree*

15. Leisure time activities do not excite me.

*Strongly Disagree*

*Disagree*

*Neutral*

*Agree*

*Strongly Agree*

16. During my leisure time, I feel like I am just bored and hanging around.

*Strongly Disagree*

*Disagree*

*Neutral*

*Agree*

*Strongly Agree*

17. I do not have many leisure activities available to me.

*Strongly Disagree*

*Disagree*

*Neutral*

*Agree*

*Strongly Agree*

18. During my leisure time, I almost always have something to do.

*Strongly Disagree*

*Disagree*

*Neutral*

*Agree*

*Strongly Agree*

*This part of the questionnaire is concerned with your behaviour and attitude towards your boyfriend or girlfriend.*

Line one

19. Have you ever hit, kicked, slapped or punched your boyfriend (if you are female) or girlfriend (if you are male)? Yes  No

*I do not have a boyfriend or girlfriend*

26

20. Is it acceptable for a girl to hit, kicked, slap or punch her boyfriend, if she is cross? Yes  No

21. It is acceptable for a boy to hit, kicked, slap or punch his girlfriend, if he is cross? Yes  No

22. How should a boy feel if he hits, kicks, slaps or punches his girlfriend who talks back to him in public? Proud

Shameful

29

23. How should a girl feel if she hits, kicks, slaps or punches her boyfriend who talks back to her in public? Proud

Shameful

24. Is it acceptable for a boy to hit, kick, slap or punch his girlfriend if she talks to another boy? Yes  No

Not sure

25. Is it acceptable for a girl to hit, kick, slap or punch her boyfriend if he talks to another girl? Yes  No

Not sure

26. Is it acceptable for your boyfriend (if you are female) or girlfriend (if you are male) to hit, kick, slap or punch you up if he/she is cross with you?

Yes  No

Not sure

I do not have a boyfriend or girlfriend

33

27. Do you think that most of your friends would approve of a boy hitting, kicking, slapping or punching his girlfriend if she talks to other boys?

No

Probably Not

Maybe

Probably Yes

Yes

34

28. Do you think that most of your friends would approve of a girl hitting, kicking, slapping or punching her boyfriend if he talks to other girls?

No

Probably Not

Maybe

Probably Yes

Yes

29. Do you think that most people in your community think that a boy is allowed to hit, kick, slap or punch his girlfriend if she makes him cross?

No

Probably Not

Maybe

Probably Yes

Yes

30. Do you think that most people in your community think that a girl is allowed to hit, kick, slap or punch her boyfriend if he makes her cross?

No

Probably Not

Maybe

Probably Yes

Yes

37

31. Would most of the people that are important to you think that a boy is allowed to hit, kick, slap or punch his girlfriend if she talks back to him in public?

Yes

No

Not sure

32. Would most of the people that are important to you think that a girl is allowed to hit, kick, slap or punch her boyfriend if he talks back to her in public?

Yes

No

Not sure

33. Would most of your friends approve of a boyfriend (if you are female) or girlfriend (if you are male) hitting, kicking, slapping, or punching you if he/she is cross with you?

Yes

No

Not sure

*I do not have a boyfriend or girlfriend*

34. Will others tease or laugh or poke fun at you for *not* beating up someone who started a fight with you?

Yes

No

41

35. Will your boyfriend (if you are female) or girlfriend (if you are male) become even more cross with you if you try to prevent her/him from hitting, kicking, slapping or punching you?

No

Probably Not

Maybe

Probably Yes

Yes

I do not have a boyfriend or girlfriend

42

36. Do you think you will be beaten up even more severely if you try to stop your boyfriend (if you are female) or girlfriend (if you are male) from hitting, kicking, slapping or punching you?

No

Probably Not

Maybe

Probably Yes

Yes

I do not have a boyfriend or girlfriend

37. For me, *not* being able to hit, kick, slap or punch someone up who started a fight with me will be....

Very difficult

Difficult

Easy

Very easy

44

38. For me to stop my boyfriend (if you are female) or girlfriend (if you are male) from hitting, kicking, slapping or punching me up would be ....

Very difficult

Difficult

Easy

Very easy

I do not have a boyfriend or girlfriend

39. Talking about hitting, kicking, slapping or punching my boyfriend (if you are female) or girlfriend (if you are male) with my friends is....

Very difficult

Difficult

Easy

Very easy

I do not have a boyfriend or girlfriend

40. Would others tease or laugh or poke fun at you for *not* hitting, kicking, slapping or punching your boyfriend (if you are female) or girlfriend (if you are male) if he/she makes you cross?

