

**PERCEIVED PARENTAL PRACTICES RELATED TO ALCOHOL USE BY  
16 TO 18 YEAR OLD ADOLESCENTS IN THE PUBLIC HIGH SCHOOLS IN  
THE EMAWALENI DISTRICT, OF KWAZULU-NATAL**

**Submitted to:**

**NELSON R. MANDELA SCHOOL OF MEDICINE**

**UNIVERSITY OF KWAZULU-NATAL**

**DURBAN**

**SOUTH AFRICA**

**For:**

**Submitted in partial fulfilment of the academic requirements for the degree:  
Master of Public Health in the School of Family and Public Health Medicine**

**BY:**

**SHANAZ GHUMAN**

**953021782**

**SUPERVISOR:**

**PROFESSOR ANNA MEYER-WEITZ**

**CO-SUPERVISOR:**

**DR STEPHEN KNIGHT**

**31 March 2009**

## ABSTRACT

**Introduction:** A quantitative cross-sectional study was undertaken to assess whether parenting practices regarding alcohol use (as perceived by 16-18 year old adolescents) are determinants of alcohol use by the adolescents. Parental practices include supervision, emotional support and parenting alcohol socialization behaviours that could influence adolescents' alcohol use behaviour.

**Aim:** The aim of the study was to investigate the influence of perceived parental practices and alcohol use behaviour among 16-18 year old adolescents in public high schools in the Emawaleni District, KwaZulu-Natal.

**Methods:** A cross-sectional study design was used. Self-administered questionnaires provided data from 704 adolescents enrolled in public high schools. Data were processed using SPSS 15.0. (SPSS Inc., Chicago, Illinois). Scale reliability analyses were conducted and frequencies on all items calculated. Chi-square tests were used to assess associations between adolescent alcohol use and demographic variables. Logistical regression analyses explored the associations between the different demographic variables, adolescents' perceptions of parental practices and alcohol use behaviours.

**Results:** The results indicated that the most significant others that affect the adolescents' drinking behaviour are parents (51.3%) and peers (33.8%). It was revealed that peers (40.1%) and parents (12.9%) offered the first alcoholic drink to adolescents. Age of alcohol use initiation was found to be as early as 13 years. It was found that mothers who communicated the risks of drinking (84.2%), and it is also mothers (36.9%) who inform adolescents of safe drinking practices. Eighty-two percent of parents are aware of adolescents' whereabouts. Regarding peer connectedness, 86% of the adolescents who drank alcohol felt that they could depend on peers when drunk and 77% of adolescents reported that they discouraged their peers from getting drunk. The best predictors of adolescent alcohol use were: younger age, being male, race (White), religiosity, parental and peer alcohol use.

***Discussion:*** The evidence demonstrated a basic understanding of the processes by which parents influence adolescent alcohol use behaviours. Although the study showed a stronger parental protective factor than reported in other studies, the influence of the peers in the adolescents' development is also consistent with that of other studies.

***Recommendations:*** Adequate interventions for adolescents are urgently needed to improve parenting skills in order to prevent risky adolescent alcohol use behaviours.

## DECLARATION

I, SHANAZ GHUMAN..........declare that

- (i) the research reported in this dissertation, except where otherwise indicated, is my original research;
- (ii) this dissertation has not been submitted for any degree or examination at any other university;
- (iii) this dissertation does not contain other persons' data, pictures, graphs or other information, unless specifically acknowledged as being sourced from other persons;
- (iv) this dissertation does not contain other persons' writing, unless specifically acknowledged as being sourced from other researchers. Where written sources have been quoted, then:
  - a) their words have been re-written but the general information attributed to them has been referenced;
  - b) where their exact words have been used, their writing has been placed inside quotation marks, and referenced.
- (v) this dissertation does not contain text, graphics or tables copied and pasted from the Internet or other sources, unless specifically acknowledged. In such instances and the source has been being detailed in the dissertation and in the References sections.

Department of Public Health Medicine,  
Nelson R Mandela School of Medicine  
University of KwaZulu Natal,  
Durban,  
SOUTH AFRICA  
March 27, 2009

## **ACKNOWLEDGEMENTS**

I offer my sincere gratitude and appreciation to the following people for their invaluable support, guidance and input towards the completion of this dissertation:

Professor Anna Meyer-Weitz, my supervisor, at the School of Psychology, University of KwaZulu Natal; for her constant support, advice and encouragement throughout the study.

Dr Stephen Knight, my co-supervisor, at the Department of Public Health Medicine, University of KwaZulu Natal; who encouraged and motivated me and made each step of the way an achievement towards success. For this I shall be forever grateful.

Mrs Tonya Esterhuizen, my statistician, at the School of Health Sciences, University of KwaZulu-Natal, whose guidance, patience and consistent help and support in the analyses and interpretation of the data made understanding statistics enjoyable.

Dr Dirk Coertze, the Deputy Director of the Research Directorate at Mangosuthu University of Technology, for his invaluable advice, and input towards the writing of this dissertation.

Mrs Linda Coertze, the linguist whose contribution to this dissertation will always be remembered and appreciated.

Freeman Zulu and Patience Ntuli, the Natural Sciences Librarians at Mangosuthu University of Technology, for their constant support.

Officials of the Department of Education of KwaZulu-Natal and the principals of the participating high schools in the Emawaleni District for granting me permission to conduct this research.

The parents and learners at the participating schools for their permission to participate in the study. Thank you for your time, patience and enthusiasm.

Dr Muhammad Rafi Ghuman, my husband, for his encouragement and support and my sons, Hamza and Usama; and daughters, Ayesha and Fatima for their precious presence and time.

## **PUBLICATIONS OR PRESENTATIONS**

The research findings were presented in the form of a poster at a conference held by the Public Health Association of South Africa 2-4 June 2008 in Cape Town, South Africa (Appendix H).

## **ACRONYMS AND ABBREVIATIONS**

LQY	-	Loeber Youth Questionnaire
PSSA	-	Parents Social Support for Adolescents Scale
QF Scores	-	Quantity Frequency scores for drinking alcohol
SADHS	-	South African Demographic Health Survey
SAYRBS	-	South African Youth Risk Behaviour Survey
SPSS	-	Statistical Package for the Social Sciences
WHO	-	World Health Organisation



## **TABLE OF CONTENTS**

ABSTRACT	ii
DECLARATION	iv
ACKNOWLEDGEMENTS	v
PUBLICATIONS OR PRESENTATIONS	vii
ACRONYMS AND ABBREVIATIONS	viii
TABLE OF CONTENTS	ix
LIST OF TABLES	xiii
LIST OF FIGURES	xv
<b>CHAPTER I: INTRODUCTION</b>	<b>1</b>
1.1 Introduction	1
1.2 Background to the study	3
1.3 Rationale of the study	5
1.4 Statement of the problem	6
1.5 Aim	6
1.6 Objectives of the study	6
1.7 Definition of terms	7
1.8 Summary	8

<b>CHAPTER V: DISCUSSION</b>	<b>52</b>
5.1 Introduction	52
5.2 Socio-demographic profile of the adolescents	52
5.3 Adolescent alcohol use	55
5.4 Adolescent drug use	56
5.5 Parental influences on adolescent alcohol use	57
5.6 Peer influences on adolescent alcohol use	61
5.7 Study limitations	61
<b>CHAPTER VI: RECOMMENDATIONS AND CONCLUSION</b>	<b>63</b>
6.1 Introduction	63
6.2 Recommendations	63
6.3 Conclusion	65
<b>REFERENCES</b>	<b>67</b>
<b>APPENDICES</b>	<b>81</b>
APPENDIX A : Approval of research proposal, acceptance letter from the Postgraduate Education Committee, Nelson R Mandela School of Medicine, University of KwaZulu-Natal	81
APPENDIX B : Approval of Research Proposal, acceptance letter from the Biomedical Research Ethics Administration, Nelson R Mandela School of Medicine, University of KwaZulu-Natal	83
APPENDIX C : Permission letter from the Department of Education to conduct research, Superintendent General, Head: Department of Education, KwaZulu-Natal	88
APPENDIX D : Permission letters from the principals of the pilot school and the five participating schools in the Emawaleni Education District, KwaZulu-Natal	92
APPENDIX E : Information and consent letters for parents/guardians of the	

adolescent learners	99
APPENDIX F : Information and consent letter for the adolescent learners	102
APPENDIX G: Information letter and questionnaire for 16 to 18 year old adolescents	104
APPENDIX H: Excerpt from Abstract Proceedings of the 4 <sup>th</sup> Public Health Association of South Africa Conference, 2-4 June, 2008	115

## LIST OF TABLES

Table 1: Measures and scales used in the study	26
Table 2: Items used for family connectedness scale	27
Table 3: Items used for house rules regarding alcohol use	27
Table 4: Items used for peer influence on adolescent alcohol use	28
Table 5: Demographic characteristics of study participants from public high schools in the Emawaleni District	33
Table 6: Main caregiver of the adolescents	33
Table 7: Marital status of parents/guardians	35
Table 8: Religion of adolescents' family	36
Table 9: Religiosity of the adolescent	36
Table 10: Adolescents' accessibility to technological commodities	37
Table 11: Adolescents' age of first alcoholic drink	39
Table 12: Logistic regression scores of socio-demographic determinants of adolescent alcohol use	41
Table 13: Adolescent's perceptions of the most serious risks associated with drinking alcohol	42
Table 14: Adolescent's perceptions of safe drinking	42
Table 15: Parental/guardian knowledge of adolescents' alcohol use	44
Table 16: Adolescents' alcohol use at home	44
Table 17: Perceived frequency of alcohol use by parents as reported by adolescents	45
Table 18: Perceived parental/guardian consent to adolescent alcohol use	46
Table 19: Parental consent to adolescent alcohol use while with peers	47
Table 20: T-tests for family connectedness and family relations with regard to parental marital status	48
Table 21: Logistic regression analyses of socio-demographic determinants of adolescent alcohol use	49
Table 22: Logistic regression analyses for the influence of parental factors on adolescent alcohol use	50

Table 23: Final model of Logistical Regression analysis of the determinants of adolescent alcohol use

51

## **LIST OF FIGURES**

Figure 1: Educational status of the adolescents' caregiver	34
Figure 2: Employment status of the adolescents' caregivers	35
Figure 3: Perceived socio-economic status of the household	37
Figure 4: Most influential persons in the adolescents' life in relation to alcohol use	38
Figure 5: Person who offered the adolescent their first	39
Figure 6: Binge drinking by adolescents	40
Figure 7: Communication between parents and adolescents regarding risky and safe alcohol use	43
Figure 8: Number of times drugs were used by adolescents	45

# CHAPTER I: INTRODUCTION

## *1.1 Introduction*

The study investigated the importance of parental influence on adolescent alcohol use and the associations between various demographic variables, parental practices as perceived by adolescents and alcohol use amongst 16 to 18 year old high school learners. Behavioural studies on adolescent risk taking in South Africa have traditionally focused on the prevalence of substance use and the impact of alcohol use on adolescents' health. Such studies investigated alcohol intake and socio-demographic determinants of alcohol use among adolescents. This study obtained information on adolescents' perceptions on parental practices such as religiosity, monitoring, communication, social roles and modelling of responsible alcohol use behaviour. It investigated the influence of these aspects on adolescent learners and their own use of alcohol.

It is argued that the outcomes of the study will inform interventions targeted at strengthening the protective effects of parental influence on adolescents' behaviours in order to create a nurturing and safe environment for adolescent growth and development. This study should also pave the way for further studies in this field in an attempt to overcome the paucity of literature in South Africa on parental influences on adolescent risk behaviours, with particular reference to alcohol use. The findings will inform public health promotion interventions which, in turn, will have implications for the development of parenting skills.

Behaviours initiated during adolescence are linked to circumstances that are responsible for early adulthood morbidity and mortality due to substance abuse. The family environment is an important context affecting adolescent risk behaviours and it impacts on their choice of peer groups as well as on their attitudes towards the susceptibility to substance use (Cohen, Richardson, & LaBree, 1994; Wassermann, Miller, Pinner, Jaramillo, 1996).

In a South African study conducted by Swart, Reddy & Panday (2004), it was revealed that 25% of Grade 8-10 learners had used tobacco; a third had used alcohol and 13% had used drugs as early as the age of 13 years. These prevalence levels amongst adolescents

allude to determining protective and resiliency factors that will prevent or reduce the intake of substance use. The challenge will remain to decrease the current rates and to maintain low prevalence rates as these adolescents mature into young adulthood.

It is imperative that an appropriate theory clarifies this study. The Ecological Theory by Bronfenbrenner and Morris (1998) appropriately explain the influences on adolescent risk behaviours at multidimensional levels, namely the micro level (adolescent level), meso level (family/peer level) and macro level (socio-cultural environment and policy level). Research has shown that various factors influence the risk of adolescent health compromising behaviours, especially the role of the socially mediated environment which includes the parents that may serve as a protective shield against substance abuse (De Vries, Engels, Kremers, Wetzels, & Mudde, 2003a; De Vries, Mudde, & Kremers, Wetzels, Uiters, Ariza, Vitoria, Fielder, Holm, Janssen, Lehtovuori, & Candel, 2003b; and Wild, Flisher, Bhana, & Lombard, 2004).

Positive parental influences through effective monitoring, support, close child-parent relationships and trust have been found to protect against negative peer pressure for health risk behaviours (Sargent & Dalton, 2001; Marshal & Chassin, 2000). Studies have shown that confident parents, who legitimately have the right to impact on their child's substance use behaviours, are the ones who are more capable of exerting specific anti-substance use socialisation practices (Ennett, Bauman, Foshee, Pemberton, & Hicks, 2001). Such parents are also successful at facilitating positive adolescent behaviours (Engels & Willemsen, 2004; Sargent & Dalton, 2001).

Parental disapproval of risky behaviours and substance use, and successful parent-child communication, is related to lower levels of adolescent risk behaviours (Resnick, Bearman, Blum, Bauman, Harris, Jones, Tabor, Beuhring, Sieving, Shew, Ireland, Bearinger & Udry, 1997 and Romer, Stanton, Galbraith, Feigelman, Black, & Li, 1999). Parents adjust the manner in which they communicate about risky behaviour according to the gender of the adolescent (Rosenthal, Senserrick, & Feldman, S. 2001, and Dutra, Miller & Forehand, 1999)..Studies report that mothers rather than fathers play a pivotal role in communicating with their children and girls seem to receive more information than boys regarding risk behaviours (Cohen *et al.*, 1994). These authors concluded that parental behaviours such as negative socialisation skills and practices (like being drunk in



the presence of their children) are significant precursors of disruptive behaviour, vulnerability and succumbing to peer pressure and substance use by their adolescent children.

In the absence of good parent-child relationships, the engagement in risk behaviour by adolescents seems to be mediated by the deviant peer group (Clark, Thatcher & Maisto, 2004). The influence of peers is strongest when adolescents lack supportive parental relationships and personal life skill resources such as a positive self-esteem and adequate levels of self-efficacy to resist negative peer pressure. A strong relationship between the quality of parenting and the development of high levels of self-esteem, behavioural control and the resistance to peer pressure in adolescence has been found (Clark *et al.*, 2004; Jackson, Henriksen, Dickinson, & Levine, 1997).

## ***1.2 Background to the study***

The high and increasing prevalence of alcohol use amongst the South African youth suggests that current prevention methods should be re-examined. The South African Youth Risk Behaviour Survey (Reddy, Panday, Swart, Jinabhai, Amosum, James, Monyeki, Stevens, Morojele, Kambaran, Omardien, & Van den Borne, 2003) reports high levels of alcohol use (49% ever used) among adolescents, and initiation of alcohol use is reported to be below the age of 13 years nationally. A study by Jung (1995) found that adolescents whose parents drank and used drugs were more likely themselves to do so than those adolescents whose parents do not. Perceived parental approval of alcohol use has been shown to be related to adverse consequences of alcohol use among adolescents (Stice, Barrera, Chassin, 1998). It was found that an adolescents' interaction with peers considerably influences substance use, (Wu, Lu, Sterling, & Weisner, 2004). On the other hand, adolescents who had strong relationships in terms of supportive parenting and the development of high levels of self-esteem and self-efficacy showed low engagement in risk behaviours, (Clark *et al.*, 2004).

A review of the abovementioned studies has shown that it is crucial for multiple strategies to guide adolescents against health risk behaviours. Alcohol is reported to be the drug most commonly used by all age groups amongst South African youth (Parry, 2000a, b, c). A need for parenting guidance programmes therefore remains an urgent priority.

Parenting styles provide a robust indicator of parental functioning in the adolescents' lives. They help predict a child's wellbeing across a wide spectrum of environments and across diverse communities (Weiss & Schwartz, 1996; Darling & Steinberg, 1993; Baumrind, 1991). Substantial evidence exists for strong parent-child relationships especially in the way parents interact with their children, resulting in various positive outcomes in their children's psychosocial and physical health.

Diana Baumrind (1966, 1971), first identified four distinct parenting styles. These styles are classified into authoritative, authoritarian, permissive and rejecting-neglecting parenting styles. In addition, two dimensions to parenting, namely responsiveness and demandingness, are critical to parent-child relationships (Tys & Pederson, 1998). The responsiveness dimension is associated with warmth, acceptance and involvement with the child, whereas the demandingness dimension is associated with strict control and relates to parental rule setting, active monitoring and supervision. According to Baumrind (1991), each of the parenting styles and the dimensions reflects different naturally occurring patterns of parental values, practices and behaviours, and requires of parents to balance responsiveness and demandingness.

Permissive or indulgent parents are more responsive than demanding; they are non-traditional and lenient; they do not require adolescents to display mature behaviour; they allow considerable self-regulation and they try to avoid confrontation. Authoritarian parents are highly demanding and directive but not responsive. These parents provide well-ordered and structured environments with clearly stated rules. Authoritative parents on the other hand are both demanding and responsive. They monitor and impart clear standards for their children's conduct, and are assertive but not intrusive nor restrictive. Their disciplinary methods are more supportive rather than penalizing. They want their children to be assertive, socially responsible and self-regulated as well as cooperative. Rejecting/neglecting parents are low in responsiveness and demandingness, although most parents within this type fall within the normal range. Authoritative parenting is one of the most consistent family predictors of competence from early childhood through to adolescence (Darling, 1999). An authoritative upbringing is usually associated with both instrumental and social competence and lower levels of problem behaviour in both boys and girls at all developmental stages (Weiss & Schwartz, 1996). Studies have shown that this style has a positive effect on reducing adolescents' use of substances like drugs,

tobacco and alcohol (Fearnow, Chassin, Presson, Sherman, 1998; O'Byrne, Haddock, & Poston, 2002). However, authoritarian parenting among African American, Hispanic and Asian parents was also associated with positive consequences, (Borawski, Ievers-Landis, Lovegreen & Trapl, 2003; Clark, Scarisbrick-Hauser, Gautam, & Wirk, 1999; and Cohen & Rice, 1997).

In a South African study, it was found that adolescents rejected a strict disciplinary approach adopted by their parents towards substance use (Swart, Panday, Reddy, Bergstrom, & De Vries, 2006). Other studies have intimately associated cultural differences with parenting styles and practices (Borawski *et al.*, 2003; Clark *et al.*, 1999; Frias-Armenta & McCloskey, 1998), but the extent to which these cultural factors influence parenting styles and practices is not well documented (Cohen & Rice, 1997). For example, alcohol consumption in an Islamic cultural environment would be considered taboo. This would impart non-use in the home and social environments and children will grow up with the knowledge that alcohol is unacceptable within their religious and cultural society therefore reducing the prevalence of alcohol use by Muslim adolescents.

Peer influence on substance use behaviour has received considerable attention internationally. The influence of peer pressure and modelling on adolescent substance use has been associated with higher probability of substance abuse and increased use. While family environmental factors influence early stages of substance use and the choice of peers, socialisation by peers significantly influences both initiation and continued substance use (Wu *et al.*, 2004). Thus, peer modelling and association with alcohol-using friends may relate to the level of severity of alcohol use.

### ***1.3 Rationale of the study***

A review of the international literature has indicated that parental influence has received a great deal of attention regarding adolescent risk behaviours, including substance abuse; particularly alcohol. There is consistent evidence that amongst middle- and high school aged adolescents; parental practices of monitoring and communication are protective measures against alcohol and drug use (Kafka, & London, 1991; Beck, Boyle, & Boekeloo, 2003; Cottrell, Li, Harris, D'Alessandro, Atkins, Richardson & Stanton, 2003;

Borawski *et al.*, 2003). Adolescents' perceptions of parental approval of alcohol use have also been found to predict alcohol and drug related consequences among adolescents (Stice *et al.*, 1998).

A combination of alcohol and drug use places adolescents at risk (Bearman, Jones, & Udry, 1997) of unplanned pregnancy, teen childrearing and the contraction of a sexually transmitted infection (STI), including HIV/AIDS. National researchers have emphasised that South African youth have increasing levels of health risk behaviours which need to be urgently addressed (Reddy *et al.*, 2003; Parry, Myers, Morojele, Flisher, Bhana, Donson, & Pluddermann, 2004).

#### ***1.4 Statement of the problem***

While adolescents have been subjected to various risk prevention interventions the need to offer parental guidance programmes remains an urgent priority. There has been very little research on parenting practices which may help identify parenting styles among South African parents. This study therefore aimed to improve our understanding of adolescents' perceptions of parental practices relating to their (adolescents') alcohol use.

#### ***1.5 Aim***

The aim of the study was to investigate a relationship between parenting practices regarding alcohol use (as perceived by 16-18 year old adolescents) and adolescent alcohol use behaviour in public high schools in the Emawaleni District, KwaZulu-Natal.

#### ***1.6 Objectives of the study***

- a) To measure the associations between perceived parenting practices and the adolescents self reported alcohol use.
- b) To determine the extent of self-reported alcohol use by adolescents.
- c) To describe how 16 to 18 year adolescents perceive the parenting practices that they are exposed to.
- d) To examine any differences amongst ethnic and gender groups with regards to adolescents' perceptions of parenting practices.
- e) To explore peer influence on adolescent alcohol use.

## ***1.7 Definition of terms***

### **1.7.1 Adolescent**

The age at which adolescence commences varies from 11 to 13 and the age at which adolescence ends varies from 17 to 21 (Louw, Van Ede & Louw, 1998). This study included adolescents between the ages of 16 to 18 years.

### **1.7.2 Binge-drinking**

The consumption of 5 or more drinks at any one occasion.

### **1.7.3 Environment**

An external condition or surrounding in which a plant, animal or human being lives which influences its development and behaviour

### **1.7.4 Peer group**

A social group composed of individuals of approximately the same age

### **1.7.5 Parents**

Persons acting as the father or the mother of a child

### **1.7.6 Guardian**

Persons responsible for the wellbeing of the adolescent in the absence of a father and/or a mother

### **1.7.7 Substance abuse**

When the individual develops immunity to the negative consequences of the habit-forming substance use and can no longer control the use thereof to the extent of causing harm and damage to health

### **1.7.8 Risky behaviour**

Partaking/participating in unsafe practices or behaviours with or without consideration of the consequences which may be harmful to the individual

### **1.7.9 Parenting practices**

Parenting practice is a system of dynamically inter-related dimensions, including aspects

of parent behaviours with their children like monitoring, communication and discipline, with the quality of the parent-child relationship serving as the foundation of parent-child relationships.

#### 1.7.10 Parental monitoring

Parental monitoring is the socializing function of the parents that intended to shape the child's goal oriented activities. These modify the expression of dependent, aggressive, playful behaviour and promote internalisation of parental standards (Baumrind, 1966). Parental monitoring includes awareness of the child's activities, and communication to the child that the parent is concerned about and aware of the child's activities (Dishion & McMahon, 1998).

#### 1.7.11 Parent-child communication

Parent-child communication is the extent to which a parent uses reason to obtain compliance by soliciting the child's opinions and feelings. The parent uses open rather than manipulative techniques of control (Baumrind, 1966).

#### 1.7.12 Parenting styles

Parenting styles are a global climate in which all families function and in which child rearing takes place (Darling & Steinberg, 1993). Four distinct styles of parenting namely authoritative, authoritarian, permissive and rejecting-neglecting parenting are identified. (Baumrind, 1966; 1971).

### **1.8 Summary**

An idiom used by the Nguni tribe, namely "Umthente Uhlaba Usamila", is most appropriate to this study. It means that to engage in risk behaviour while still in the youthful stages of life has considerable negative consequences on health, social roles, personal development and preparation for adulthood. The youth of South Africa need to be protected from an early age and there are no better persons to fulfil this role than their parents and role models.

## **CHAPTER II: LITERATURE REVIEW**

### **Adolescents' perceptions of parenting practices in a global and South African context**

#### ***2.1 Introduction***

Globally, alcohol consumption has increased in recent decades, particularly in developing countries (World Health Organization, 2002). This increase is often happening in countries with little tradition of population behaviour alcohol use and with few strategies to prevent, control or treat alcohol abuse. The rise in alcohol consumption in developing countries provides ample cause for concern over the possible advent of a matching rise in alcohol-related problems in those regions of the world most at risk to substance abuse (WHO, 2002).

The World Health Organization (WHO) estimates that 2 billion people worldwide consume alcoholic beverages and that 76.3 million have diagnosable alcohol use disorders. In terms of a public health perspective, the global burden of alcohol consumption demonstrates that morbidity and mortality are high in most parts of the world. The consumption of alcohol has health and social consequences due to intoxication (drunkenness), alcohol dependence, and other biochemical effects of alcohol. In addition, chronic diseases may affect drinkers after many years of heavy use. Moreover, alcohol contributes to traumatic outcomes that kill or disable individuals at a relatively young age, resulting in the loss of many years of life due to death or disability. There is increasing evidence that besides the volume of alcohol consumption, the pattern of the drinking habit is relevant for health outcomes. Overall, a causal relationship exists between alcohol consumption and more than 60 types of diseases and injuries. Included amongst the consequences of alcohol use are 20–30% of oesophagi and liver cancers, cirrhosis of the liver, homicides, epileptic seizures, and motor vehicle accidents worldwide (WHO, 2002). Alcohol causes 1.8 million deaths (3.2% of total) and a loss of 58.3 million (4% of total) of Disability-Adjusted Life Years (DALY; WHO, 2002).

Alcohol use is ranked fifth amongst the leading causes of death worldwide, and consumption has increased over time; with the greatest increase occurring in developing countries (WHO, 2002). Alcohol consumption is the leading risk factor for the disease

burden in low mortality developing countries and the third largest risk factor in developed countries. In Europe alone, it has been reported that alcohol consumption was responsible for over 55 000 deaths among young people aged 15–29 years in 1999, (Rehm, Gmel, Room, Monteiro, Gutyjahr, Graham, Rehn, Sempos & Jernigan, 2001).

Adolescents and children below the age of 18 years make up half of South Africa's population (Statistics SA, 2001). Almost 12 million children are enrolled in schools and they account for 28% of the total population (Statistics in Brief, SA, 2001). South Africa is experiencing a high rate of pathologies which are threatening the lives of individuals, especially the youth. In the Emawaleni District many adolescents were lost in a short time frame as a consequence of alcohol and drug use (Sun Newspapers: 2006). Many South African youth are not fully prepared for life and how to cope, and as a result, many of them end up being vulnerable victims of life itself, which leads to impaired social functioning, (Motepe, 2006).

A study on the prevalence of and factors influencing substance use among learners in grade 10 from 28 rural high school students in grade 10 in southern KwaZulu-Natal found that 53% of males and 25% of females reported ever using alcohol. In a study that was conducted in 28 high schools in Durban it was revealed that 45.4% of male and 25.5% of female students in grade 11 reported past year alcohol use (Taylor, Jinabhai, Naidoo, Kleinschmidt & Dlamini, 2003). Surveys from a study at three sentinel sites in South Africa reported high levels of alcohol misuse among high school learners with alcohol being the most common substance of abuse (Parry *et al.*, 2004). Comparisons of other sites show that treatment demand for alcohol-related problems remains consistently high in Durban (Parry *et al.*, 2004). Alcohol forms the second most frequently reported primary substance of abuse among adolescent patients in Durban (Parry *et al.*, 2004). The study also revealed that of 35 state schools in the year 2000, 40% of learners reported drinking to intoxication occasionally during the course of a typical month. The prevalence of binge drinking increases with age for both genders which is in keeping with international findings on alcohol use among adolescents (P.B. Johnson & H.L. Johnson, 2000).

Against this background, the misuse of alcohol is of great concern considering the high HIV infection rate among young people in South Africa. Alcohol use decreases the





likelihood of safer sex practices in particular where binge-drinking takes place (Parry & Karim, 1999). The rate of lifetime prevalence of alcohol use was 63.4% among males and 32.9% among females (Parry *et al.*, 2004). A survey by the Department of Health (South African Demographic and Health Survey - SADHS) conducted in 1998 included adolescents aged 15 years and older. This survey ascertained that 44.7% of males and 16.9% of females consumed alcohol at the time of the survey. For both sexes, the rate is 28%, which translates to 8.3 million South Africans 15 years or older (Parry, 2000c).

## **2.2 Adolescent alcohol use**

In 1998 the South African Demographic and Health Survey found that alcohol was the drug most commonly used by South Africans of all ages. Twenty eight percent (28%), which was 1 in 4 South Africans aged 15 years and older consumed alcohol at the time of the survey. Eleven percent (11%) of current adolescent alcohol drinkers were found to be in the age category of 15-19 years. In terms of race, “White” adolescents were found to rate higher for the ‘ever drank alcohol’ category.

Adolescence is a time of risk taking with increased chances of negative consequences or loss, (Bezuidenhout & Dietrich, 2007). Adolescent exploration can be dangerous and unacceptable. A study by Taylor *et al.*, (2003) reports the use of alcohol, cigarettes and drugs as one or more contributors to self-destructive behaviours that include unsafe sex, teenage pregnancy and childbearing, under-achievement, failure and dropping out of school, delinquent or criminal behaviours, suicide, practising Satanism, violence, unsafe driving, fighting using foul language and running away from home.

## **2.3 Parental styles**

Parenting styles provide a robust indicator of parenting functioning that predict child wellbeing across a wide spectrum of environments and across diverse communities of children (Weiss & Schwartz, 1996; Darling & Steinberg, 1993; Baumrind, 1991). Parenting styles have been defined as the global climate in which a family functions and childrearing takes place (Darling & Steinberg, 1993). It is determined by multiple factors (Engels, Vermulst, Dubas, Bot, & Gerris, 2005). Substantial evidence exists concerning the strong relationship between the way parents interact with their children and their children's psychosocial and physical health.

Baumrind (1966, 1971), identified four distinct parenting styles. These styles are authoritative, authoritarian, permissive and rejecting-neglecting parenting styles along dimensions of responsiveness and demandingness. Aspects associated with the responsiveness dimension are warmth, acceptance and involvement. Aspects associated with demandingness are strict control related to parental rule setting, active monitoring and supervision. According to Baumrind (1991), each of these parenting styles reflects different naturally occurring patterns of parental values, practices and behaviours and a distinct balance of responsiveness and demandingness.

Cohen and Rice's, (1997) study on adolescent and parent perceptions on parenting styles showed that parents were less authoritative, less permissive and more authoritarian than they had considered themselves. Adolescent alcohol use was associated with adolescent perception of lower authoritative and higher permissiveness while parent perception of parenting styles was not associated with child substance abuse. A further study by Cottrell, *et al.*, (2003) reinforced these findings. They found that, while parents and adolescents perceived parental roles differently, adolescents' perceptions of their parents were more predictive of their own involvement in risk behaviours. The authors felt that their study would benefit parents of adolescents by guiding them to understand how they were perceived by their children.

Authoritarian parents attempt to mould the child according to a set of standards of conduct within a well-ordered and structured environment with clearly stated rules (Darling & Steinberg, 1993). Values of obedience as a virtue with forceful measures to control self-will are typical characteristics. The child's actions are punishable if contrary or if his beliefs conflict with what the parent considers as appropriate conduct. Authoritative parents direct the child's activities in a rational issue-oriented manner whereby control is both demanding and responsive. Parents monitor and impart clear standards for their children's conduct. They are assertive but neither intrusive nor restrictive. Their disciplinary methods are supportive rather than punitive. This helps the child to develop assertive characteristics as well as to be socially responsible and self-regulated and cooperative. An authoritative parent affirms the child's present qualities and sets standards for future conduct. Decisions are not based on group consensus or the individual child's desires. Permissive parenting is more responsive than demanding. It is non-traditional and lenient, allowing considerable self-regulation by avoiding

confrontation and consulting with the child about decisions and giving explanations for family rules. The parent may use reason and manipulation, and not overt power to accomplish needs and outcomes (Baumrind, 1966).

Neglecting parents are low in responsiveness and demandingness. Authoritative parenting constitutes to be one of the most consistent family predictors of competence from early childhood to adolescence (Darling, 1999). Authoritative upbringing is associated with both instrumental and social competence and lower levels of problem behaviour in both boys and girls at all developmental stages (Weiss & Schwartz, 1996). Studies have indicated that this style has a positive effect on reducing adolescents' use of tobacco and alcohol (Fearnow *et al.*, 1998; O'Byrne *et al.*, 2002). As mentioned before, authoritarian parenting styles among African American, Hispanic and Asian parents were also associated with positive consequences (Borawski *et al.*, 2003; Clark *et al.*, 1999; Cohen & Rice, 1997). In a South African study, adolescents rejected the disciplinary approach adopted by their parents towards risk behaviour (Swart *et al.*, 2006).

## ***2.4 Parental practices***

Effective parenting practices are perceived by the adolescent as significant in their risk behaviours. A study conducted by Sargent & Dalton, (2001) has found that parents can prevent their adolescents from adopting risk behaviours. Various researchers have shown that parenting styles and practices play an important role in reducing substance use and that parental influence is at least as important as peer influences in early adolescence (De Vries *et al.*, 2003b; Engels, Knibbe, De Vries, & Drop, 1999; Henriksen & Jackson, 1998; Wang, Fitzhugh, Green, Turner, Eddy, & Westerfield, 1999).

The following section will focus on those parenting practices that were identified in the literature review showing that these practices influence adolescent risk behaviours. These parental issues include adolescent support and monitoring, discipline, social behaviours and communication.

### **2.4.1 Parental support and monitoring**

According to Sartor (1999) parental support is the most significant predictor of identity achievement. Adolescent perceptions of lack of emotional support and poor parent-adolescent relationship quality have been associated with earlier alcohol initiation

(Johnson & Pandina, 1991) and higher levels of alcohol involvement (Anderson & Henry, 1994; Barnes, Reifman, Farrell, Uhteg, & Dintcheff, 1994, and Henry, Robinson & Wilson, 2003). Research on parental monitoring (Diclemente, Wingood, Crosby, Sionean, Cobb, Harrington, Davies, Hook, & Kim Oh, 2001), has shown that adolescents perceiving less parental monitoring are more likely to have a history of alcohol use and greater alcohol consumption in the past 30 days prior to the study (OR: 1.4 and OR: 1.9 respectively). The findings clearly demonstrate a consistent pattern of health risk behaviours outcomes associated with less perceived parental monitoring.

A study by Diclemente *et al.*, (2001) reported parental monitoring and support to be positively associated with identity achievement in adolescents. This finding is consistent with the conceptualisation of adolescent identity formation as an endeavour that leads to a restructuring of parent-adolescent relationships (Grotevant & Cooper, 1985). Jackson *et al.*, (1997) and Clark *et al.*, (2004) have shown a strong relationship between the quality of parenting and the development of relatively high levels of self-esteem and adequate levels of self-efficacy in adolescents. Borawski *et al.*, (2003) have discovered that, although monitoring is an important practice for parents of adolescents, managing their behaviour through negotiation of unsupervised time may have mixed results, leading to increased experimentation with sexuality and substances among adolescents. A combination of low parental control and low levels of affection was related to problem drinking in females (Engels *et al.*, 2005). It was concluded that trust between an adolescent female and her parents continues to be a strong deterrent for risky behaviours but less so for adolescent males.

Negative parental responses towards their children may create negative feelings and catapult the adolescent into anti-social behaviour, (K. Geldard & D. Geldard, 1999). Even when there are tensions in family life, the family remains one of the most important influences in an adolescent's life; a very important challenge for adolescents is to maintain a positive relationship with their parents (K. Geldard & D. Geldard, 1999).

Limited parental supervision and emotional support have been shown to be associated with greater alcohol involvement among adolescents (Clark & Winters, 2002). Several studies such as those conducted by Barnes *et al.*, (1994); Choquet and Plant (2002); Diclemente *et al.*, (2001); LeDoux, Miller, Peterson, Hawkins, Abbott and Catalano

(1995); and Steinberg, Fletcher and Darling (1994), have indicated that in community samples, lower levels of parental supervision are linked to higher levels of adolescent alcohol consumption.

#### 2.4.2 Parental discipline

One of the most important and most salient tasks for parents is discipline; the manner in which parents discipline their children predicts crucial aspects of positive and negative interpersonal behaviours, including the extent to which they comply with parental directives, internalize parental values, behave altruistically or act disrespectfully or aggressively (Grusec & Goodnow, 1994; Hofman, 1997; Minton, Kagan & Levine, 1971; Power & Chapieski, 1986; Strassberg, Dodge, Pettit & Bates, 1994; Zahn-Waxler, Radke-Yarrow & King, 1979).

#### 2.4.3 Parental behaviour

Parental behaviour has been demonstrated to influence child behaviour. Studies have shown that adolescents model the risk behaviour of their parents i.e. adolescents whose parents use substances like alcohol or drugs are more likely to drink and use drugs than those adolescents whose parents do not (Reeves, 1984, Jung, 1995). Findings by Engels *et al.*, (2005) provide solid evidence that a combination of high levels of parental aggression and low levels of family functioning are related to problem drinking in males. In terms of parental socialisation behaviours, Clarke *et al.*, (1999) reported that parents who smoke did not show anti-tobacco socialization practices in that they had difficulty in talking to their children about the dangers of tobacco. However, in another study, mothers who smoke were more likely to provide anti-smoking information to their adolescents than fathers (Engels & Willemsen, 2004).

#### 2.4.4 Parent - adolescent communication

A parent-child relationship is an ongoing interaction between two changing systems. Communication forms a critical element of the parent-adolescent relationship that facilitates supervision and emotional support (Stanton, Li, Gailbraith, Cornick, Feigelman, Kaljee & Zhou, 2000). Dimensions hypothesised to be relevant for defining parental involvement during adolescence include control and nurturance implemented through supervision and monitoring, emotional support and communication (Jacob & Johnson, 1997). Fathers were portrayed as poorer communicators than mothers while

mothers were perceived as effective communicators by adolescents in a study by Rosenthal *et al.*, (2001). The latter study showed that parents adjust their communication strategies according to the age and sex of their child. Openness of communication between parents and their children was found to be inversely related to substance abuse (Kafka & London, 1991).

## ***2.5 Socio-demographic factors influencing parental practices and styles***

Worldwide research on adolescent risk behaviours and parental influence are well reported and documented. However, a paucity of literature in South Africa regarding socio-demographic factors influencing parental practices and styles and their impact on adolescent risk behaviours with regard to substance use exists. There is an urgent need to identify the extent to which these factors are influential amongst South African youth.

The effects of **parent age** have been reported to be influential in various studies; specifically that the young age of mothers is linked to negative parenting styles (Fox, Platz, & Bentley, 1995; Huver, Engels & De Vries, 2004). These younger mothers have been found to be more disciplining and less nurturing than older mothers. Older parents were found to be more authoritarian than younger parents (Kendler, Sham, & MacLean, 1997).

In terms of **parental gender**, differences were found in studies reporting on conflict in parent-adolescent relationships. Mothers reported more intense conflicts (Wierson, Armistead, Forehand, McCoombs & Fauber, 1990) than fathers, while in another study, women were found to be more authoritative and punitive than their male counterparts with regards to adolescent conflict situations (Leinonen, Solantus & Punamaski, 2003). Mothers who have more than one child living at home have been found to be more disciplining (Fox *et al.*, 1995).

The **educational level of parents** may also play a role in parent-adolescent relationships. Studies have revealed that low levels of education in combination with a young age seem to be associated with higher levels of discipline and less nurturing of children (Fox *et al.*, 1995; Frias-Armenta & McCloskey, 1998). Higher levels of parental education are associated with lower levels of authoritarianism (Kendler *et al.*, 1997).

With regard to **marital status**, cognitive and social competence have been found to correlate with a parent's psychological adjustment, parenting style and the quality of the marriage (Cowan, 1991; Hetherington, Clingempeel, Anderson, Deal, Stanley-Hagan, Hollier & Linder, 1992). The quality of marriage has been positively related to parental warmth (Kendler *et al.* 1997). Harris (2004) showed that the association between parental divorce and adolescent alcohol use was further mediated by parent unavailability, quality of family relationships, peer acceptance, adolescent self-esteem and deviant peer involvement. Forehand, Thomas, Wierson, Brody & Fauber, (1990) have indicated that adolescent functioning following parental divorce is associated with poorer adolescent functioning. A study by Fox *et al.*, (1995) showed that married mothers were more nurturing and less disciplining than single mothers.

Studies conducted by Conger, Rueter & Elder, (1999); Simons, Bearman, Conger & Chao (1993a, b) demonstrated that single parents encounter more stress, including economic pressure, than do married or cohabiting parents and that this impacts on stronger negative parenting behaviour. Divorced mothers were more likely to experience conflict with their adolescent children and display poorer parenting skills and fewer problem-solving skills and were less likely to engage in positive communication (Forehand *et al.*, 1990). Single parents are often forced to work longer hours than married parents and may reside away from the home. This affects the quality of parenting in comparison with two-parent cohabiting families (Carlson & Corcoran, 2001; Kung & Farrell, 2000; Weinraub & Wolf, 1983). Adolescents in two-parent families tend to report lower levels of alcohol use than adolescents in single-parent families (Dornbusch, Carlsmith, Bushwell, Ritter, Leiderman, Hastorf & Gross, 1985; S.C. Duncan, T.E. Duncan, Stryker, & Chaumeton, 2002; Pierret, 2001). Despite the advantages offered by two-parent households, some such families may exhibit inadequate supervision and support for adolescents.

**Religiosity** shows a positive association with effective parenting (Snider, Clements, & Vazsonyi, 2004). Positive relations have been found between religious fundamentalism and parental warmth, protectiveness and authoritarianism (Kendler *et al.*, 1997). However, a positive relationship has been found between religion and a heavy reliance on corporal punishment as a means of discipline (Gershoff, Miller, & Holden, 1999).