No

Probably Not

Maybe

Probably Yes

Yes

I do not have a boyfriend or girlfriend

41. Do you think you would hit, kick, slap or punch your boyfriend (if you are female) or girlfriend (if you are male) or if he/she makes you cross?

Yes  No

*I do not have a boyfriend or girlfriend*

48

42. Have you decided that you will never hit, kick, slap or punch your boyfriend (if you are female) or girlfriend (if you are male) *no matter what happens?*

Yes  No

*I do not have a boyfriend or girlfriend*

49

*This part of the questionnaire is concerned with the experiences you have in your school.*

43. My school is a safe place

*Strongly agree*

*Agree*

*Not sure*

*Disagree*

*Strongly disagree*

50

44. Pupils in my school fight a lot

*Strongly agree*

*Agree*

*Not sure*

*Disagree*

*Strongly disagree*

45. Many pupils in my school are put on suspension

<i>Strongly agree</i>	<input type="checkbox"/>	
<i>Agree</i>	<input type="checkbox"/>	
<i>Not sure</i>	<input type="checkbox"/>	
<i>Disagree</i>	<input type="checkbox"/>	
<i>Strongly disagree</i>	<input type="checkbox"/>	<input type="checkbox"/>

46. My parent(s) or guardian visit my school often

<i>Strongly agree</i>	<input type="checkbox"/>	
<i>Agree</i>	<input type="checkbox"/>	
<i>Not sure</i>	<input type="checkbox"/>	
<i>Disagree</i>	<input type="checkbox"/>	
<i>Strongly disagree</i>	<input type="checkbox"/>	<input type="checkbox"/>

47. At my school, the same pupils get chosen very time to take part in after-school or special activities

<i>Strongly agree</i>	<input type="checkbox"/>	
<i>Agree</i>	<input type="checkbox"/>	
<i>Not sure</i>	<input type="checkbox"/>	
<i>Disagree</i>	<input type="checkbox"/>	
<i>Strongly disagree</i>	<input type="checkbox"/>	<input type="checkbox"/>

48. Pupils in my school take part in school sport and social activities

<i>Strongly agree</i>	<input type="checkbox"/>	
<i>Agree</i>	<input type="checkbox"/>	
<i>Not sure</i>	<input type="checkbox"/>	
<i>Disagree</i>	<input type="checkbox"/>	
<i>Strongly disagree</i>	<input type="checkbox"/>	<input type="checkbox"/>