Parental styles and practices are influenced by **socio-economic status**. Socio-economic status has been identified as influencing parenting practices. Koenig, Jalongo, Wagner, Poduska & Kellam, (2002) found that poverty was associated with negative parenting styles, whilst Fox *et al.*, (1995) found that parents with a higher socio-economic status had lower developmental expectations and were less disciplining. Chuang, Ennett, Bauman, & Foshee (2005) reported that high socio-economic neighbourhoods were associated with increased parent drinking and adolescent alcohol use: that low socio-economic neighbourhoods were associated with increased parental monitoring and less alcohol use and that increased peer drinking was associated with increased adolescent alcohol use.

Research in South Africa has revealed that the majority of the population does not live in responsive environments, and that poverty is deep and widespread (Bezuidenhout, 2004; Bernstein & Gray, 1997). It has been argued by S.C. Duncan, T.E. Duncan, Biglan & Ary, (1998) that since the first democratic elections in 1994, the quality of life for the large majority of black South Africans has not improved significantly. While the economy has shown signs of growth and the inflation rate has improved, South Africa nevertheless retains the highest gap between the rich and poor in the society. Zastrow (2000) stated that in the year 2000, approximately 20% of children under the age of 18 were living in poverty and nearly 40% were children under 16 years of age. Van Niekerk and Prins (2001) noted that these children were not exposed to situations that would promote the development of coping skills required to meet the demands of an increasingly complex society. According to Walker & Walker (2000), children and young people are amongst the largest segments of the poor population. Their poverty status is a consequence of the low income or lack of income of their parents (Bezuidenhout, 2004). It is expected that poverty will impact negatively on South African adolescents through parenting styles and practices. Studies on parents under economic pressure have found that these parents resort to punitive parenting behaviour (Conger *et al.*, 1999; Lempers, Clark-Lempers, & Simons, 1989; Skinner, Elder & Conger, 1992; Whitbeck, Simons, Conger, Wickrama, Ackley, & Elder 1997).

Various studies have shown that **ethnicity** influence attitudes towards child-rearing (Reis, Stein & Bennett, 1986). Authoritative parenting predicts good psychosocial outcomes and fewer problem behaviours for adolescents in all ethnic groups (Steinberg, Lamborn,



Dornbusch, & Darling, 1992, and Steinberg, Fletcher, & Darling 1994). Chao, (1994), and Darling and Steinberg, (1993) observed that ethnic differences of parenting styles may be due to cultural differences in the social context, parenting practices or the cultural meaning of specific dimensions of parenting styles. This in turn impacts on child outcomes in diverse socio-economic cultural contexts.

Kendler *et al.*, (1997) provided a solid indication that **parent wellbeing** and health are positively associated with parental protectiveness and authoritarianism while depressive behaviours are negatively associated with parental warmth. A positive association between depressive symptoms and harsh parenting has been found in mothers (Simons *et al.*, Bearman, Conger, & Chao, 1993a), while emotional distress has been found to cause aversive and punitive parenting and ineffectual discipline (Simons, Bearman, Conger & Chao, 1993b).

## ***2.6 Peer influence***

The influence of peers on adolescent substance use behaviour has received considerable attention. The influence of peer pressure and modelling on adolescent substance use has been associated with a higher probability of substance abuse and increased use (Wu *et al.*, 2004). While family environmental factors influence early stages of substance use and the choice of peers, socialisation by peers significantly influences both initiation to and continued substance use (Wu *et al.*, 2004). Thus, peer modelling and association with alcohol-using friends may relate to the level of severity of alcohol use. School-going adolescents who abuse substances hardly ever do so in isolation. According to Oetting and Beauvais, (1990), they are almost always influenced by their peers and usually act in peer clusters. Adolescents constantly seek reassurance and acceptance by peers, (Carey & Knight, 1990). McCoy, Metsch and Inciardi, (1996), maintained that adolescents focus on their individuality and together with the breakdown of family structures and relationships, a reliance on peers as a source of reference and self-definition increases. It was interesting to note that Kafka and London (1991) showed that although perceived pressure from friends to use substances was not correlated with adolescent substance use, strong correlations existed between adolescents' substance use and their own beliefs about their friends' substance use. It was concluded that adolescents interact with other adolescents whose substance use or non-use is similar to their own.

## **2.7 Theoretical framework**

The Ecological Perspective, which is a multilevel, interactive approach, emphasises the interdependence of factors within and across all levels of a health problem. It highlights people's interactions with their physical and socio-cultural environments. According to Glanz and Rimer (2005), there are two important concepts of the ecological perspective namely multiple levels of influence and reciprocal causation (individual behaviour both shapes and is shaped by the social environment). The Ecological Perspective (Bronfenbrenner & Morris, 1998), best clarifies adolescent risk behaviours at multidimensional levels of the micro (individual), meso (family) and macro (socio-cultural, policy) levels. De Vries *et al.*, (2003a, b) and Wild *et al.*, (2004) have shown that although various factors influence the risk of adolescent health compromising behaviours, the role of the socially mediated environment including the positive influences of parents and peers, serves as a protective effect against substance abuse. Positive parental influence has also been found to help confer protection against negative peer pressure for health risk behaviours (Marshall & Chassin, 2000; Sargent & Dalton, 2001). Studies have borne testimony to the reality that confident parents, who legitimately have the right to impact on their child's substance use behaviours, are the ones who are more capable of exerting specific anti-substance use socialisation practices (Ennet *et al.*, 2001; Fearnow *et al.*, 1998) and are successful at achieving their goals of positive adolescent behaviours (Engels & Willemsen, 2004; Sargent & Dalton, 2001).

## **2.8 Conclusion**

This chapter aimed to provide a review and summary of the national and international literature highlighting the prevalence of alcohol use among adolescents in South Africa and the influence of parental practices and peer pressure on alcohol use behaviours in South Africa and elsewhere. The methods used in the study will be discussed in the following chapter.

# CHAPTER III: METHODOLOGY

## ***3.1 Introduction***

The study examined alcohol use among adolescents and the influence of socio-demographics, parental practices, parental alcohol use behaviour and the use of alcohol by the adolescent. Understanding the relationship between parenting practices and adolescents' alcohol use may inform guidelines for parents to reduce alcohol use by their children who are in the adolescent phase of their lives. Chapter 3 outlines the methods used in the study and includes the research design, data collection instrument, sampling method, data collection process and the processing and analysis of data.

## ***3.2 Study design***

An observational analytic cross sectional study design was used. A self-administered questionnaire was administered to 16 to 18 year old learners who attended the selected public high schools in KwaZulu-Natal.

## ***3.3 Study setting and population***

The Emawaleni Education District in KwaZulu-Natal has 12 high schools. Five schools were selected based on the learners' perceived fluency in the English language. Three of the five high schools are located in a peri-urban area about 25km from central Durban and are former Model C<sup>a</sup> schools. Most learners attending these schools are from middle to higher socioeconomic status families. The fees at these schools are higher than those at other schools because of their semi-government status. Certain additional services are provided as a result of the higher fees including activities, such as additional educators who are remunerated by the Governing Bodies (i.e. the parents) of the schools, aftercare facilities, as well as sporting and other extracurricular activities. The other two high schools are former Department of Education government schools located in a more rural setting about 60km from the city centre. These two schools are attended by learners from families of poor to average socioeconomic status.

<sup>a</sup> In 1990, schools previously designated "Whites Only" were permitted to admit black learners under limited conditions which included the provision that the school remained 51% white and the "ethos and character was maintained" (Human Rights Commission, 1991). These schools were known as "Model C" schools. Although all such legislation became dysfunctional with the National Schools Act of 1996, the term remains in frequent use to designate historically advantaged schools.

Principals at all five of the participating schools allowed the research to be conducted at their schools. All the 16 to 18 year old adolescents of these five schools and their parents were approached and informed about the study.

Information letters with all details of the study, and letters of consent were sent to parents of the adolescents via the school administration correspondence process. Parents were given contact details of the main researcher should they require any further details regarding the study. These were collected by the schools and collated for the main researcher to receive. Those adolescents whose parents approved of their participation in the study were provided with information letters and a letter of assent/consent to sign and return to the school administrative officer. These were also collected by the researcher. Dates were set by the principals and the researcher and learners were allowed to complete the questionnaire in an appropriate venue in the school. Prior to the survey being conducted, the researcher informed all the learners about the nature of the study. Attached to the questionnaire was an assent/consent letter which informed participants of the voluntary nature of their participation and their right to withdraw from the survey at any time, also that confidentiality and anonymity would be maintained at all times.

### ***3.4 Sampling***

#### **3.4.1 Method of sample selection**

The study population included all 16 to 18 year old learners who attended the designated five schools in the Emawaleni District in 2007. The age groups were chosen as older adolescents tend to be more critical of their parents' parental practices and are also more likely to engage in substance use behaviours. In order to minimize participation bias, all these adolescents who had given parental and individual consent were approached to participate. The researcher anticipated a response rate of at least 50% due to non-consent.

#### **3.4.2 Sample size and realization**

It had been ascertained that 1227 learners aged 16 to 18 year attended the designated 5 schools in the Emawaleni District. In order to minimize participation bias, all these adolescents with parental and individual consent/assent were approached to participate. The researcher anticipated a response rate of at least 50% due to non consent/assent. Seven hundred and four fully completed questionnaires were analysed. A 57% response

rate was received from the study participants. The sample size was discussed with the statistician and it was decided that 1227 learners would yield adequate power to the intended analysis.

### 3.4.3 Inclusion / exclusion criteria

#### 3.4.3.1 Inclusion criteria:

- a) Adolescents/learners of the designated schools
- b) Only Grade 11 and 12 adolescent learners attending the designated schools were included.
- c) Only learners who signed the voluntary consent form, and whose parent(s) / legal guardian also signed the form, were included in the study.

#### 3.4.3.2 Exclusion criteria:

- a) Adolescents/learners who did not sign the consent document
- b) Adolescents whose parent(s) / legal guardian did not sign the consent documents or were not available to sign the consent document.

## ***3.5 Measurement instrument***

The self-administered questionnaire was developed in accordance with the Ecological Perspective theoretical framework and information gained from the reviewed literature. The questionnaire was developed with consideration of the respondents' level of literacy and care was taken to ensure that the questions were phrased clearly and unambiguously. Elementary English was used to make it easy for the participants to understand the questions.

The questionnaire was pre-tested and refined in a pilot study conducted at a public high school. The pilot study was conducted among Grades 11 and 12 learners and adapted accordingly to ensure understanding and clarity which in turn would contribute to the validity of the instrument. The data collected in this pilot study is not reported in this study. Due to the fact that this was an exploratory study, the pilot study was primarily done to refine the questionnaire. The questionnaire contained items related to socio-

demographics of the adolescent and included age, gender, religious affiliation, home environment amenities, as well as parent details such as work status and educational background. Questions on adolescents' alcohol use or non use, and parental alcohol use and socialisation behaviours were included. Adolescent perceptions of parental practice such as communication, trust, monitoring and attitudes towards alcohol use were included as well as the influence of the peer groups to resist peer pressure.

### 3.5.1 Items in the questionnaire

In order to investigate the variables related to adolescent alcohol use the questionnaire (Appendix G) was structured accordingly and consisted of three sections.

Section 1 of the questionnaire sourced information on the gender, age, family demographics, main caregiver as well as caregiver demographics regarding educational level, marital status, professional status, religious background, socio-economic status and household amenities. The data from questions 1 to 15 were collated and analyzed.

Questions in section 2 elicited information on alcohol use among adolescents. The questions were derived from the measures proposed by Grant, Tonigan & Miller, (1995) and Hasin, Carpenter, McCloud, Smith and Grant, (1997) regarding the quantity and frequency (QF scores) of alcohol use. These measures were adapted in questions 17, 18, 20 and 21 for the current study in terms of comprehension. Questions requiring information on alcohol use responses ranged from never, once, to 5 times or more. 'Never' responses classified an adolescent as a non-drinker while any response indicating alcohol use classified adolescents as drinkers. Two items were included to determine drug use among adolescents. The objective was to determine if the adolescents who used alcohol also used drugs.

Adolescents' perceptions of their parents' alcohol socialisation behaviours as well as the house rules regarding alcohol were investigated. Questions included screening or filtering questions that measured information regarding responses to alcohol use in terms of frequency, for example: "During a one-month period, how many times have you had at least one drink of alcohol other than a few sips?" "In our house there are very clear rules about drinking alcohol". A four-point Likert Scale was used for questions which focused on house rules regarding alcohol use and ranged from 'definitely true' to 'definitely not

true', for example: "I am not allowed to drink alcohol at home or anywhere else". Two questions were open-ended and unstructured which provided the adolescent an opportunity to freely respond to the questions which measured their perceptions of safe and risky drinking behaviours. These questions were "What do you think is the most serious risk associated with drinking alcohol?" and "What do you think safe drinking means?" A question with a "yes" or "no" response assessing parental communication with regards to alcohol use was used to determine whether parents spoke to their adolescent about alcohol use.

Finally, in section 3, items measuring adolescent family and peer relationships were included. A four-point Likert scale that ranged from 'strongly agree' to 'strongly disagree' was utilised to collect the necessary information.

Parenting style was assessed with items from the Parental Social Support for Adolescents Scale developed by Lamborn, Mounts, Steinberg and Dornbusch (1991) and items identified in the literature. The scale is reported to have an inter-item reliability of 0.76 (Lamborn *et al.*, 1991). The items referred to parental support and warmth as well as monitoring.

### ***3.6 Pilot study***

Pilot studies are used to assess the face validity of proposed measures (Terre Blanche & Durrheim, 1999). Face validity is concerned with the extent to which the content of items/scales actually measure what they are intended to measure.

A pilot study was conducted prior to the main study at a public high school similar to the selected schools in the study using a smaller sample size as calculated by a statistician; this school was not used in the main study. Forty-five learners aged 16 to 18 years who were in grades 11 and 12 were included in the pilot study. The questionnaire took 30-45 minutes to complete. The procedure followed for the pilot study was exactly the same as that followed for the main study. The pilot study was useful in that it provided guidelines for the refinement of the final questionnaire. The pilot study was used to refine the measuring instrument and to improve the quality of each question in the questionnaire. It also assisted in determining the time for the completion of the questionnaire and it allowed for changes to be made prior to the full-scale study.

### 3.7 Measurements and scales

Items were examined by factor analysis and related items were grouped into potential constructs. The promax oblique rotation method was used to allow for correlations between the rotated factors. The interpretation of the rotated factors was based on variables with factor loads of 0.4 or higher. Each item was examined for the effect on scale reliability and items substantially diminishing reliability were deleted. Recoding of some items was done to ensure that all items were in a similar direction. For the family connectedness scale some items were recoded in order to ensure that a low score measured lower levels of family connectedness and a high score higher levels of connectedness. The preceding recoded items are reflected in Table 1. In Tables 2 and 3 the items pertaining to the measures ‘house rules’ and ‘peer influence’ to use alcohol are depicted respectively. The items were reverse coded in order to ensure that they were worded in the same direction.

Subscales were constructed by summing the related items. Items measuring a particular construct were correlated and new subscales were created for significantly interrelated items with an acceptable inter-item reliability coefficient (Cronbach alpha) of  $\alpha = 0.60$  and higher. Table 1 presents the descriptive statistics for the measures and Tables 2, 3 and 4 present the individual items used in the measures.

**Table 1: Measures and scales used in the study**

Scales/Measures	Number of Items	$\alpha$	Min/Max	Mean	SD
Family connectedness	11	0.80	14/44	33.8	5.8
House rules regarding alcohol use	6	0.72	6/24	16.8	4.0
Peer influence to use alcohol	3	0.64	3/12	6.4	2.2

#### 3.7.1 Family Connectedness scale (FCS)

The family connectedness measure was developed from items in the Parental Social Support for Adolescents Scale (PSSA) and relevant information from the literature. The



PSSA scale was obtained from the Loeber Youth Questionnaire (LYQ: Jacob, Moser, Windle, Loeber, & Stouthamer-Loeber, 2000).

**Table 2: Items used for the Family Connectedness Scale (FCS)**

<b>Items</b>
1. I feel loved by my family*
2. Everyone in my family accepts me just as I am*
3. I feel an important part of my family*
4. I do not get the support and encouragement that I need from my family
5. I feel that I can talk to one of my parents/guardians about most things in life*
6. As a family we do a lot of things together*
7. I do a lot of things that my family would not approve of if they knew about it
8. We never have money to go out as a family
9. I think I have a happy home life*
10. If I do not do well at school I am encouraged to do better by people at home*
11. I feel that no one should tell me what to do anymore

\*Recoded Response categories: Strongly agree=4; Agree=3; Disagree=2, Strongly Disagree =1

### 3.7.2 House rules regarding adolescent alcohol use.

The following items were selected from the literature, (Ennett et al., 2001) for the measure.

**Table 3: Items used for house rules regarding adolescent alcohol use**

<b>Items</b>
1. In our house there are very clear rules about drinking alcohol
2. Adults are allowed to drink alcohol at our home but not children
3. My father/male guardian is totally against the use of alcohol
4. My mother/female guardian is totally against the use of alcohol
5. I am not allowed to drink alcohol at home or anywhere else
6. No one is allowed to drink alcohol in our house

Response categories: Strongly agree=4; Agree=3; Disagree=2, Strongly Disagree =1

### 3.7.3 Peer pressure on adolescents to use alcohol

Peer influence to use alcohol included the following three items, two of which were recoded in order to score all questions in the same direction.

**Table 4: Items used for peer influence on adolescent alcohol use**  
**Items**

1. My friends drink alcohol and want me to drink with them\*
2. My friends and I encourage each other not to use alcohol
3. My friends and I encourage each other to get drunk\*

\*Recoded Response categories: Strongly agree=4; Agree=3; Disagree=2, Strongly Disagree =1

## 3.8 Data collection

### 3.8.1 Preparation and administration of the questionnaire

Officials from the provincial Department of Education provided consent to conduct the study (Appendix C) on condition that the study was conducted in the first term in order not to interfere with the academic program for grades 11 and 12 later on in the year. Permission letters were obtained from the participating school principals as well as from the principal of the pilot school (Appendix D). The information and consent documents were sealed in envelopes and sent to 1227 parents of adolescents. Eight hundred and seven parents responded positively (66%). The signature of one parent or legal guardian was required on the consent form for permission and this was returned to the school by the learner after the parent or legal guardian had read and removed the information letter. Only those learners, who brought the consent document signed by their parent or legal guardian, back to school, were eligible to participate in the study. The researcher conducted the survey in an appropriate venue at each of the schools' hall with the permission of the principals and educators at each school. Educators were not involved in this process. The questionnaires were completed within 45 minutes and collected by the researcher. Only 704 completed (57%) questionnaires remained in the possession of the main researcher. The remaining 9% either withdrew consent, did not attend on the day of the survey and a few questionnaires could not be used due to incomplete information.

### 3.8.2 Data management

A period of four months (January to April 2007) was required to collect the data. Two

open-ended questions were categorised according to the views of the participants regarding the consequences of alcohol use and all data were analysed in SPSS 15.0. (SPSS Inc., Chicago, Illinois, United States of America). Cross validation of data entry was employed to confirm the accuracy of the data capturing process. A statistician was consulted to assist with the process of identifying outliers and to identify relationships between the variables.

### ***3.9 Data Analysis***

Quantitative data enable a researcher to describe the data more succinctly and make inferences about the characteristics of the study population (Terre Blanche & Durrheim, 1999). Congruent with the hypotheses and the aims and objectives of the study; the researcher investigated the relationship between the independent variables (socio-demographic, adolescent perceptions of parental practices and peer influence) and the dependent variable (alcohol use).

Analyses were performed on the full sample population. The first step included SPSS frequencies and cross tabulations to examine the frequencies and distribution of the variables of the total sample population. **Chi-square tests** were used for exploring the data. Pearsons' chi-square tests were conducted for parental alcohol use and adolescent alcohol use.

**T-tests** were done between a categorical variable, i.e. gender and continuous variables such as family connectedness, house rules, and peer influence to use alcohol. In order to investigate factors influencing parents' parenting practices, t-tests were conducted with the reported parental marital status, (married/unmarried) and family connectedness as well as house rules regarding alcohol use.

**Analyses of variance (ANOVAS)** were used to examine differences between three or more samples/group means conducted with the demographic variables age (16, 17, 18 years) and alcohol use frequency as the dependent variables ('never' to 'five times or more').

**Pearson's correlation analysis** was conducted to determine the association between alcohol use frequency and parental monitoring using the following items: parental

knowledge of adolescent whereabouts, knowledge of adolescent home coming time and weekend curfew time. Correlation analyses were done to explore the association between parental levels of education and parenting practices, i.e. family connectedness and house rules regarding alcohol use and peer influence to use alcohol.

Multivariate analysis was conducted to determine the associations between alcohol use and parental practices after controlling for possible confounding effects of other risk factors for alcohol use. Analyses were carried out to compare the different parental practices with regard to communication, monitoring and modelling of responsible alcohol use. Binary logistical regression analyses were determined for each outcome. All variables significant in bivariate analysis were entered into a binary logistic regression model. The following significant variables were entered into the **logistic regression model**: the socio-demographic variables: [(age(1 year increase), gender (male), race(white), religiosity (not), parental marital status (separated/divorced)]; the following composite measures as independent variables were entered: family connectedness, house rules regarding alcohol use, alcohol use and peer influence). In addition, the following items were entered: parental alcohol use, parental drunkenness, parental consent regarding alcohol use while with peers, frequency of peer alcohol use, and a few items relating to parental monitoring. A backward stepwise elimination method based on likelihood ratios was used. The final model reported odds ratios with 95% confidence intervals (Tables 21, 22 & 23).

### ***3.10 Consent, ethics, institutional review boards, permissions and financial considerations***

The study strictly adhered to ethical principles. Ethical clearance for the study was obtained and ethical codes such as informed consent and confidentiality were adhered to. These were obtained from the following stakeholders prior to the study:

The Post Graduate Committee of the University of KwaZulu-Natal, who accepted the research proposal (Appendix A).

The Biomedical Research Ethics Committee of the Nelson R Mandela School of Medicine, University of KwaZulu-Natal, South Africa who provided ethical approval for

the study (Reference number EXP003/06) ( Appendix B).

Written permission/consent/assent was obtained to conduct the study in selected schools from the Provincial Department of Education, KwaZulu-Natal (Appendix C),

The Principals of the selected high schools (Appendices D).

Financial considerations which included the costs of printing the questionnaires for this study were provided by Professor Anna Meyer-Weitz.

Parents and the learners participating in the study were provided with information sheets and consent documents (Appendices E and F).

Parents and learners were furnished with the appropriate explanation that their consent was required to participate in the study and to answer questions according to a standard questionnaire.

In the information sheet the participants were made fully aware that they had the right to refuse to participate or withdraw at any time during the study.

The principals of the Schools, the parents and the learners were assured of confidentiality and that the information obtained would not be divulged to anyone except for the use of the researcher. All questionnaires were completed anonymously as neither learner nor school names were used, in order to maintain complete anonymity and confidentiality.

### ***3.11 Conclusion***

This chapter attempted to outline the method of sampling, to provide a description and explanation of the measuring instruments and to detail the procedure for the pilot study and the final study conducted. The statistical analyses were outlined, concluding with considerations of the relevant ethical board as applied to the study. Chapter 4 will follow; with details of the results of the statistical analyses.

## **CHAPTER IV: RESULTS**

### ***4.1 Introduction***

The results are presented in a descriptive and analytical format. These results describe alcohol use among adolescents, its socio-demographic determinants and the influence of perceived parental practices on the alcohol use of 16-18 year old high school adolescents. A statistical level of  $P \leq 0.05$  was used as the acceptable level of significance for the purpose of this study.

### ***4.2 Socio-demographic profile of the adolescents***

Section 1 (comprising Questions 1 to 16) of the questionnaire provided the results for the socio-demographic characteristics of the adolescents.

#### **Adolescents' age, gender, grade, ethnicity and home language**

The participating adolescents were 16 to 18 years old. Of the 704 participants, 59.8% were female (Table 5). The participants were in grade 11 and 12 at public high schools in the Emawaleni Education District, KwaZulu-Natal. In terms of race, the majority (46.2%) were African, while the rest of the respondents were Indian and White. English and Zulu were the most common home languages of the participants, while the home language of a small group (9%) was Afrikaans.

#### **Age of adolescents' parents**

The ages of the adolescents' parents ranged widely. The majority of female and male care givers occurred in the age category of 36 to 50 years old. The data showed that for female care givers, the age ranged up to 70 years of age and for the male care givers the highest age was 75 years.

#### **Adolescents' main caregivers in the home**

The main caregivers of a large number of the adolescent participants were both parents (62.6%) who lived with them at their home and 29% who lived with a guardian (Table 6).

**Table 5: Demographic characteristics of study participants from public high schools in the Emawaleni District (N = 704)**

<b>Characteristic</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Age</b>		
16 years	300	42.6
17 years	292	41.5
18 years	112	15.9
<b>Gender</b>		
Male	283	40.2
Female	421	59.8
<b>Grade</b>		
11	374	53.1
12	330	46.9
<b>Race</b>		
Asian/Indian	196	27.8
Black/African	325	46.2
White	183	26.0
<b>Home language</b>		
Afrikaans	64	9.1
English	317	45.0
Zulu	308	43.8
Other	15	2.1

**Table 6: Main caregiver of the adolescents**

<b>Main caregiver</b>	<b>Frequency</b>	<b>Percent</b>
Father & mother	441	62.6
Mother/female guardian	205	29.1
Father/male guardian	58	8.3

### Educational status of parents/guardians

The educational levels of adolescents' parents/guardians are reported in Figure 1. A large percentage (57.8%) of adolescents' mothers/female guardians had a tertiary qualification, and 21.4% had a Matric qualification. Fathers/male guardians' educational status followed a similar pattern with 60.1% having a tertiary qualification and 22.2% having matriculated.

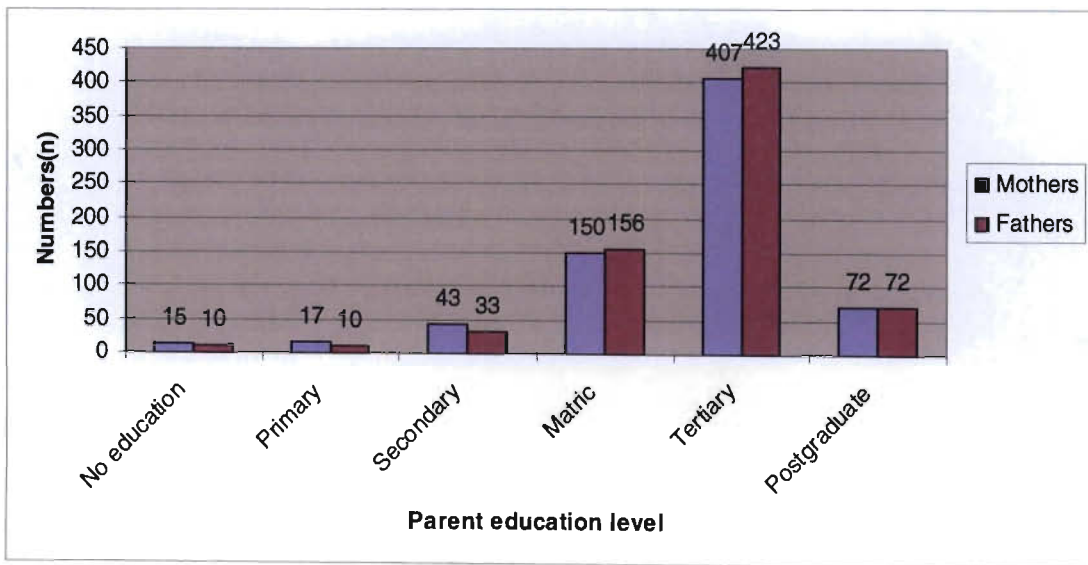
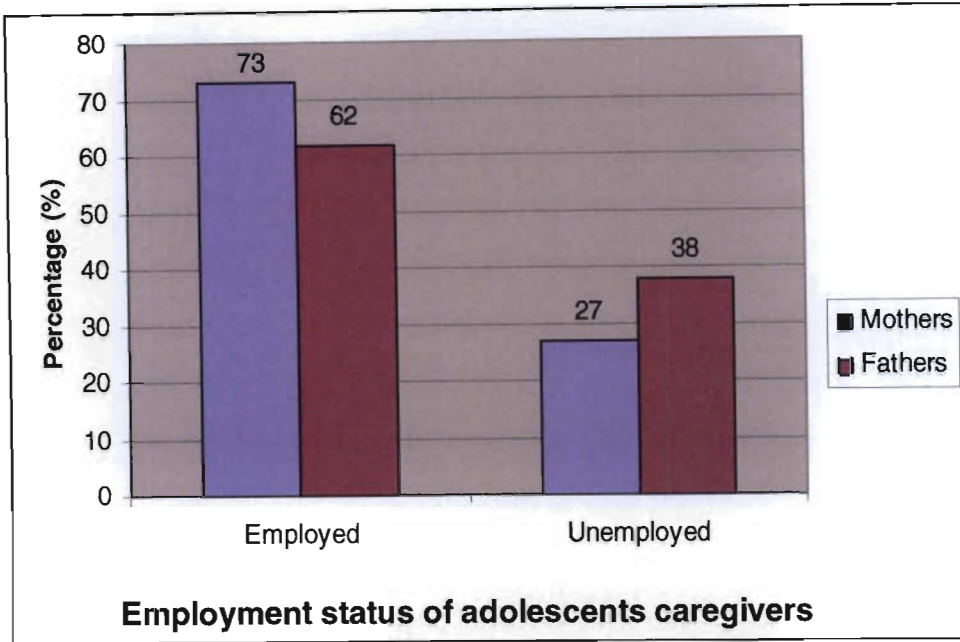


Figure 1: Educational status of the adolescents' caregiver

### Working/employment status of the parents/guardians

Working/employment status of the parents/guardians of the adolescents is presented in Figure 2. Adolescents reported that 73% of mothers and 62% of the fathers were in employment at the time of the study.





**Figure 2: Employment status of adolescents' caregivers**

### **Marital status of parents/guardians**

The majority of the adolescents' parents/guardians were married (61.1%), 16.2% were unmarried and 8.5% were divorced (Table 7).

**Table 7: Marital status of parents/guardians**

<b>Status</b>	<b>Frequency</b>	<b>Percent</b>
Married living together	430	61.1
Unmarried not living together/single	114	16.2
Divorced	60	8.5
Other	54	7.7
Married not living together	33	4.7
Unmarried living together	13	1.8
<b>Total</b>	<b>704</b>	<b>100.0</b>

### **Religion of adolescents' family**

Four religious categories (Table 8) were identified in the study population as presented in Table 8. The highest proportions (78.1%) of the adolescent's families were of the Christian faith followed by Hinduism (17.8%).

**Table 8: Religion of adolescents' family**

Category of religion	Frequency	Percent
Christian	550	78.1
Hindu	125	17.8
Jewish	2	0.3
Muslim	12	1.7
No religion	15	2.1
<b>Total</b>	<b>704</b>	<b>100</b>

**Adolescents' perceived religiosity**

Adolescents rated the perceived religiosity level in their homes as follows (Table 9). More than fifty percent (57.2%) of adolescents perceived themselves to be somewhat religious whilst 36.6% indicated that they were very religious.

**Table 9: Religiosity of the adolescent**

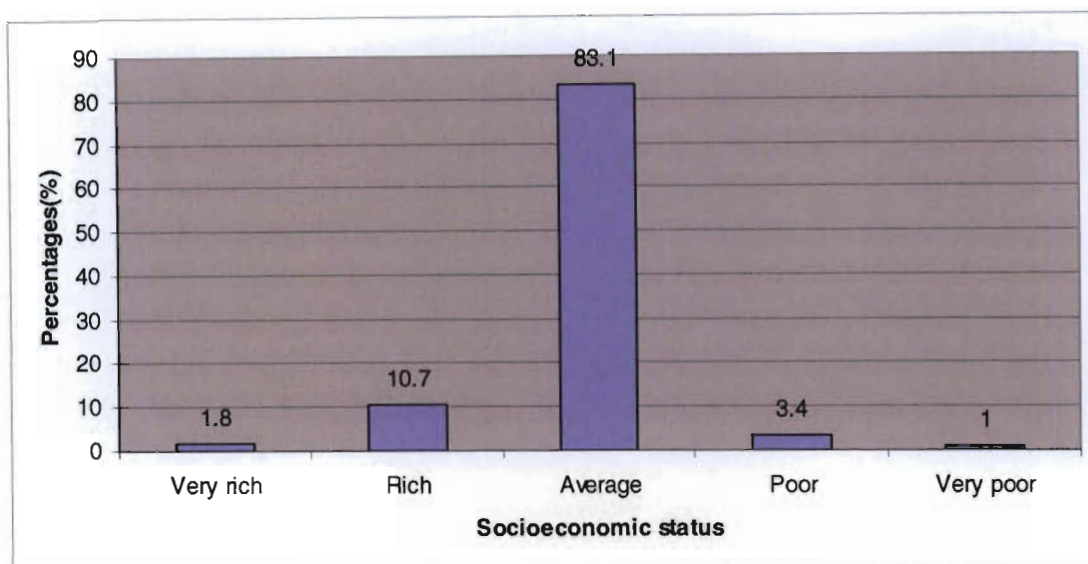
Religiosity	Frequency	Percent
Not religious at all	43	6.1
Somewhat religious	403	57.2
Very religious	258	36.6
<b>Total</b>	<b>704</b>	<b>100.0</b>

**Adolescents' family size**

In terms of the relationship of the adolescents with other members of the family, particularly in relation to siblings in the household, adolescents reported siblings within a range of 1 to 3 brothers and sisters. The study population came predominantly from smaller family units.

### Adolescents' perceptions of their socioeconomic status

Eighty-three percent, (83.1%) of the adolescents perceived their families as of average economic status, 10.7% regarded their family as rich and 3.4% saw themselves as poor (Figure 3).



**Figure 3: Perceived socio-economic status of the household**

### Commodities accessible to the adolescent

Adolescents in the study group had access to a television (66.1%), satellite television (55%), a computer (62%) and 35.2% had access to the internet with the highest number of adolescents having access to cell phones (88%), (Table 10).

**Table 10: Adolescents' accessibility to technological commodities**

Commodity	Frequency	Percent
Cell phone	619	88.0
TV	465	66.1
Computer	436	62.0
Satellite TV	387	55.0
Internet Access	248	35.2

### 4.3. Adolescent Alcohol Use

#### Most influential person with regards to adolescents' alcohol use

Adolescents reported that the most influential people in terms of their alcohol use were their parents/guardians (51.3%) and their friends/peers (33.8%) whilst a few referred to siblings (7.4%), other adults (4.7%) and grandparents (2.8%), (Figure 4).

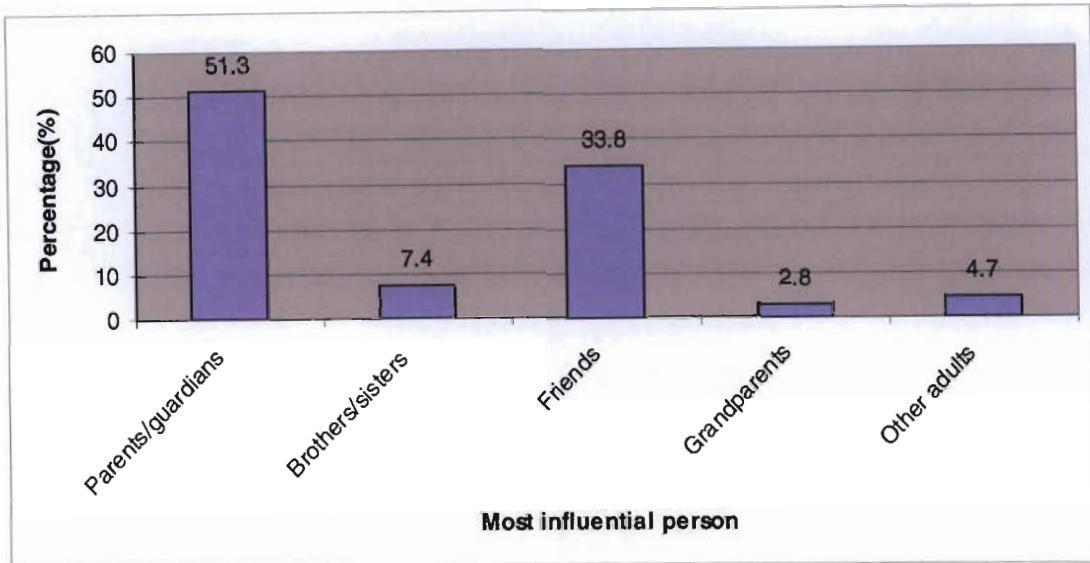


Figure 4: Most influential persons in adolescents' life in relation to alcohol use

#### Adolescents age of initiation regarding alcohol use

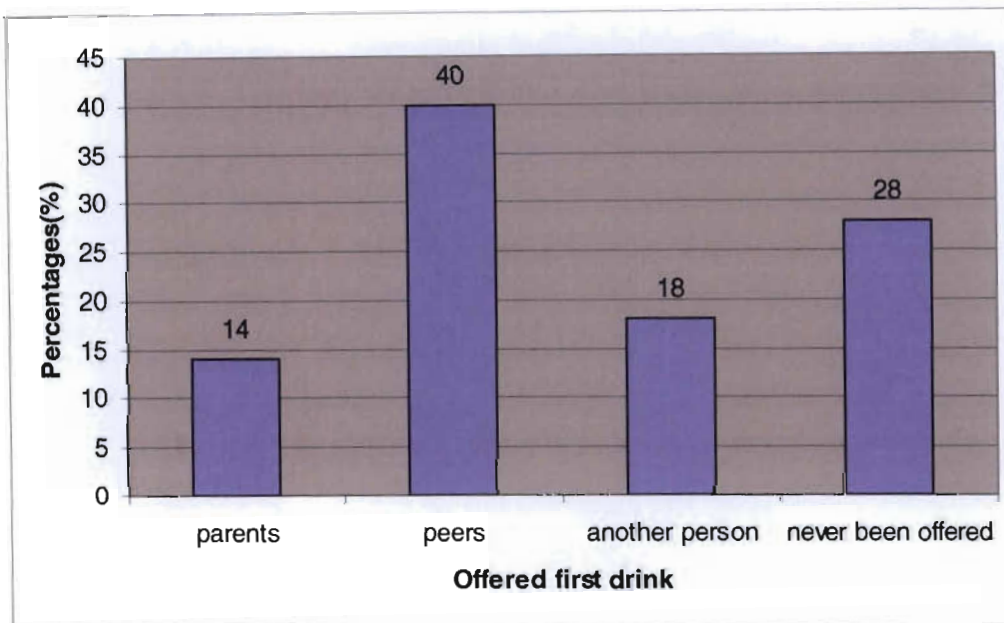
Fifteen percent (15%) of the respondents who took alcohol were under the age of thirteen years. Thirty percent (30.5%) of adolescents reported that they had never used alcohol whilst 69.5% had used alcohol. Fifty one percent (51%) of those who had used alcohol had their first alcoholic drink between the ages of 13 to 16 years old. The ages at which adolescents first initiated alcohol use were 13 to 14 years (22%) and 15-16 years (29%), (Table 11).

**Table 11: Adolescents' age of first alcoholic drink**

Drinking status	Frequency	Percent
Never drank	215	30.5
8 years or younger	32	4.5
9 or 10 years old	21	3.0
11 or 12 years	49	7.0
13 or 14 years	158	22.4
15 or 16 years	201	28.6
17 years or older	28	4.0

**Person who offered adolescents their first drink**

The majority of the adolescents (40.1%) indicated that peers had offered them their first drink, followed by another person (18%) and parents/guardians (12.9%) (Figure 5).



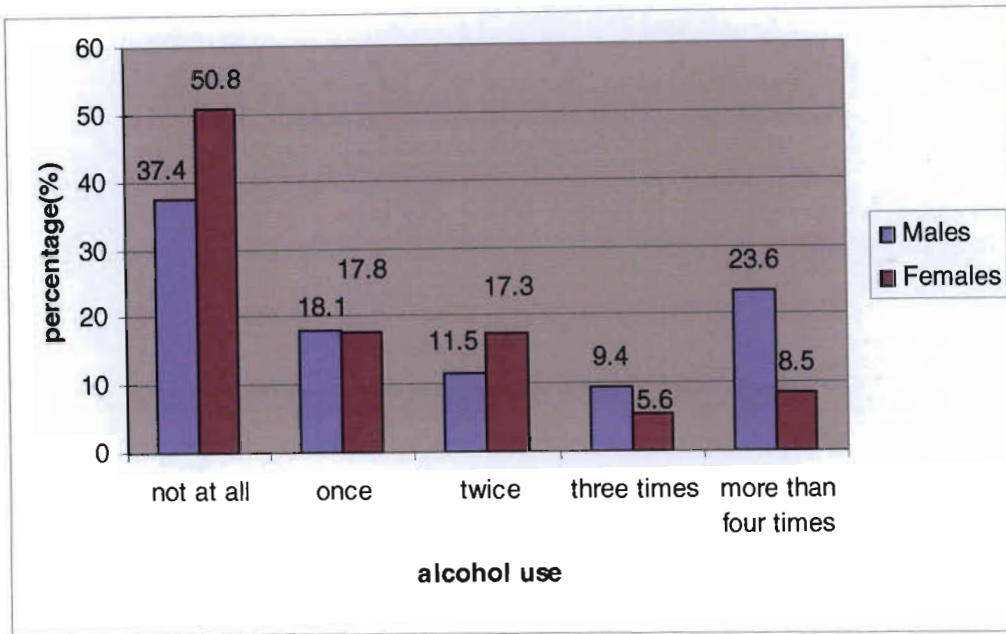
**Figure 5: Person who offered adolescents their first alcoholic drink**

**Adolescent alcohol use behaviours and binge-drinking**

Regarding the frequency of alcohol use, 46 % of the adolescents reported that they had never used alcohol, whilst 54% had consumed alcohol at some time. Twenty percent (20%) indicated that they had used alcohol four times or more during a one-month period. The results showed that of the 54% of adolescents who ever used alcohol, 1.1%

reported using alcohol on a daily basis in the past month. The mean age of alcohol use was found to be 16.8 years.