49. There are too many sport and social activities in my school

*Strongly agree*

*Agree*

*Not sure*

*Disagree*

*Strongly disagree*

50. At my school, all pupils are treated the same, even if their parents or guardians are rich or poor

*Strongly agree*

*Agree*

*Not sure*

*Disagree*

*Strongly disagree*

51. Students at my school trust the teacher

*Strongly agree*

*Agree*

*Not sure*

*Disagree*

*Strongly disagree*

52. Students at my school go to the teacher first when they are not feeling well

*Strongly agree*

*Agree*

*Not sure*

*Disagree*

*Strongly disagree*

53. It is easy for teachers at my school to control students

*Strongly agree*

*Agree*

*Not sure*

*Disagree*

*Strongly disagree*

54. My school is usually very noisy

*Strongly agree*

*Agree*

*Not sure*

*Disagree*

*Strongly disagree*

55. Students in my school respect the teachers

*Strongly agree*

*Agree*

*Not sure*

*Disagree*

*Strongly disagree*

56. Students at my school are usually neat and tidy

*Strongly agree*

*Agree*

*Not sure*

*Disagree*

*Strongly disagree*

57. Some students carry guns or knives in my school

Strongly agree

Agree

Not sure

Disagree

Strongly disagree

58. At my school, the students disobey the rules

Strongly agree

Agree

Not sure

Disagree

Strongly disagree

59. When we have fun games at my school, the same students are always put in charge

Strongly agree

Agree

Not sure

Disagree

Strongly disagree

60. My parent(s) or guardian often come to my school to help with special projects

Strongly agree

Agree

Not sure

Disagree

Strongly disagree

61. At my school, the teachers do not respect the students

Strongly agree

Agree

Not sure

Disagree

Strongly disagree

62. I feel that I can do well in my school

Strongly agree

Agree

Not sure

Disagree

Strongly disagree

63. Students in my school often get hurt in school

Strongly agree

Agree

Not sure

Disagree

Strongly disagree

64. Students in my school often listen to the teacher

Strongly agree

Agree

Not sure

Disagree

Strongly disagree

65. My teachers make me feel good about my self

Strongly agree

Agree

Not sure

Disagree

Strongly disagree

66. My classmates and peers at school make me feel good about myself

Strongly agree

Agree

Not sure

Disagree

Strongly disagree

67. My teachers work hard to get me to do well on my test

Strongly agree

Agree

Not sure

Disagree

Strongly disagree

68. Students at my school are caring and friendly people

Strongly agree

Agree

Not sure

Disagree

Strongly disagree

73. I do extra work at my school

Strongly agree

Agree

Not sure

Disagree

Strongly disagree

80

Line two

74. Students at my school like one another

Strongly agree

Agree

Not sure

Disagree

Strongly disagree

1

75. The principal at my school cares about students

Strongly agree

Agree

Not sure

Disagree

Strongly disagree

76. At my school, teachers are fair to everyone

Strongly agree

Agree

Not sure

Disagree

Strongly disagree

3

69. At my school, boys and girls are treated equally well

*Strongly agree*

*Agree*

*Not sure*

*Disagree*

*Strongly disagree*

76

70. My teachers believe I can do well in my school work

*Strongly agree*

*Agree*

*Not sure*

*Disagree*

*Strongly disagree*

71. At my school, pupils of all races are treated the same

*Strongly agree*

*Agree*

*Not sure*

*Disagree*

*Strongly disagree*

72. This school is a quiet enough for study

*Strongly agree*

*Agree*

*Not sure*

*Disagree*

*Strongly disagree*

77. My parent(s) or guardian feel welcome at my school

Strongly agree

Agree

Not sure

Disagree

Strongly disagree

78. The windows or doors at my school are often broken

Strongly agree

Agree

Not sure

Disagree

Strongly disagree

79. Students at my school often trust one another

Strongly agree

Agree

Not sure

Disagree

Strongly disagree

80. At my school, students help one another

Strongly agree

Agree

Not sure

Disagree

Strongly disagree

81. There is a lot of violence at my school

*Strongly agree*

*Agree*

*Not sure*

*Disagree*

*Strongly disagree*

82. People in my school usually write on the wall

*Strongly agree*

*Agree*

*Not sure*

*Disagree*

*Strongly disagree*

83. I enjoy learning at my school

*Strongly agree*

*Agree*

*Not sure*

*Disagree*

*Strongly disagree*

84. My school is usually clean and tidy

*Strongly agree*

*Agree*

*Not sure*

*Disagree*

*Strongly disagree*

85. Teachers at my school help students with emotional problems

Strongly agree

Agree

Not sure

Disagree

Strongly disagree

86. Sometimes the school roof leaks

Strongly agree

Agree

Not sure

Disagree

Strongly disagree

87. My parents or guardian help me with my school work

Strongly agree

Agree

Not sure

Disagree

Strongly disagree

88. I do all my school work

Strongly agree

Agree

Not sure

Disagree

Strongly disagree

89. My school has a beautiful appearance

*Strongly agree*

*Agree*

*Not sure*

*Disagree*

*Strongly disagree*

16

90. I like coming to school

*Strongly agree*

*Agree*

*Not sure*

*Disagree*

*Strongly disagree*

91. I can talk to my teachers about my problems

*Strongly agree*

*Agree*

*Not sure*

*Disagree*

*Strongly disagree*

92. When students get sick at school the teachers look after them

*Strongly agree*

*Agree*

*Not sure*

*Disagree*

*Strongly disagree*

93. When students get sick at school, teachers refer them to the clinic

- Strongly agree
- Agree
- Not sure
- Disagree
- Strongly disagree

94. At my school, it is easy for students get help when they are sick

- Strongly agree
- Agree
- Not sure
- Disagree
- Strongly disagree

95. Have you seen a school nurse at your school

- Yes
- No

96. The school nurse at my school is very helpful

- Strongly agree
- Agree
- Not sure
- Disagree
- Strongly disagree

97. The sick bay at my school is good
- Strongly agree
- Agree
- Not sure
- Disagree
- Strongly disagree
98. There is a guidance teacher at my school
- No
- Yes
99. The guidance teacher at my school is very helpful
- Strongly agree
- Agree
- Not sure
- Disagree
- Strongly disagree
100. If a teacher refers me to a health person (doctor, nurse, healer etc.), it is easy for me to get help
- Strongly agree
- Agree
- Not sure
- Disagree
- Strongly disagree

101. If you go to see a health person (doctor, nurse, healer etc.), do you worry that people will see you there

Strongly agree

Agree

Not sure

Disagree

Strongly disagree

28

102. I do not understand the language of health workers

Strongly agree

Agree

Not sure

Disagree

Strongly disagree

103. People are very friendly to me or my friends if we go to the clinic

Strongly agree

Agree

Not sure

Disagree

Strongly disagree

104. Pupils of all races get along well together at my school

Strongly agree

Agree

Not sure

Disagree

Strongly disagree

31