The number of times alcohol was used other than a few sips by the adolescent during a one-month period is represented in Figure 6. The study reports binge-drinking for both males (23.6%) and females (8.5%). However, 51% of males and 37.4% of females had never consumed five or more drinks in a row.



**Figure 6: Binge-drinking by adolescents**

**Socio-demographic determinants of adolescent alcohol use**

In the first logistic regression model that was fitted, the five significant socio-demographic determinants of ever using alcohol are presented in Table 12. In terms of age, for every 1 year increase in age the likelihood of using alcohol increased, with  $p < 0.002$ , (OR = 1.472). In terms of gender, males were more likely to use alcohol than females,  $p < 0.001$  (OR=2.052). In terms of parent marital status, it was revealed that 82% of adolescents, who have used alcohol, came from a family structure where parents were divorced or had separated,  $p < 0.001$ , OR=1.130.

**Table 12: Logistic regression scores of socio-demographic determinants of adolescent alcohol use**

Variables	P- value	OR	95% C.I. for OR	
			Lower	Upper
Age (1 year increase)	0.002	1.472	1.154	1.878
Gender (male)	0.000	2.052	1.451	2.902
Race (white)	0.000	3.933	2.295	6.738
Marital status (divorced/separated)	0.000	1.130	0.599	2.133

**Adolescents’ perceptions of risky and safe alcohol use**

Adolescents’ perceptions regarding the most serious risks pertaining to alcohol use as presented in Table 13, indicates that about a third (29%) mentioned behavioural problems that came with excessive alcohol use while 18% named vehicle accidents as a serious consequence. A smaller group, 15% mentioned health consequences and 12% mentioned that vulnerability to sexual assault and violent behaviour were risks related to alcohol use.

Adolescents’ views regarding safe drinking were reported as “not getting drunk/been responsible” (68%) whereas only 17% reported that “no drinking” is safe (Table 14).

**Table 13: Adolescent's perceptions of the most serious risks associated with drinking alcohol**

<b>Risks of alcohol use</b>	<b>Frequency</b>	<b>Percent</b>
Unable to control behaviour	203	28.8
Vehicle accidents	129	18.3
Poor health-related consequences	103	14.6
Violent behaviour	84	11.9
Vulnerable to sexual assault	84	11.9
Unprotected sex leading to HIV/STD's/pregnancy	34	4.8
Develop alcohol dependency	30	4.3
Alcohol poisoning causing death	18	2.6
Spiking alcohol with drugs	8	1.1
Poor self image/reputation	7	1.0
Poor performance at school	4	0.6
<b>Total</b>	<b>704</b>	<b>100</b>

**Table 14: Adolescent's perceptions of safe drinking**

<b>Safe alcohol use</b>	<b>Frequency</b>	<b>Percent</b>
Not getting drunk/ being responsible	479	68.0
Don't drink	117	16.6
Drink at home/safe environment	67	9.5
Drinking in company	20	2.8
Drinking under adult supervision	15	2.1
Not mixing drinks	3	0.4
Not drinking and driving	3	0.4
<b>Total</b>	<b>704</b>	<b>100</b>



#### 4.4 Adolescent drug use

Eighty percent (80%) of adolescents had never experimented with a drug while 20% had used a drug or combinations of drugs at any one time (Figure 7). Analysis of the drugs used by the 20% of adolescents who had used a drug or combination of drugs at any given time indicated that the most commonly used drug was dagga followed by dagga with a combination of other drugs. Dagga use had a frequency of 115 which translates into 16.1% which means that of the 20% who did use drugs; almost 81% have used dagga and a dagga with a combination of other drugs at any one time.

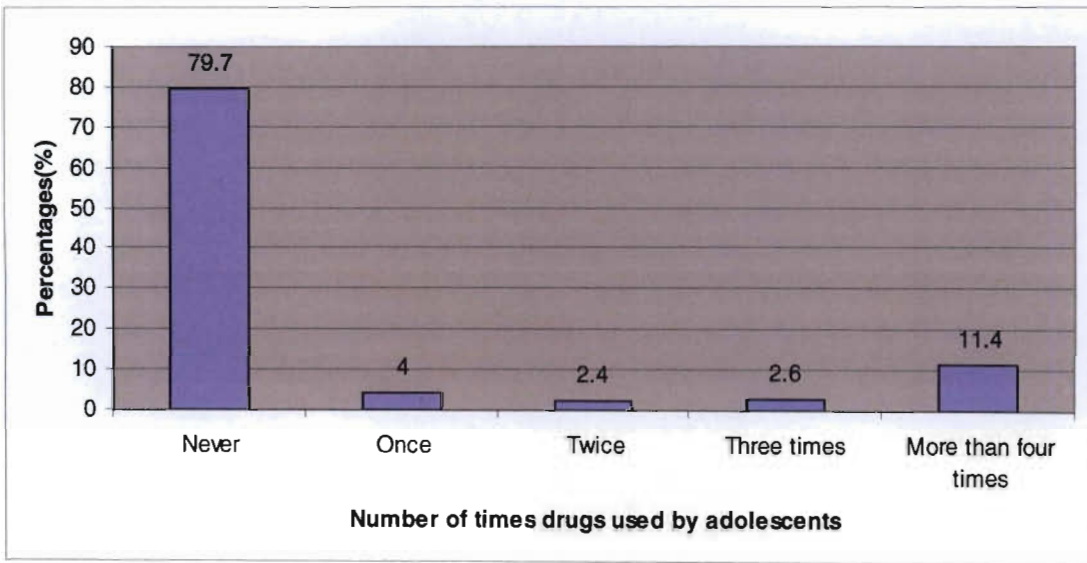


Figure 7: Number of times drug/s were used by adolescents

#### 4.5 Parental Influences on Adolescent Alcohol Use

##### Parents'/guardians' knowledge of adolescents' alcohol use

Adolescents reported that 26.7% of mothers/female guardians and 22.6% of fathers/male guardians were aware of their alcohol use (Table 15).

##### Adolescent alcohol use at home

A large number of mothers/female guardians (66.3%) and fathers/male guardians (69.3%) did not allow alcohol use at home, while 19.3% of fathers/male guardians and 21.6% of mothers/female guardians did allow drinking at home (Table 16).

**Table 15: Parental/guardian knowledge of adolescents' alcohol use**

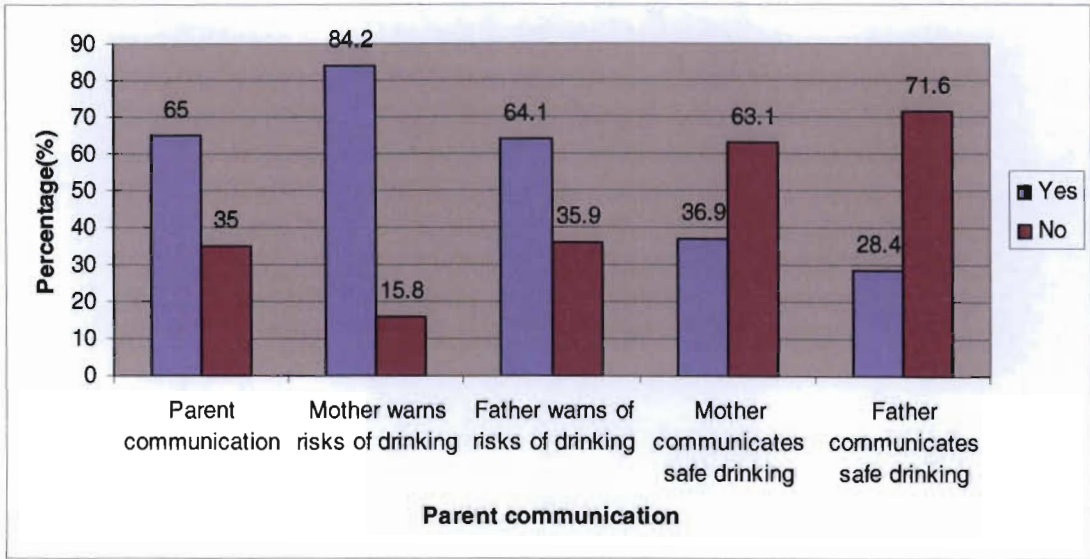
<b>Mother/female guardian</b>	<b>Frequency</b>	<b>Percent</b>
Yes	188	26.7
No	241	34.2
Do not drink	275	39.1
<b>Father/Male guardian</b>		
Yes	159	22.6
No	314	44.6
Do not drink	231	32.8

**Table 16: Adolescents' alcohol use at home**

<b>Mother/female guardian</b>	<b>Frequency</b>	<b>Percent</b>
Yes	152	21.6
No	467	66.3
Don't know	85	12.1
<b>Total</b>	<b>704</b>	<b>100.0</b>
<b>Father/male guardian</b>		
Yes	136	19.3
No	488	69.3
Don't know	80	11.4
<b>Total</b>	<b>704</b>	<b>100.0</b>

**Parental communication regarding alcohol use**

In terms of communication, 65% of mothers and 35% of fathers did communicate with their adolescents. With regard to alcohol use, 84% of mothers and 64% of fathers were found to communicate with the adolescents regarding the risks of using alcohol. In terms of safe drinking habits, 28% of fathers and 37% of mothers communicated with their children regarding safe drinking practices (Figure 8).



**Figure 8: Parental communication with adolescents regarding risky and safe alcohol use**

### Alcohol use by parents

Adolescents reported that 17% of fathers and 5% of mothers used alcohol often (Table 17).

**Table 17: Perceived frequency of alcohol use by parents as reported by adolescents**

Mother/female guardian	Frequency	Percent
Yes, often	38	5.4
Sometimes	109	15.5
Never	557	79.1
<b>Father/male guardian</b>		
Yes, often	122	17.3
Sometimes	209	29.7
Never	373	53.0

### Alcohol use by parents and adolescents

The chi-square test results indicated that adolescents were more likely to use alcohol when they reported that they had often seen either their father or mother drunk or both, ( $\chi^2(2) = 29.14, p < 0.001$  and  $\chi^2(2) = 37.96, p < 0.001$  respectively).

### Perceived parental perceptions' regarding adolescent alcohol use

Sixty-six percent (66%) of adolescents' mothers and 45% of fathers were reported by the adolescent to consent to the adolescents' use of alcohol (Table 18).

**Table 18: Perceived parental/guardian consent to adolescent alcohol use**

Mother/female guardian	Frequency	Percent
Yes	467	66.3
No	237	33.7
<b>Father/male guardian</b>		
Yes	315	44.7
No	389	55.3

The majority of the female and male **care givers** do not allow the adolescents to drink while with friends or peers. These included female care givers (71.2%) and 73% of male caregivers. However, 17.5% of female care givers and 14.5% of male care givers did allow adolescents to use alcohol when they were with their peers (Table 19). An independent-samples t-test was conducted to compare the mean scores on frequency of alcohol use for those that reported peer use of alcohol and those who reported that their peers do not use alcohol. There was a significant difference in scores for the peers that used alcohol ( $M = 7.12$ ,  $SD=2.13$ ) and the peers who did not use alcohol ( $M =5.45$ ,  $SD=1.98$ ;  $t(702) =11$ ,  $p<0.001$ ).

**Table 19: Parental consent to adolescent alcohol use while with peers**

<b>Mother/female guardian</b>	<b>Frequency</b>	<b>Percent</b>
Yes	123	17.5
No	501	71.2
Don't know	80	11.4
<b>Father/male guardian</b>		
Yes	102	14.5
No	514	73.0
Don't know	88	12.5

### **Parental monitoring and adolescent alcohol use**

Association between parental influences regarding monitoring and adolescent alcohol use reported a significant positive correlation at the  $p < 0.01$  level between frequency of alcohol use and parental knowledge of adolescents' whereabouts ( $r = 0.148$ ). Similarly, a positive correlation was found between frequency of alcohol use and parents' awareness of adolescent home coming time ( $r = 0.157$ ). A negative correlation was found at the  $p < 0.01$  level between frequency of alcohol use and strict weekend curfew times, ( $r = 0.170$ ). This implies that the more permissive their curfew times were, the more frequently adolescents used alcohol.

An independent-samples t-test was conducted to determine the difference in the mean scores for adolescents who do not use alcohol and those who do regarding house rules. A significant difference was found for those who do not use alcohol, ( $M = 18.27$ ,  $SD = 3.81$ ) and for those who use alcohol pertaining to house rules ( $M = 15.5$ ,  $SD = 3.79$ ,  $t(702) = 10$ ,  $p < 0.001$ ). Strict house rules decrease adolescents' alcohol use. The results of the independent-samples t-tests regarding the difference on the mean scores between those who use alcohol and those who do not pertaining to family connectedness indicated a significant difference in the mean scores for adolescents who use alcohol use ( $M = 33.20$ ,  $SD = 5.95$ ) and those who do not use alcohol ( $M = 34.48$ ,  $SD = 5.42$ ,  $t(702) = 2.95$ ,  $p < 0.003$ ). Family connectedness decreases the likelihood of adolescent alcohol use.

**Parental marital status and parenting practices i.e. family connectedness and house rules**

The independent samples t-test was conducted to determine the difference between parents who were married and those that were unmarried/single on adolescents’ perceptions of family connectedness. A significant difference was found between those whose parents were married ( $\mathcal{M}$  =34.27, SD=5.44) and those whose parents were unmarried on family connectedness ( $\mathcal{M}$  =32.875, SD=6.20; t (434), p=0.003).

**Table 20: T-tests for family connectedness and family relations with regard to parental marital status**

Measures	P-value	F	t-test	df	P-value (2-tailed)	Mean Diff.	SE Diff.	95% CI Lower	Upper
Family Connectedness	0.030	4.716	2.965	434	0.003	1.403	0.473	0.472	2.333
Family Relations	0.112	2.536	2.404	702	0.016	1.428	0.594	0.261	2.595

**4.6 Peer influence on adolescent alcohol use**

The adolescents reported that 30.5% of their peers used alcohol often, 53.7% used alcohol sometimes and 15.8% never used alcohol. The t-test results indicated that peer influence on adolescent alcohol use was significant as 54% reported alcohol use if their peers used alcohol. The t-test showed a significant difference for those who used alcohol ( $\mathcal{M}$  =7.11, SD=2.126), and those who did not use alcohol ( $\mathcal{M}$  =5.455, SD=1.986, t (702) =10.66, p<0.001) regarding peer influence.

**4.7 Determinants of adolescent alcohol use**

In the final models, (Tables 21, 22 & 23), all factors that are important in determining adolescent alcohol use are presented. The study has shown that adolescent alcohol use was related to parental approved of adolescent alcohol use. Ninety-five percent (95%) of

adolescents, whose parents approve of drinking, did drink alcohol with friends,  $p < 0.001$ ,  $OR = 5.542$ . The study revealed that 48% of adolescents who had seen both or one of their parents drunk were more likely to use alcohol themselves,  $p < 0.001$ ,  $OR = 5.623$ . Monitoring was found not to be a determinant for alcohol use among the adolescents in the study population and this factor was not included in the final model. Age, race and religiosity are significant socio-demographic determinants of alcohol use in the final model. Mother or father allows drinking at home; father or mother allows drinking with peers and peer influence to use alcohol are also significant determinants for adolescent alcohol use.

**Table 21: Logistic regression analyses of socio-demographic determinants of adolescent alcohol use**

Variables	P-value	OR	95.0% C.I.	
			Lower	Upper
Age	0.015	1.394	1.067	1.821
Gender (1)	0.001	1.950	1.333	2.853
Race	0.000			
Race (White)	0.001	0.466	0.302	0.717
Race (Black)	0.090	2.783	0.852	9.096
Race (Indian)	0.323	1.411	0.713	2.790
Religiosity	0.032			
Religiosity (not)	0.106	2.136	0.851	5.361
Religiosity (yes)	0.015	1.618	1.098	2.382
Mother/father allows drinking (yes)	0.039	1.983	1.035	3.800
Mother/father allows drinking with peers	0.000	5.542	2.586	11.876
Mother/father drunk	0.012			
Mother/father drunk (often vs. never)	0.005	2.179	1.262	3.764
Mother/father drunk (sometimes vs. never)	0.074	1.453	0.964	2.190
Peer alcohol use	0.000	1.308	1.192	1.436
Constant	0.000	0.049		

**Table 22: Logistic regression analyses for the influence of parental and peer factors on adolescent alcohol use (N=704)**

Variables	P- value	t- test	95% C.I. for OR	
			Lower	Upper
Parents allow drinking in their presence (yes)	0.000	5.542	2.586	11.876
Parents drunk	0.005	2.179	1.262	3.764
Parents allow drinking with friends (yes)	0.000	5.542	2.586	11.876
Family connectedness	0.003	-2.955	-2.126	-0.428
House rules	0.000	-9.570	-3.316	-2.187
Peer influence	0.000	10.664	1.357	1.969
Peer alcohol use	0.000	1.308	1.192	1.436



**Table 23: Final model of Logistical Regression analysis of the determinants of adolescent alcohol use**

<b>Variables</b>	<b>Parameter estimates (beta)</b>	<b>S.E.</b>	<b>Wald statistic</b>	<b>df</b>	<b>P-value</b>	<b>OR</b>	<b>95.0% C.I.</b> Lower Upper	
<b>Age</b>	0.326	0.136	5.726	1	0.017	1.386	1.061	1.811
Gender male vs. female	0.674	0.194	12.036	1	0.001	1.962	1.341	2.872
<b>Race</b>			22.840	3	0.000			
Race African vs. Indian	-0.768	0.220	12.140	1	0.000	0.464	0.301	0.715
Race White vs. Indian	0.348	0.348	1.001	1	0.317	1.416	0.716	2.799
<b>Religiosity</b>			7.124	2	0.028			
Religiosity not vs. very	0.772	0.471	2.686	1	0.101	2.163	0.860	5.444
Religiosity somewhat vs. very	0.489	0.198	6.122	1	0.013	1.631	1.107	2.402
	0.686	0.332	4.283	1	0.039	1.986	1.037	3.803
<b>Mother or father allows drinking</b>								
Mother or father allows drinking								
Mother or father allows drinking with friends	1.688	0.389	18.794	1	0.000	5.406	2.521	11.594
<b>Mother or father drunk</b>			9.999	2	0.007			
Mother or father drunk often vs. never	0.825	0.266	9.612	1	0.002	2.281	1.354	3.842
M or f drunk sometimes vs. never	0.323	0.213	2.291	1	0.130	1.381	0.909	2.098
	0.269	0.047	32.260	1	0.000	1.309	1.193	1.436
<b>Peer alcohol use</b>								
Peer alcohol use								
Constant	-3.011	0.406	54.898	1	0.000	0.049		

#### **4.8 Conclusion**

The results presented will be discussed and further explored in the discussion chapter.

## CHAPTER V: DISCUSSION

### 5.1 Introduction

The purpose of this study was to investigate the relationship between alcohol use and parental practices as perceived by 16-18 year old adolescents in public high schools in the Emawaleni District, in order to identify critical issues to be included in future alcohol use intervention programmes for adolescents and their parents.

The sample population was selected from an education district in KwaZulu-Natal, of which five public high schools were found to be suitable for the study. Three of the schools were in a peri-urban area which is a socio-economic affluent, middle class area while two were situated in a more peri-rural area which is middle to lower socio-economic class area.

### 5.2 *Socio-demographic profile of the adolescents*

Adolescents' **age and grade** in the demographic findings show the mean age of the learners in this study to be 17 years. In terms of **gender**, males were more likely to use alcohol than females. With regards to adolescents' **parents' ages**, the results showed that the ages of the adolescents' parents and the majority of female and male care givers ranged between 36 to 50 years old. The data shows that for female care givers, the age ranged up to 70 years of age and for the male care givers the highest age was 75 years. The reason for this range is that in a number of cases adolescents in extended families are taken care of by their much older guardians who are most likely their grandparent/s, or older aunts and uncles.

Fox *et al.*, (1995) report that younger mothers have lower expectations about their child's development and are more disciplining and less nurturing. Kendler *et al.*, (1997) found in a study of families with twins, that higher parental age was associated with lower levels of parental warmth and higher authoritarianism.

Adolescents reported that the **main caregivers** living with them in the home were

both parents (62.6%), while 29.1% reported living with their mother/female guardian and 8.3% with their father/male guardian. Therefore, 37.4% of the study population lived in single-family home environments.

With regards to the **educational status** of parents/guardians, it was reported that more than half of the adolescents' mothers/female guardians had a tertiary qualification, followed by 21.4% with Matric and 10.2% with a postgraduate qualification. Fathers/male guardians' educational status followed a similar pattern with 60.1% having tertiary qualifications, 22.2% with a Matric and 10.2% with a postgraduate qualification.

Mothers' occupation had little effect on parenting styles as they retained the traditional role of housewife despite their educational level. This is different from a study where parent educational levels showed that higher levels of education are related to less harsh parenting styles amongst mothers (Friars-Armenta *et al.*, 1998).

In this study at least 62% of the adolescents' fathers and 73% of the mothers were **working**. The fathers' occupation also affected the mothers' parenting style in a counter intuitive direction. The trend is that the higher the occupational status of the father, the harsher the mothers' parenting style, and the lower the occupational status the more relaxed the mothers' parenting style. Fathers tend to stress more authority with increasing occupational status.

**In terms of the parental marital status** of the adolescents' caregivers, this study found that sixty one percent (61.1%) of the adolescents' care givers were married and living together, followed by 16.2% who were unmarried and not living together or single, while 8.5% of adolescents' parents were divorced. This must be considered in relation to the alcohol use by adolescents in two-parent and single-parent homes. The findings revealed that 82% of adolescents who had used alcohol came from a family structure where parents were divorced or had separated. These findings concurred with the literature presented. Adolescents who resided in one-parent households were more likely to participate in risk behaviours, such as using alcohol. (Oman *et al.*, 2002; Blum & Ireland, 2004; Santelli *et al.*, 2000). However, fifty-two percent of adolescents in one-parent households are 2.5 times more likely to report non-use of alcohol if they are actively involved in community activities (Oman *et al.*, 2002; Pentz, 1989; Pentz, Dwyer,

MacKinnon, Flay, Hansen, Wang & Johnson, 1989). Various studies report lower levels of alcohol use among adolescents in two-parent families than among adolescents in single-parent families (Dornbusch *et al.*, 1985; Duncan *et al.*, 2002; Pierret, 2001). Married mothers have been reported as being more nurturing and less disciplining with a more positive quality of marriage related to parental warmth (Fox *et al.*, 1995).

In terms of **religiosity**, 57.2% of adolescents in this study rated themselves as 'somewhat religious' whilst 36.6% rated themselves as being 'very religious'. Religiosity has been used here as a condition of been religious in practice and behaviour. Religious is referred to as belonging to a religion, not the actual practice thereof. Only 6.1% of the adolescents reported that they were 'not religious' at all. Seventy-four percent (74%) of adolescents who used alcohol indicated that they were not religious at all. This factor (non-religiosity) can therefore be considered a significant determinant of adolescent alcohol use. Oman *et al.*, (2002) reports that youth who have positive peer role models and who use time for religious practice and family communication are 4.4 times more likely to report non-use of alcohol compared with youths who do not have these determinants. This means that in terms of religiosity, personal religious devotion in adolescents has been positively correlated with non-alcohol use. This has been confirmed in a study by Miller *et al.*, (2000), who showed that personal devotion and an affiliation with a religious denomination were inversely associated with substance use. When considering parental religiosity, Wesley-Perkins (1987) reported that the parents' strength of faith was predictive of lower parental problem drinking. If parents' drinking level is lower due to religious practices, their adolescents' alcohol use is also predicted to be lower. A positive relation between religiousness, parental protectiveness and authoritarianism amongst adolescent-parent relationships has also been reported by Kendler *et al.*, (1997).

Adolescents' perceptions of the **socio-economic status** at home was reported to be 83.1% for 'average economic status', while 10.7% reported that their parents were 'rich' and 3.4% perceived themselves to be 'poor'. In a study on adolescents of 12-14 years it was found that high socio-economic status and increased parent drinking were positively associated with increased adolescent alcohol use. In low socio-economic status neighbourhoods' adolescent alcohol use increased despite increased parent monitoring Chuang *et al.*, 2005.

### 5.3 *Adolescent alcohol use*

The most **influential persons** with regards to adolescents' alcohol use are peers and parents. In this study the adolescents reported that the two most influential persons that affected their use of alcohol were parents/guardians (51.3%) and friends/peers (33.8%), while smaller groups attributed their use of alcohol to siblings (7.4%), other adults (4.7%) and grandparents (2, 8%). Peer influence on adolescent alcohol use is powerful when parent-adolescent relationships are of a poorer quality (Haynes *et al.*, 2004).

With regard to the **age of initiation**, this study found that 15% of the respondents who used alcohol for the first time were younger than 13 years old. Adolescents used alcohol as early as 13-14 years (22%) and 15-16 years (29%). Thirty percent (30.5%) of adolescents never drank alcohol, while 69.5% had consumed an alcoholic drink at the time of the study. Of those who had consumed alcohol, 51% had their first drink between the ages of 13 – 16 years. Significant changes in alcohol awareness were found to occur between the ages of 12 and 13 years by Nesor *et al.*, (2003). An Australian study reported that ninety percent of adolescents had used alcohol by the age of 14 years (Haynes *et al.*, 2004). The median age for using alcohol for the first time in a South African study was 14 years. A reliable indicator of later alcohol use has been found to be the age of initiation, especially if that use began before the age of 15 (Parry *et al.*, 2002). An alarming finding in the Nesor *et al.*, (2003) study was that 14% of learners, mostly under the age of 15 years, were drinking alcohol 'to become drunk', 'forget their problems' and 'have fun'. The main findings of the South African Community Epidemiology Network of Drug Use (SACENDU) showed that more than 10% of 11 to 17 year-olds had been drunk more than ten times (Parry *et al.*, 2002). Various studies (Coombs & Landsverk, 1991; Ennett & Bauman, 1991; Kandel & Andrews, 1987) have shown that for the age of initiation of drinking, parental influences are stronger than peer behaviour.

**Person who offered adolescents their first drink** were found to be their peers (40.1%), another person (17.8%) and the parents/guardians (12.9%). About a third of the adolescents (29.3%) indicated that they had never been offered any alcoholic

drinks. Levels of alcohol use by adolescents were reported to be related to their source of access and the location where alcohol is consumed. Adolescents drink less alcohol when they obtain it from their parents than when they obtain it from their peers or another source (Haynes *et al.*, 2004).

Adolescent **alcohol use** in a one-month period and binge-drinking were investigated. Adolescents in the study reported on the frequency and quantity of alcohol consumption. Regarding the frequency of alcohol use, 46 % had never drunk alcohol, while 54% had consumed alcohol at some time. Twenty percent (20%) had drunk alcohol four times or more in a one-month period. In terms of binge-drinking (five or more drinks in a row in a one month period); 51% males and 37.4% females had never consumed five or more drinks in a row. Twenty three percent (23%) males and 8.6% females had consumed five or more drinks once to four times or more. The results regarding the number of days alcohol was consumed in a one-month period showed that 1.1% of the 54% of adolescents who consumed alcohol did so on a daily basis in a one month period. In a Cape Town study of grade 11 public high school learners, 36% of male and 19% of female respondents reported binge-drinking (Parry *et al.*, 2004). This study provided similar results in that 24% of males and 8.6% of females reported binge-drinking. The frequency of adolescent alcohol use in a study by Neser *et al.*, (2003) was 37.7% for those who replied in the negative while 38.0% admitted to drinking alcohol on one to five occasions in a month. Moreover, 24.3% reported drinking alcohol on more than five occasions during the same period while forty percent admitted getting drunk at least once in a typical month. Adolescents of 12 - 20 years reported that they had used alcohol in a one month period (44.9%) and 28.8% admitted to binge-drinking. The study concluded that among high school youth who drank alcohol, binge-drinking was strongly associated with a wide range of other health risk behaviours (Miller *et al.*, 2006). Among grade 10 learners, 40% of male and 25% of female adolescents engaged in binge-drinking (Miller *et al.*, 2006).

#### **5.4 Adolescent drug use**

Eighty percent (80%) of adolescents reported that they had not experimented with a drug while 20% had used a drug or combinations of drugs at any one time. It was found that more than 10% of adolescents had used drugs four times or more, while 80% had not

used drugs at all. The study also found that 20% of adolescents had tried a drug or combination of drugs at any given time. The most commonly used drug reported was dagga and a combination of other drugs (16.1%). The findings of this study are similar to those found nationally and internationally regarding the proportion of adolescents who use drugs and the commonly used drug, dagga. Nesor *et al.*, (1999) reported that 26% of learners in grade 12 had used illegal drugs during the year prior to their study while 22% of learners from grade 10 and 12% from grade 8 used drugs. In the United States (US), dagga has been found to be the most widely used illegal drug for decades (Johnston *et al.*, 2000). In the US, exposure to dagga becomes one of the first pressures that adolescents encounter on the way to adulthood. The use increases steadily as the learners grow older. Forty nine percent (49%) of adolescents first try dagga at the age of 13 or younger (Califano 1999). Matthews (2004) also found that age was a factor related to the type of drug chosen by the adolescent, and that dagga and mandrax in particular were found to be popular with 14 to 16-year-old adolescents. Cocaine and heroine were commonly used drugs by youth over 16 years (Matthews 2004). Dagga is the most common primary drug for which adolescents seek treatment. It is relatively cheap and easily accessible to the youth in South Africa (Parry *et al.*, 2004).

### ***5.5 Parental Influences on Adolescent Alcohol Use***

This study found that a large number of mothers/female guardians (66.3%) and fathers/male guardians (69.3%) did not allow drinking alcohol at home, whereas only 19.3% of fathers/male guardians and 21.6% of mothers/female guardians allowed drinking at the home. The majority of the female and male caregivers did not allow the adolescents to drink while with their peers (71.2% of female caregivers and 73% of male caregivers respectively). However, 17.5% of female caregivers and 14.5% of male caregivers allowed drinking with peers.

Haynes *et al.*, (2004) argue that when adolescents are not permitted to drink alcohol in the home, it has a protective effect on reducing the initiation age of alcohol use. They found that the age of 16 or 17 was usually when parents allowed their adolescents to drink alcohol at home. Parental disapproval also appeared to result in lowered adolescent drinking patterns (Smith & Rosenthal, 1995).

## **Parents' awareness of adolescents' drinking behaviours**

The study found that twenty seven percent (27%) of mothers/female guardians and 23% of fathers/male guardians were aware of their adolescents' drinking behaviours. As a significant difference between parental reports and adolescent consumption patterns were found by Haynes *et al.*, (2004), it may be concluded that parents do not always know the level of alcohol consumed by their adolescents and tend to underestimate their children's use of alcohol. A Canadian study reported that of 854, 12 to 18-year-old adolescents, only 34% of parents were aware that their adolescents used alcohol, with  $p < 0.001$  (Haynes *et al.*, 2004). Based on a series of quantitative and qualitative studies in Australia, Taylor and Carroll (2001) argue that parents are more concerned with illegal drug use than with adolescent alcohol use.

## **Communication with parents about alcohol use**

This study investigated adolescents' perceptions regarding the most serious risks pertaining to alcohol use. About a third (29%) mentioned behavioural problems that come with excess alcohol use, while 18% named vehicle accidents as a serious consequence, 15% mentioned health consequences and 12% mentioned vulnerability to sexual assault and violent behaviour. In terms of adolescents' views regarding safe drinking, 'not getting drunk' and 'drinking responsibly' were seen by 68% as safe alcohol use. Only 17% indicated that 'no drinking' was the safest option. In terms of communication between parents and their children regarding safe drinking habits, it was also found that mothers (more than 80%) played a pivotal role when compared to fathers (65%). Chassin, Pillow, Curran, Molina and Berrera (1998) reported that those adolescents whose mothers communicated with them had a lower risk of smoking. Ennett *et al.*, (2001) showed that for adolescents who were already using substances, parent-child communication actually made the situation worse. In terms of safe and risky alcohol use, Kafka and London (1991) reported that the openness of communication with a peer was unrelated to the extent of substance use, while open communication with a parental figure was negatively correlated with all substance use. Thus the more open the communication with a parental figure, the lower the level of substance use.



## **Adolescents' perceptions of alcohol use by their parents/guardians**

Adolescents in this study reported that 17% of fathers drank often and that 5% of mothers often used alcohol. The majority of adolescents (66%) seemed to think that their mothers were against them using alcohol while 45% thought that their fathers were against their use of alcohol. Studies by various researchers (Botvin, Schinke & Orlandi, 1995b; Hawkins, Catalano & Miller, 1992; Ievers-Landis & Dusenbury, 1995a; Pentz *et al.*, 1995, 1989; Simons-Morton, Haynie, Crump, Eitel & Saylor, 2001) have all shown significant positive relationships between youths who were less likely to use alcohol and having positive family relationships and peer role models. A study of 13 to 19-year-old adolescents pertaining to alcohol non-use and the availability of peer role models found that adolescents with positive family communication, good health practices and future aspirations were 1.5 to 2.5 times less likely to use alcohol than the others (Oman *et al.*, 2002).

Sher (1994) and Fischer *et al.*, (1994) argue that adolescents react to the stress of parental substance abuse by using substances themselves to reduce or numb the negative emotional states they experience. Family cohesion buffers adolescents against the impacts of paternal drinking (Doherty & Allen, 1994; Farrell, Barnes & Banerjee, 1995). When parents use alcohol frequently, their adolescents have an increased likelihood of exposure to alcohol-related risk behaviours (Haynes *et al.*, 2004). Jung (1995) claims that parents who drink alcohol have poorer relationships with their adolescent children. Wood, Read, Mitchell and Brand (2004) found that where parents were more permissive towards alcohol use, their adolescents were more likely to engage in heavy binge-drinking. Parental permissiveness also influences peer associations with a significant relationship between peer influence and alcohol use.

## **Family relationships/connectedness, house rules and alcohol use**

It is argued that this study will open the doors for further research into family studies in order to seek answers to reducing the high prevalence of adolescent risk behaviours in South Africa. It was found that strict house rules against alcohol use deterred adolescent alcohol use. Family connectedness, which measured the relationship between adolescents and their parents, was associated with low alcohol use. Thus positive

perceived family associations seemed to protect against alcohol use. A significant positive relationship was found between parental influences in terms of monitoring and adolescent alcohol use. Similarly, a positive correlation was found between the frequency of alcohol use and parental awareness of adolescent home coming time and adolescent whereabouts. A negative correlation was found between the frequency of alcohol use and less stringent weekend curfew times. This implied that the more permissive their curfew times were, the more frequently adolescents used alcohol.

In the first logistic regression model that was fitted, the five significant socio-demographic determinants of ever using alcohol indicated that for every 1 year increase in age the likelihood of using alcohol increased. In the final model, all factors related to adolescent alcohol use were noted. The study revealed that an increase in adolescent alcohol use was related to parental approval of adolescent alcohol use. Ninety-five percent (95%) of adolescents, whose parents approved of drinking, did drink alcohol with friends. The study also revealed that 48% of adolescents who had seen one or both of their parents drunk used alcohol themselves.

In a study conducted by Miller, P.A. Cowan, C. P. Cowan and Hetherington (1993), it was found that when parents had a relationship characterised by positive, affectionate feelings for each other, their relationships with their children were warmer; and when parent-child relationships were warmer, both preschool children and early adolescents behaved more appropriately. Authoritative parenting was associated with positive child behaviour outcomes, particularly regarding risk taking behaviours (Mayeseless *et al.*, 1998). These findings were supported by studies conducted worldwide such as in India (Carson *et al.*, 1999); China (Chen, Bauman, Rissel, Tang, Forero & Flaherty, 1997); Korea (Mantzicopolous & Oh- Hwang, 1998); and Hong Kong (Leung *et al.*, 1998).

According to Baumrind (1991), adolescents tend to internalise the values of their parents, whether these values are conforming or nonconforming. The success of shielding their children from risk-taking behaviours appears to be related to two factors that adolescents share in authoritative families. These are strong mutual attachment from childhood to adolescence and coherent, consistent management policies including supervision and discipline, for example house rules. Baumrind (1991) maintains that the continuing importance of parents to the healthy development of their adolescents in an authoritative

upbringing is a sufficient, but not a necessary, condition to producing competent, well-adjusted children, even in divorced families. In 14 to 15-year-old adolescents adequate house rules appear to be the foundation for better supervision and less conflict and thus lower levels of adolescent problem behaviours (Haynes *et al.*, 2004). In a study among 14 to 17-year-old adolescents, it was found that positive parenting practices (communication, monitoring) and involvement were critical and moderated the effects of peer influences on substance use in adolescents. Such practices were seen by the researchers as complementary to adolescents' pursuit of independence (Clark *et al.*, 2004).

### **Parental monitoring and supervision**

In the final model of the study, monitoring was reported not to be a determinant for adolescent alcohol use. A study on adolescents in grades 6 to 8 reported that the influence of peers on adolescent problem behaviour was buffered by parental monitoring (Chyung, Ennett, Bauman & Foshee, 2001). The longer the time adolescents spent independently from the parents though with sufficient parental monitoring and supervision; the more positive the behaviours developed if the adolescents believed that they were obliged to obey their parents. Thus, those who did accept parental authority were found to be less likely to be involved in problem behaviours (Chyung, Ennett, Bauman & Foshee, 2001).

### ***5.6 Peer Influence on Adolescent Alcohol Use***

Pressure from friends as perceived by the adolescent respondents was significantly correlated with adolescent substance use ( $p < 0.001$ ). High school learners in this study did not report much pressure from their peers to behave in a particular manner. Similarly, Kafka and London (1991) found that if an adolescent used alcohol and other substances, peers were estimated to use the same substances.

### ***5.7 Study limitations***

The limitations of this study must be acknowledged. Most importantly, the participants in the study were selected through non-probability purposive sampling, as the learners who were able to participate were made available at each schools' convenience and thus could not be stipulated by the researcher. The range of students who participated was therefore

not an entirely accurate demographic representation of South Africa's population of adolescents, as the ethnic distribution was almost 50% African, followed by around 25% each of White and Indian/Asian learners. The Coloured community was not represented at all. Secondly, the response rate for participants in a survey study of this nature was low. This had been anticipated. Although all the available learners had been invited to participate, a 57% participant response rate was obtained. The study was carried out among only fluent English speaking adolescents from selected schools and the participants were not offered the opportunity to complete the questionnaire in their home language. The study area was limited to the Emawaleni District and only five of the twelve schools in this area had been selected. Alcohol and drug use was assessed only for the month prior to the study, therefore it is unknown what behaviour occurred outside this time period as the study design was of a cross-sectional nature. Also, adolescents may not have responded honestly to the questions, although studies have shown that adolescent reporting on their parents' and own behaviours are far more accurate than parental reporting on their adolescents' risk behaviours. Studies have shown that adolescents' perceptions of parents are more accurate (Engels *et al.*, 2001) than parents' perceptions of their adolescents (Huver *et al.*, 2004). A cross-sectional research design was used. However, in future studies a longitudinal research design may be used to determine the stability of the observed associations over time in a South African context. Finally, further analyses need to be done to look at differences in parental practices and adolescent alcohol use in the different school settings in the province and nationally.

# CHAPTER VI: RECOMMENDATIONS AND CONCLUSIONS

## 6.1 *Introduction*

In both developed and developing countries alcohol plays a significant role in leisure activities and in various cultural and religious traditions. Along with the pleasure and benefits it provides, drinking brings many problems into developing societies. The term ‘epidemiological transition’, which implies a complex and interrelated change of health and disease patterns observed over time in a society and country, (Lozan *et al.*, 1995) is applicable to the transition from infectious diseases to chronic degenerative conditions that are brought on by alcohol misuse. Alcohol misuse is a significant component of the health profile of developing countries. Alcohol use impacts negatively on the family (Jernigan, 2001). The opening of South Africa’s markets and borders prompted foreign investment and engagement. These, however, contributed to the sharp increase in the traffic and trade of illegal drugs and alcohol accessibility. The large percentage of children and adolescents in our population, urbanization, lack of community involvement and the limited capacity of the criminal justice system are but a few of the negative contributions to this persisting problem we face with our youth.

## 6.2 *Recommendations*

6.2.1 Education and persuasion are usually the first prevention strategies that come to mind to combat negative behaviour patterns. Most evaluations of educational approaches have been of school programmes in a narrow range of societies. However, few substantial and lasting effects have been found with this approach. Persuasive media campaigns can show effects on attitudes and behaviours. The most successful approaches have concentrated not only on changing the drinkers’ behaviour, but on community engagements in terms of building popular support/advocating alcohol policy measures. This latter approach is associated with the framework for this study, which is the Ecological perspective, a multidimensional approach to reducing the risks of adolescent alcohol use.

6.2.2 Deterrence through the enforcement of existing National policies and legislation for alcohol use and driving and adolescent access to and use of alcohol. In practice, the country may lack the capacity to police or the willingness to devote sufficient resources to render deterrent measures effective. In South Africa, the legal age for purchasing and drinking alcohol is 18 years. However, as shown by this study and others, adolescents under this age still have free access to alcohol and use alcohol at much earlier ages. The source of this accessibility needs further investigation. Increasing alcohol taxes may further deter alcohol purchase. Also, stricter legislation and enforcement is needed to deter those who sell alcohol to adolescents under the legal age of purchase. Parents and or guardians need to be informed of their responsibility to monitor their children in this regard.

6.2.3 Empowerment of the youth to develop responsibility and accountability of their own behaviours may be the answer to many problems currently present amongst our adolescents which would enable them to make informed decisions regarding alcohol use. Peer counsellors and support are also necessary to counteract alcohol use through peer based interventions.

6.2.4 Surveillance organizations like South African Community Epidemiology Network of Drug Use provides an alcohol and drug database centre in four metropolitan areas in South Africa. Such organizations may be useful in advocating stricter policy making and management regarding substance use amongst adolescents. The South African Youth Risk Behaviour Survey should also play a significant role in awareness of substance use by our adolescents by making it public knowledge. More sensitive measuring instruments and accurate data over a longer period of time on the occurrence of substance use among the youth are necessary and the Departments of Health and Education need to be proactive in this regard. Another national Youth, Health, Risk Behaviour survey is needed.

6.2.5 Changing social norms and the development of a culture of responsible drinking is required. The challenge is to distinguish between responsible use of alcohol and its abuse and to determine the most responsible manner in which one can communicate the concept of responsibility and moderate alcohol consumption, particularly among adolescents, as this varies in individuals and the way in which they respond to it.

6.2.6 Compulsory parenting programmes and skills development should be practised by education, health, cultural and religious groups. Interventions must be targeted before adolescence as well as throughout adolescence. This effort should not only help parents identify and adopt promising child management techniques, but should motivate attributes of monitoring, setting rules, interactive communication skills as well as stimulate a broader social context that enables parents to have the time to develop positive family relationships. Parents should be motivated to delay the age at which their children are initiated into alcohol use and be provided with guidance on how to counteract social pressures, especially from peers.

6.2.7 The influence of engaging social networks and community projects using adolescents as peer role models and involvement in these activities have been shown to deter risk behavioural problems. This would serve as an excellent basis for reducing the prevalence of adolescent substance use.

6.2.8 Support for families and adolescents with substance abuse-related problems needs to be increased in communities. If parental use of alcohol is associated with adolescent use, then parental recovery from alcoholism or cessation of alcohol-related problems should reflect a reduction in family stress and an alteration in children's expectancies and alcohol-related behaviours.

6.2.9 Treatment programmes include health services that offer treatment to substance abuse by adolescents. Such treatment programmes need a holistic approach which should include support from both the families and the communities of the adolescent. A multidimensional strategy to reduce the prevalence of substance use amongst adolescents is essential. Once treatment and rehabilitation are complete, the supervision and monitoring of these adolescents must continue with support from all role players in the adolescents' life.

### **6.3 Conclusion**

At present, limited literature is available on parental practices and parents' support and involvement in reducing adolescent alcohol use. It is vital that more research be done in South Africa on parenting of adolescents and their substance use to improve our understanding in this regard. This needs to be recognized urgently in order to reduce the

prevalence of alcohol use by our youth. Multifaceted strategies are necessary to decrease tolerance of alcohol use in society in general and to improve public awareness about the risks associated with the use of alcohol. By reducing consumption, various associated problems may be counteracted. Conventional research approaches to these issues, for example surveys, will need to be supplemented by more studies on protective determinants for substance use and further qualitative studies to gain a better understanding of substance use among adolescents with particular reference to the role of the media in this regard. The steps that follow these should be to reach beyond the schools and develop multiple-agency and community-based problem solving strategies like focusing on the parents of adolescents and their relationship with their children.



## REFERENCES

- Anderson, A.R. & Henry, C.S. 1994. Family system characteristics and parental behaviours as predictors of adolescent substance use. *Adolescence*, vol. 29, pp. 405-420.
- Aneshensel, C.S., & Sucoff, C.A. Parental Social Support for Adolescents (PSSA). Available on Instruments/Assesments\_files\_new/assessment. Accessed 15/05/2007.
- Barnes, G.M., Reifman, A.S., Farrell, M.P, Uhteg, L & Dintcheff, B.A. 1994. Longitudinal effects of parenting on alcohol misuse among adolescents. *Alcoholism: Clinical and Experimental Research*, vol. 18, pp. 507.
- Baumrind, D. 1966. Effects of authoritative parental control on child behaviour. *Child Development*, vol. 37, pp. 887-907.
- Baumrind, D. 1971. Current patterns of parental authority. *Developmental Psychology*, vol. 4, pp.1-103.
- Baumrind, D. 1991. The influence of parenting style on adolescent competence and substance use. *Journal of Early Adolescence*, vol. 11(1), pp.56-95.
- Bearman, P.S., Jones, J. & Udry, J.R. 1997. The National Longitudinal Study of Adolescent Health Research Design. Available at: <http://www.cpc.unc.edu/addhealth> Accessed on 04/06/2006
- Beck, K.H.; Boyle, J.R. & Boekeloo, B.O. 2003. Parental monitoring and adolescent alcohol risk in a clinic population. *American Journal of Health Behavior*, vol. 27(2), pp.108-115.
- Bernstein, A & Gray, M. 1997. Social work: a beginner's text. Kenwyn. Juta & Company, Ltd. Bezuidenhout, F. 2004. A reader on selected social issues. Pretoria: Van Schaik Publishers.
- Bezuidenhout, M.C & Dietrich, H. 2007. Anxiety sensitivity moderates relations among tobacco smoking, panic attack symptoms and bodily complaints. *Journal of Psychology and Behavioural Assessment*, vol. 29(2), pp. 69-79.
- Blum, R.W., & Ireland, M, 2004. Reducing risk, increasing protective factors: findings from the Caribbean Youth Health Survey. *Journal of Adolescent Health*, vol. 35(6), pp.493-500.
- Borawski, E.A., Ievers- Landis, C.E., Lovegreen, L.D., & Trapl, E.S., 2003. Parental Monitoring Negotiated Unsupervised Time, and Parental Trust: The Role of Perceived Parenting Practices in Adolescent Health Risk Behaviours. *Journal of Adolescent Health*, vol. 33(2), pp 60-70.

- Botvin, G.J., Baker, E., & Dusenbury, L. 1995a. Long term follow-up results of a randomized drug abuse prevention trial, *Journal of the American Medical Association*, vol. 273, pp. 1106-1112
- Botvin, G.J., Schinke, S. & Orlandi, A.M. 1995b. Drug abuse prevention with multi-ethnic youth. London: Sage.
- Bronfenbrenner, U., & Morris, P. 1998. In (Series editor, Damon W.) Lerner RM (Ed). *Handbook of Child Psychology*. Fifth Edition, vol. I: Theory, pp. 993-1028.
- Califano, J.A 1999. The best amongst us: Children of substance-abusing parents. *America*, vol. 180(14), pp. 10-12.
- Carey, J., & Knight, A. 1990. County collaboration creates a unique drug treatment program for adolescents. *Thrust for Education Leadership*, vol 19(4), pp. 27-29.
- Carlson, J & Corcoran, B. 2001. Family structure and children's behavioural and cognitive outcomes. *Journal of Marriage and the Family*, vol. 63(3), pp. 779-792.
- Carson, K.T. 1998. The Self – yesterday, today and tomorrow: another look at adolescent suicide. *Child and Adolescent Social Work*, vol. 18(4), pp. 241-252.
- Central Statistical services. RSA Statistics in Brief .2001. Pretoria: Government Printers.
- Chassin, L., Pillow, D.R., Curran, P.J., Molina, B.S.G., & Berrera, M.1998. Relation of parental alcoholism to early adolescent substance use: Mediating mechanisms, *Journal of Abnormal Psychology*, vol. 102, pp 3-19.
- Chao. R.K. 1994. Beyond parental control and authoritarian parenting style: understanding Chinese parenting through the cultural notion of training. *Child Development*, vol. 65(4), pp. 1111-1119.
- Chen, J., Bauman, A., Rissel, C., Tang, K.C., Forero, R., & Flaherty, B. 1999. Substance use in high school students in New South Wales, Australia, in relation to language spoken at home. *Journal of Adolescent Health*, vol. 23, pp. 53-63.
- Chuang, Y.C.; Ennett, S.T.; Bauman, K.E. & Foshee, V.A. 2005. Neighbourhood influences on adolescent cigarette and alcohol use: mediating effects through parent and peer behaviours. *Journal of Health and Social Behaviour*. vol. 46 (2), pp. 187-204.
- Chyung, Y.J., Darling, N & Caldwell, L. 2001. Parental monitoring and legitimacy of parental authority: Flip sides of the same coin? Pennsylvania State University, University Park,
- Clark, P.I., Scarisbrick-Hauser, A., Gautam, S.P., & Wirk, S.J. 1999. Anti-tobacco Socialization in Homes of African-American and White Parents, and Smoking and Non-smoking Parents. *Journal of Adolescent Health*, vol. 24, pp. 329-339.

- Clark, D.B. & Winters, K.C. 2002. Measuring risks and outcomes in substance use disorders prevention research. *Journal of Consulting and Clinical Psychology*, vol. 70(6), pp. 1207-1223.
- Clark D.B., Thatcher D.L. & Maisto S.A. 2004. Adolescent neglect and alcohol use disorders in two parent families. *Child Maltreatment*, vol.9 (4), pp. 357-370.
- Cohen, D.A. Richardson, J & LaBree, L. 1994. Parenting behaviours and the onset of smoking and alcohol use: a longitudinal study. *Paediatrics*, vol. 94, pp. 368-375.
- Cohen, D.A. & Rice, J. 1997. Parenting Styles, adolescence substance use, and academic achievement. *Journal of Drug Education*, vol. 27(2), pp. 199-211.
- Conger R. D., Rueter, M. A & Elder G. H. J. 1999. Couple resilience to economic pressure. *Journal of Personality and Social Psychology*, vol. 76, pp. 54-71.
- Cowan, P. 1991. *Family Transitions*. L.Erlbaum Associates.
- Coombs, R.H. & Landsverk, J. 1991. Parenting styles and substance use during childhood and adolescence. *Journal of Marriage and the Family*.vol 50, pp. 473-482.
- Cottrell, J. L.; Li, X; Harris, C., D'Alessandro, D, Atkins, M., Richardson, B & Stanton, B. 2003. Parent and adolescent perceptions of parental monitoring and adolescent risk involvement. *Parenting: Scientific Practice*, vol. 3(3), pp. 179-195.
- Darling, N. 1999. Parenting Styles and Its Correlates. ERIC Digest.
- Darling, N. & Steinberg, L. 1993. Parenting style as context: an integrative model. *Psychological Bulletin*, vol.113 (3), pp. 487-496.
- De Vries, H., Engels, R., Kremers, S, Wetzels, J, & Mudde, A.2003a. Parents' and Friends' smoking status as predictors of smoking onset: findings from six European countries. *Health Education Research*, vol. 18, pp. 627-636.
- De Vries, H., Mudde, A., Kremers, S., Wetzels, J., Uiters, E., Ariza, C., Vitoria, P.D., Fielder, A, Holm, K, Janssen, K, Lehtovuori, R & Candel, M. 2003b. The European Smoking Prevention Framework Approach (ESFA): short term effects. *Health Education Research*, vol. 18(6), pp. 649-663.
- DiClemente, R.J. Wingood, G.M. Crosby, R., Sionean, C., Cobb, B.K., Harrington, K., Davies, S., Hook, E.W., & Kim Oh, M. 2001. Parental Monitoring: Association with adolescents risk behaviours. *Paediatrics*, vol. 107(6), pp. 1363-1368.
- Dishion, T.J., & McMahon, R.J. 1998. Parental monitoring and the prevention of child and adolescent problem behaviour: A conceptual and empirical formulation. *Clinical Child Family Psychology Review*, vol.1 (1), pp. 61-75.

- Doherty, W.J & Allen, W. 1994. Family functioning and parental smoking as predictors of adolescent cigarette use: a six year prospective study. *Journal of Family Psychology*, vol, 8, pp. 347-353.
- Dornbusch, S., Carlsmith, J., Bushwell, S., Ritter, P., Leiderman, P., Hastorf, A., & Gross, R. 1985. Single parents, extended households and the control of adolescents. *Child Development*, vol, 56. pp. 326-341.
- Duncan, S.C., Duncan, T.E., Biglan, A, & Ary, D. 1998. Contributions of the social context to the development of adolescent substance use: a multivariate latent growth modelling approach. *Drug and Alcohol Dependence*, vol 50(1), pp.57-71.
- Duncan, S.C., Duncan, T.E., Strycker, L.A., & Chaumeton, N.R. 2002. Relations between youth antisocial and prosocial activities. *Journal of Behavioural Medicine*, vol. 25, pp. 425-438.
- Dutra, R., Miller, K.S. & Forehand, R. 1999. The process and content of sexual communication with adolescents in two-parent families: Associations with sexual risk-taking behaviour. *AIDS and Behaviour*, vol. 3(1), pp. 59-66.
- Engels, R.C.M.E., Knibbe, R.A., De Vries, H, & Drop, M.J. 1999. Influences of parental and best friends smoking and drinking on adolescent use: a longitudinal study. *Journal of Applied Social Psychology*, vol. 29, pp. 338-362.
- Engels, R.C.M.E. & Willemsen, M. 2004. Communication about smoking in Dutch families: associations between anti-smoking socialization and adolescent smoking-related cognitions. *Health Education Research*, vol. 19(3), pp. 227-238.
- Engels, R.C.M.E., Vermulst, A.D., Dubas J.S. Bot, S.M, & Gerris, J. 2005. Long-Term effects of Family Functioning and Child Characteristics on Problem Drinking in Young Adulthood. *European Addiction Research*, vol. 11(1), pp. 32-37.
- Ennett, S.T., Bauman, K.E., Foshee, V.A., Pemberton, M & Hicks, K.A. 2001. Parent-Child Communication about Adolescent Tobacco and Alcohol Use: What Do Parents Say and Does It affect Youth Behaviour? *Journal of Marriage and the Family*, vol. 63(1), pp. 48-62.
- Farrell, M.P, Barnes, G.M, & Banerjee, S. 1995. Family cohesion as a buffer against the effects of problem-drinking fathers on psychological distress, deviant behaviour and heavy drinking in adolescents. *Journal of Health and Social Behaviour*, vol. 36, pp. 377-385.
- Fearnow, M., Chassin, L., Presson, C.C., & Sherman, S.J. 1998. Determinants of parental attempts to deter their children's cigarette smoking. *Journal of Applied Developmental Psychology*, vol. 19(3), pp. 453-468.
- Fischer, L.A., & Bauman, K.E. 1994. Influence and selection in the friend-adolescent relationship: findings from studies of adolescent smoking and drinking. *Journal of Applied Social Psychology*, vol. 18, pp.925-943.

- Forehand, R., Thomas, A.M. & Wierson, M., Brody, G & Fauber, R. 1990. Role of maternal functioning and parenting skills in adolescent functioning following parental divorce. *Journal of Abnormal Psychology*, vol. 99(3), pp. 278-283.
- Fox, R. A., Platz, D.L. & Bentley, K.S. 1995. Maternal factors related to parenting practices, development expectations and perceptions of child behaviour problems. *Journal of Genetic Psychology*, vol. 156(4), pp. 431-441.
- Frias-Armenta, M. & McCloskey, L.A. 1998. Determinants of harsh parenting in Mexico. *Journal of Abnormal Child Psychology*, vol. 26(2), pp. 129-139.
- Geldard, K & Geldard, D 1999. *Counselling Adolescents: the pro-active approach*. London: Sage Publications.
- Gershoff, E.T., Miller, P.C. & Holden, G.W. 1999. Parenting influences from the pulpit: Religious affiliation as a determinant of parental corporal punishment. *Journal of Family Psychology*, vol. 13(3), pp. 307-320.
- Glanz, K. & Rimer, B.K. 2005. *Theory at a Glance: A Guide for Health Promotion Practice*. (Second edition). United States Department of Health & Human Services. National Institute of Health.
- Grant, K.A., Tonigan, J.S., & Miller, W.R, 1995. Comparison of three alcohol consumption measures: A concurrent validity study. *Journal of Studies on Alcohol*, vol, 56, pp. 168-172.
- Grusec, J. E & Goodnow, J. J. 1994. Impact of parental discipline methods on the child's internalization of values: A reconceptualization of current points of view. *Developmental Psychology*, vol, 30, pp. 4-19.
- Grotevant, H.D & Cooper C.R. 1985. Patterns of interaction in family relationships and the development of identity exploration in adolescence. *Child Development*, vol. 56, pp. 415-428.
- Harris, S.H. 2004. Exploring sexual risk taking in low risk African American adolescents. Oral presentation as part of an HIV/AIDS panel discussion. Minority women's health summit. Washington, DC.
- Hasin, D., Carpenter, K., McCloud, S, Smith, M., & Grant, B. 1997. The alcohol use disorder and associated disabilities interview schedule: reliability of alcohol and drug modules in a clinical sample. *Drug and Alcohol Dependence*, vol, 44, pp. 133-141.
- Hawkins, J.D., Catalano, P & Miller, J.Y. 1992. Risk and protective factors for alcohol and other drug problems in adolescent and early adulthood: Implications for substance abuse prevention. *Psychological Bulletin*, vol. 112(1), pp. 64-105.
- Hayes, L, Smart, D, Toumbourou, J.W., & Sanson, A. 2004. Parenting influences on adolescent alcohol use. Australian Government of Health and Ageing & Australian Institute of Family Studies.

- Henriksen, L., & Jackson, C. 1998. Anti-smoking socialization: relationship to parent and child smoking status. *Health Communication*, vol. 10, pp. 87-101.
- Henry, C.S., Robinson, L.C. & Wilson, S.M. 2003. Adolescent perceptions of their family system, parents' behaviour, self-esteem and family life satisfaction in relation to their substance use. *Journal of Child and adolescent substance abuse*, vol, 21(3), pp. 29-59.
- Hetherington, E.M., Clingempeel, W.G., Anderson, E.R., Deal, J.E., Stanley-Hagan, M. Hollier, E.A, & Linder, M.S. 1992. Coping with marital transition. *Child Development*, vol. 57, (2-3, serial no. 227).
- Hofman, A.D. 1997. Communicating with adolescents and their parents. In Hoffman, A.D. & Greydanus, D.E. eds. *Adolescent Medicine*, 3<sup>rd</sup> edition, Stamford, CT: Appleton & Lange, pp. 40-50
- Huver, R.M.E., Engels R.C.M.E. & De Vries, H. 2004. Factors associated with Parenting Styles: Associations between Parental Characteristics and Parenting Styles. Department of Health education and Promotion, Maastricht University, 6200 MD Maastricht, The Netherlands.
- Jackson, C., Henriksen, L., Dickinson, D., & Levine, W. 1997. The early use of alcohol and tobacco: Its relation to children's competence and parents' behaviour. *American Journal of Public Health*. vol. 87, pp. 359-364.
- Jacob, T., & Johnson, S. 1997. Parenting influences on the development of alcohol abuse and dependence. *Alcohol Health and Research World*, vol 21(3), pp. 204-210.
- Jacob, T, & Moser, R.P., Windle, M., Loeber, R., & Stouthamer-Loeber, M. 2000. A new measure of parenting practices involving preadolescents and adolescent children. *Behaviour Modification*, vol, 24. pp. 611-634.
- Jernigan, D., 2001. *Global status report: Alcohol and young people*, World Health organization, Geneva.
- Johnson, V., & Pandina, R.J. 1991. Effects of family environment on adolescent substance use, delinquency and coping styles. *American Journal of Drug and Alcohol Use*, vol. 17, pp. 71-88.
- Johnson, P.B., & Johnson, H.L. 2000. Reaffirming the power of parental influence on adolescent smoking and drinking decisions, *Adolescent & Family Health*, vol. 1(1), pp. 37-43.
- Johnston, L., O'Malley, P & Backman, J. 2000. Monitoring the future: National Results of Adolescent Drug Use. Overview of key findings, 1999. Maryland: National Institute on Drug Issues.

- Jung, J. (1995). Parent-child closeness affects the similarity of drinking levels between parents and their college age children. *Addictive Behaviours*, vol. 20, pp. 61-67.
- Kafka, R. R & London, P. 1991. Communication in relationships and adolescent substance use: the influence of parents and friends. *Adolescence*, vol.26 (103), pp. 587-598.
- Kandel, D.B., & Andrews, K. 1987. Process of adolescent socialisation by parents and peers. *International Journal of Addiction*, vol. 22, pp. 319-342.
- Kendler, K.S., Sham, P.C., & MacLean, C.J. 1997. The determinants of parenting: An epidemiological, multi-informant, retrospective study. *Psychological Medicine*, vol. 27, pp. 549-563.
- Koenig, A.J, Ialongo, N., Wagner, B.M., Poduska, J & Kellam, S 2002. Monitoring the future. National results of adolescent drug use: overview of key findings, 1999. Maryland: National Institute of Drug Issues. *Child Abuse and Neglect*, vol.26, pp. 1211-1233.
- Kung, E.M. & Farrell, A.D. 2000. The role of parents and peers in early adolescent substance use: An examination of mediating and moderating effects. *Journal of Children and Family Studies*, vol. 9(4), pp. 509-528.
- Lamborn, S.D., Mounts, N.S., Steinberg, L., & Dornbusch, S.M. 1991. Patterns of competence and adjustment among adolescents from authoritative, authoritarian, indulgent and neglectful families. *Child Development*, vol. 62, pp. 1049-1065.
- Leinonen, J.A., Solantaus, T.S. & Punamaki, R.L. 2003. Social support and the quality of parenting under economic pressure and workload in Finland: The role of the family structure and parental gender. *Journal of Family Psychology*, vol. 17(3), pp. 409-418.
- LeDoux, S., Miller, P., Choquet, M., & Plant, M. 2002. Family structure, parent-child relationships and alcohol and other drug use amongst teenagers in France and the United Kingdom. *Alcohol and Alcoholism*, vol. 37(1), pp. 52-60.
- Lempers, J, D., Clark-Lempers, D & Simons, R. L. 1989. Economic hardship, parenting and distress in adolescence. *Child Development*, vol, 60, pp. 25-39.
- Loeber, R, & Dishion, T.J. 1983. Early predictors of male delinquency: A review. *Psychological Bulletin*, vol. 94, pp. 68-98.
- Louw, D., Van Ede, D., & Louw, A. 1998. Human development. Cape Town: Kagiso Tertiary.
- Lozan, R., Murray, C.J.L. & Bobadilla, J.L. 1995. Burden of disease assessment and health system reform: Results of a study in Mexico. *Journal of International Development*, vol. 7, pp. 555-563.

- Mantzicopolous, P. Y & Oh-Hwang, Y. 1998. The relationship of psychosocial maturity to parenting quality and intellectual ability for American and Korean adolescents, *Contemporary Educational Psychology*, vol. 23, pp 195-206.
- Marshal, M.P. & Chassin, L. 2000. Peer influence on adolescent alcohol use: The moderating role of parental support and discipline. *Applied Developmental Science*, vol., 4 (2), pp. 80-88.
- Matthews, B.M.F 2004. An exploratory study of aspects on environmental conditions associated with alcohol and drug abuse and criminal behaviour. University of the Western Cape.
- Mayeseless, O, Scharf, M, & Shott, M. 2003. From authoritative parenting practices to an authoritarian context: exploring the person-environment fit. University of Haifa, Israel. *Journal of Research on Adolescence*, vol. 13(4), pp. 427-456.
- McCoy, C.B., Metsch, L.R., & Inciardi, J.A. 1996. Intervening with drug-involved youth. London: Sage.
- Miller, N. B. Cowan, P.A. & Cowan, C.P. & Hetherington, E.M 1993. Externalising in preschoolers and early adolescents: A cross-sectional study replication of a family model. *Developmental Psychology*, vol. 29(1), pp. 3-18.
- Miller, L., Davies, M & Greenwald, S. 2000. Religiosity and substance use and abuse among adolescents in the National Comorbidity Survey. *Journal of American Academy of Child and Adolescent Psychiatry*, vol. 39(9), pp. 1190-1197.
- Miller, J.W., Naimai, T.S., Brewer, R.D & Everett-Jones, S. 2006. Binge drinking and associated health risk behaviours among high school students. Centre for Chronic Disease Prevention and Health Promotion. Atlanta, Georgia.
- Minton, C., Kagan, J & Levine, JA. 1971. Maternal control and obedience in the two year old. *Child Development*, vol. 42, pp. 1873-1894.
- Motepe, M.M. 2006. A life skills programme for early adolescent AIDS orphans. University of Pretoria.
- Neser, J.J., Van der Merwe, E., Ovens, M, Ladikos, A, & Prinsloo, J. 2003. Under age drinking in schools: an exploratory survey, *Acta Criminologica*, vol. 16(5), pp. 123-135.
- O'Byrne, K.K., Haddock, C.K. & Poston, W.S.C. 2002. Parenting style and adolescent smoking. *Journal of Adolescent Health*, vol. 30, pp. 418-425.
- Oetting, E.E., & Beauvais, F. 1990. Adolescent drug-use: findings of national and local surveys. *Journal of Consulting and Clinical Psychology*, vol. 58, pp. 385-394.



- Oman, R.F., Mcherory, K., Vesely, S., Aspy, C.B., Smith, D.W., & Penn, D.A. 2002. An adolescent age group approach for examining youth risk behaviours. *American Journal of Health Promotion*, vol. 16, pp. 167-176.
- Parry, C., 1998. Binge drinking among teenagers. Available at <http://www.sahealthinfo.org.htm>. Accessed on 15/05/2007.
- Parry, C.D.H. & Bennetts, A.L. 1998. Alcohol policy and public health in South Africa. Cape Town: Oxford University Press. Cape Town, South Africa.
- Parry, C.D.H., & Karim, Q.A. 1999. Country report: Substance abuse and HIV/AIDS in South Africa. 1999 Global Research Network Meeting on HIV prevention in drug-using populations. Second Annual Report Meeting. (August 26-29, 1999). Atlanta: Georgia.
- Parry, C.H.D, Pluddermann, A, Bhana, A, Bayley, J & Potgieter, H. 2000a. Monitoring alcohol and drug abuse trends in South Africa. (July 1996-December 1999). *SACENDU Research Brief*. vol. 3(1), pp.1-16.
- Parry, C. 2000b , Alcohol problems in Developing Countries: Challenges for the New Millennium. Symposium Paper- Medicine Meets Millennium. *Suchtmed*, vol 2(4).pp. 216-220.
- Parry, C., 2000c , Alcohol and other Drug Use .South African Health Review 2000. Durban: Health Systems Trust, pp. 441-454.
- Parry, C. 2002. Alcohol misuse and public health: a 10-point action plan. Available at <http://www.sahealthinfo.org/admodule/alcoholmisuse.htm>. Accessed on 15/5/2007.
- Parry, C.D.H., Bhana, A., Myers., Pludderman, A., Siegfried, N., Morojele, N., Flisher, A.J., & Kozel, N.J. 2002. The South African Community Epidemiology Network on Drug Use (SACENDU): description, findings (1997-1999) and policy implications. *Addiction*, vol. 97, pp. 969-976.
- Parry C.D.H., Myers, B. & Morojele, N.K., Flisher, A.J., Bhana, A, Donson, H & Pluddermann, A. 2004. Trends in adolescent and other drug use: findings from three sentinel sites in South Africa. (1997-2001). *Journal of Adolescence*, vol. 27(4), pp. 429-440.
- Pentz, M.A, Dwyer, J.H., MacKinnon, D.P, Flay, B.R., Hansen, W.B., Wang, E.Y.I, & Johnson, C.A. 1989. A multi-community trial for primary prevention of adolescent drug abuse: effects on drug use prevalence. *Journal of American Medical Association*, vol. 261, pp. 3259-3266.
- Pentz, M. 1995. The school community interface in comprehensive school health education. In: S. Stansfield (Ed). 1996. Institute of Medicine Annual Report, Committee on Comprehensive School Health Programs, Washington DC: National Academy Press.

- Peterson, P.L., Hawkins, J.D., Abbott, R.D., & Catalano, R.F 1995. Disentangling the effects of parental drinking, family management and parental alcohol norms on current drinking by Black and White adolescents. In Boyd, G.M., Howard, J & Zucker, R.A. (Eds). *Alcohol problems among adolescents: current directions in prevention research*. (pp 33-57). Hillsdale, NJ: Lawrence Erlbaum.
- Pierret, C.R., 2001. The effect of family structure on youth outcomes in the NLSY97. In Michael, R.T. (Ed). *Social awakening: Adolescent behaviour as adulthood approaches* (pp 25-48). Chicago: Irving B, Harris Graduate School of Public Policy Studies, University of Chicago.
- Power, T.G & Chapieski, M.L. 1986. Childrearing and impulse control in toddlers: A naturalistic investigation. *Developmental Psychology*, vol, 22: 271-275.
- Reddy, S.P., Panday, S, Swart, D., Jinabhai, C.C., Amosum, S.L., James, S., Monyeki, K.D., Stevens, G, Morojele, N. Kambaran, N.S. Omardien, R.G & Van den Borne, H.W. 2003. *Umthenthe Uhlaba Usamila- The South African Youth Risk Behaviour Survey 2002*. South African Medical Research Council, Cape Town.
- Reeves, D. 1984. Parental power and adolescents' drinking. *Psychology Report*, vol. 55, pp. 161-162.
- Rehm, J, Gmel, G., Room, R., Monteiro, M, Gutjahr, E, Graham, K, Rehn, N, Sempos, T., & Jernigan, D. 2001. Alcohol as a risk factor for burden of diseases. Geneva: Report submitted to WHO. *European Addiction Research*, vol 96(4), pp. 138-147.
- Reis, J., Stein, B, & Bennett, S. 1986. Ecological Determinants of parenting. *Family Relations: Journal of Applied Family and Child Studies*, vol., 35, pp. 547-554.
- Resnick, M.D., Bearman, P.S., Blum, R.W., Bauman, K.E., Harris, K.M., Jones J, Tabor, J, Beuhring, T., Sieving, R.E., Shew, M, Ireland, M, Bearinger, L.H. & Udry, J.R. 1997. Protecting adolescents from harm: Findings from the National Longitudinal Study on Adolescent Health. *Journal of American Medical Association*, vol. 278(10), pp. 823-832.
- Romer, D., Stanton, B., Galbraith J., Feigelman, S, Black, M.M, & Li, X. 1999. Parental influence on adolescent on adolescent sexual behaviour in high-poverty settings. *Archives of Paediatrics & Adolescent Medicine*, vol. 53 (10), pp. 1055-1062.
- Rosenthal, D., Senserrick, T. & Feldman, S. 2001. A typology approach to describing parents as communicators about sexuality. *Archives of Sexual Behaviour*, vol. 30(5), pp. 463-482.
- Santelli, J.S., Lowry, R., Brener, N.D & Robin, L. 2000. The association of sexual behaviours with socioeconomic status, family structure and race, ethnicity among US adolescents. *American Journal of Public Health*, vol. 90, pp. 1582-1588.

- Sargent, J.D. & Dalton, M. 2001. Does parental Disapproval of Smoking Prevent Adolescents from Becoming Established Smokers? *Paediatrics*, vol. 108(6), pp. 1256-1262.
- Sartor, C.E. 1999. The influence of parental monitoring and support on adolescent identity development. US Department of Education. Office of Educational research and Improvement.
- Sher, K.J. 1994. Children of alcoholics: a critical appraisal of theory and research. Chicago: University of Chicago.
- Sher, K.J., Walitzer, K.S., Wood, P.K., & Brent, E.E. 1994. Characteristics of children of alcoholics: putative risk factors, substance use and psychopath. *Journal of Abnormal Psychology*, vol. 100, pp. 427-449.
- Simons, R.L., Beaman, J., Conger, R.D., & Chao, W. 1993a. Childhood experience, conceptions of parenting, and attitudes of spouse as determinants of parental behaviour. *Journal of Marriage and the Family*, vol.55, pp. 91-106.
- Simons, R.L., Beaman, J., Conger, R.D., & Chao, W. 1993b. Stress, support and antisocial behaviour trait as determinants of emotional well-being and parenting practices among single mothers. *Journal of Marriage and the Family*, vol. 55, pp. 385-398.
- Simons-Morton ,B., Haynie, D.L., Crump, A.D., Eitel, P., & Saylor, K.E.2001. Peer and Parent Influences on smoking and drinking among early adolescents. *Health Education and Behaviour*, vol. 28(1), pp. 95-107.
- Skinner, M.L., Elder, G.H.J & Conger, R.D. 1992. Linking economic hardship to adolescent aggression. *Journal of Youth and Adolescence*, vol, 21: 259-276.
- Smith, M.A., & Rosenthal, D.A. 1995. Adolescents perceptions of their risk environment, *Journal of Adolescence*, vol. 18, pp. 229-245.
- Snider, J.B, Clements, A & Vazsonyi, A.T., 2004. Late adolescent perceptions of parent religiosity and parenting processes. *Family Process*, vol. 43(4), pp. 489-501.
- South African Demographic and Health Survey. 1998. Chapter 9. Adolescent Health. Available on: <http://www.doh.gov.za/facts/index.html>. Accessed on 31 March, 2007.
- Stanton, B.F.,Li, X., Gailbraith, J., Cornick., G., Feigelman, S., Kaljee, L., & Zhou, Y. 2000. Parental underestimates of adolescent risk behaviour: a randomized controlled trial of a parental monitoring intervention. *Journal of Adolescent Health*, vol. 26, pp. 18-26.

- Steinberg, L., Lamborn, S.D., Dornbusch, S.M., & Darling, N. 1992. Impact of parenting practices on adolescent achievement: Authoritative parenting, school involvement and encouragement to succeed. *Child development*, vol. 63, pp 1266-1281.
- Steinberg, L., Fletcher, A., & Darling, N. 1994. Parental monitoring and peer influences on adolescent substance use. *Paediatrics*, vol. 93, pp. 1060-1064.
- Stice, E.; Barrera, M., Chassin, L. 1998. Prospective differential prediction of adolescent alcohol use and problem use: examining the mechanism of effect. *Journal of Abnormal Psychology*. vol. 10, pp. 616-628.
- Strassberg, Z., Dodge, K.A., Pettit, G.S. & Bates, J.E. 1994. Spanking in the home and children's subsequent aggression towards kindergarten peers. *Development and Psychopathology*, vol. 6, pp 445-461.
- South Coast SUN Newspaper. 25 August 2006 & 01 September 2006.
- Statistics South Africa. 2001. The people of South Africa: population census, 1996. Census in Brief. Pretoria: Statistics South Africa 2001.
- Statistical Package for Social Sciences (SPSS, Version 15.0., Illinois, Chicago, USA).
- Swart, D, Panday, S, Reddy, P., Bergstrom, E & De Vries, H. 2006. Access point analysis. What do adolescents in South Africa say about tobacco control programmes? *Health Education Research*, vol, 21(3), pp.393-406.
- Swart, D, Reddy, P. & Panday, S. 2004. *The 2002 Global Youth Tobacco Survey (GYTS): The 2nd GYTS in South Africa (SA)-A comparison between GYTS (SA) 1999 and GYTS (SA) 2002*. South African Medical Research Council, Cape Town.
- Taylor, J, & Carroll, T. 2001. Youth alcohol consumption: Experiences and expectations, in Williams, P.S. (ed), *Alcohol, young persons and violence, Research and Public Policy* series No. 35, Australian Institute of Criminology, Canberra.
- Taylor, M., Jinabhai, C.C., Naidoo, K, Kleinschmidt & Dlamini, S.B. 2003. An epidemiological perspective of substance use among high school pupils in rural KwaZulu-Natal. *South African Medical Journal*, vol. 93(2), pp.136-140.
- Terre Blanche, M. & Durrheim, K. 1999. Research in practice: applied methods for the social sciences. Cape Town: University of Cape-Town Press.
- Tyas, S. & Pederson, L. 1998. Psychosocial factors related to adolescent smoking: a critical review of the literature. *Tobacco Control*, vol. 7, pp. 409-420.

- Van Niekerk, E. & Prins, A. 2001. Theoretical perspectives in counselling. In Van Niekerk, E & Prins, A. *Counselling in Southern Africa: A youth perspective*. Sandown: Heinemann Publishers.
- Walker, C. & Walker, A. 2000. Social policy and social work. In Adams, R., Dominelli, L & Payne, M. *Social Work: themes, issues and critical debates*. Palgrave: Houndmills.
- Wang, M.Q., Fitzhugh, E.C., Green., B.L., Turner, L.W., Eddy, J.M & Westerfield, R.C.1999. Prospective social-psychological factors of adolescent smoking progression. *Journal of Adolescent Health*, vol. 24, pp. 2-9.
- Wassermann G.A., Miller, L.S. Pinner, E., Jaramillo, B. 1996. Parenting predictors of early conduct problems in urban high-risk boys. *Journal of American Academy of Child and Adolescent Psychiatry*, vol. 35, pp. 1227-1236.
- Weinraub, M & Wolf, B.M. 1983. Effects of stress and social supports on mother-child interactions in single- and two- parent families. *Child Development*, vol, 54:1297-1311.
- Weiss, L.H. & Schwarz, J.C.1996. The relationship between parenting types and older adolescents' personality, academic achievement, adjustment and substance abuse. *Child Development*, vol. 67(5), pp. 2101-2114.
- Wesley-Perkins, H. 1987. Parental Religion and Alcohol Use Problems As Intergenerational Predictors of Problem Drinking Among College Youth. *Journal for the Scientific Study of Religion*, vol. 26(3), pp 340-357.
- Whitbeck, L.B., Simons, R. L., Conger, R.D., Wickrama, K. A. S., Ackley, K.A. & Elder G.H.J. 1997. The effects of parents' working conditions and family economic hardship on parenting behaviours and children's self-efficacy. *Social Psychology Quarterly*, vol, 60:291-303.
- Wierson, M., Armistead, L., Forehand, R , McCombs, T & Fauber, R. 1990. Parent-adolescent conflict and stress as a parent: Are there differences between a mother and a father? *Journal of Family Violence*, vol. 5(3), pp. 187-197.
- Wild, L.G., Flisher, A.J., Bhana, A., & Lombard, C. 2004. Associations among adolescent risk behaviours and self-esteem in six domains. *Journal of Child Psychology and Psychiatry*, vol. 45(8), pp. 1454-1467.
- Wood, M.E., Read, J.P., Mitchell, R.E., & Brand, N.H. 2004. Do parents still matter? Parent and Peer influences on Alcohol Involvement among recent high school graduates. *Psychology of Addictive Behaviours*, vol. 18(1), pp. 19-30.
- World Health Organisation 2002. The World Health Report 2002. Reducing Risks, Promoting Healthy Life. Geneva: World Health Organization.

Wu, N.S., Lu, Y., Sterling, S., & Weisner, C. 2004. Family environment factors and substance abuse severity in an HMO adolescent treatment population. *Clinical Paediatrics*, vol 43, pp. 323-333.

Zahn-Waxler, C., Radke-Yarrow, M & King, R.A. 1979. Child rearing and children's pro-social initiations towards victims of distress. *Child Development*, 50:319-330.

Zastrow, C. 2000. Introduction to social work and social welfare. Belmont: Wadsworth Publishing Company.

## **APPENDIX A**

**APPROVAL OF RESEARCH PROPOSAL,  
ACCEPTANCE LETTER FROM THE POSTGRADUATE  
EDUCATION COMMITTEE, NELSON R MANDELA  
SCHOOL OF MEDICINE,  
UNIVERSITY OF KWAZULU-NATAL**

**ghuman**

---

**From:** "Cheryl Borresen" <Borresen@ukzn.ac.za>  
<ghuman@telkomsa.net>  
**Date:** 15 November 2006 09:33  
**Subject:** PROTOCOL H126/06

November 2006

Professor A Meyer-Weitz  
Technology  
WARD COLLEGE

Professor Meyer-Weitz

PROTOCOL : Perceived parenting practices related to alcohol use in  
13 year old adolescents in public high schools of the Emawaleni  
District, KwaZulu-Natal. S Ghuman, Family and Public Health. Ref.:  
H126/06

The Postgraduate Education Committee considered the abovementioned  
protocol and the protocol is given approval for the MPH degree.

Please note that the study may not begin without ethics approval.

We take this opportunity to wish the student every success with the  
study.

Yours sincerely

Prof. P MOODLEY  
Chairman, Postgraduate Education Committee

Prof. S Ghuman - e-mail : [ghuman@telkomsa.net](mailto:ghuman@telkomsa.net)  
Heslop, Postgraduate Education

Find our Email Disclaimer here: <http://www.ukzn.ac.za/disclaimer>



## **APPENDIX B**

**APPROVAL OF RESEARCH PROPOSAL,  
ACCEPTANCE LETTER FROM THE BIOMEDICAL  
RESEARCH ETHICS ADMINISTRATION,  
NELSON R MANDELA SCHOOL OF MEDICINE,  
UNIVERSITY OF KWAZULU-NATAL**



UNIVERSITY OF  
KWAZULU-NATAL

Research Office  
BIOMEDICAL RESEARCH ETHICS ADMINISTRATION  
Nelson R Mandela School of Medicine  
Private Bag 7, Congella 4013  
KwaZulu-Natal, SOUTH AFRICA  
Tel: 27 31 2604769  
Fax: 27 31 2604609  
Email:  
Website:

December 2006

Ms S Ghuman  
Department of Family Medicine  
Nelson R Mandela School of Medicine  
University of KwaZulu-Natal  
Tel: 031-9033863

Dear Mrs Ghuman

## PROVISIONAL APPROVAL

PROTOCOL: Perceived parenting practices related to alcohol use in 16-18 year old adolescents in public high schools of the Emawaleni District, KwaZulu-Natal. Mrs S Ghuman, Family Medicine. Ref: H126/06

The sub-committee of the Biomedical Research Ethics Committee has considered and noted your response dated 06 December 2006 to queries raised on 24 November 2006.

Your study is given **PROVISIONAL APPROVAL** pending receipt of:

1. Permission from the Department of Education and School Principals.

2. Please refer to attached document "Permission to Conduct a Research Study/Trial". This must be completed and submitted to the Hospital Manager for signature. For King N/A  
David VIII Hospital (KEH) and Inkosi Albert Luthuli Central Hospital (IALCH) studies /A  
3. Please submit the document together with items 1 to 6 as outlined on the form.

Once the document has been signed it should be returned to this office.

4. Once full ethical approval is given, may the study begin. Full ethics approval has been given at this stage.

**PLEASE NOTE:** Provisional approval is valid for 6 months only - should we not hear from you during this time - the study will be closed and reapplication will need to be made.

Yours sincerely

Siya Buccas  
Research Administrator

**ghuman**

---

**From:** "Suraiya Buccas" <BUCCAS@ukzn.ac.za>  
"dr ghuman" <ghuman@telkomsa.net>  
**Date:** 14 February 2007 12:37  
**Subject:** Re: Permission letters from participating schools and KZN DOE

Shanaz

Full approval letter (signed copy) is in the post to you. See email below.  
Regards

**Research Office**  
BIOMEDICAL RESEARCH ETHICS ADMINISTRATION  
Nelson R Mandela School of Medicine  
Private Bag 7, Congella 4013  
KwaZulu-Natal, SOUTH AFRICA  
Tel: 27 31 2604769  
Fax: 27 31 2604609  
Email: [buccas@ukzn.ac.za](mailto:buccas@ukzn.ac.za)  
Website: [www.ukzn.ac.za](http://www.ukzn.ac.za)

February 2007

S Ghuman  
Department of Family Medicine  
Nelson R Mandela School of Medicine  
University of KwaZulu-Natal  
031-9033863

Mrs Ghuman

**OCOL: Perceived parenting practices related to alcohol use in 16-18 year old adolescents in public high schools of the Emawaleni District, KwaZulu-Natal. Mrs S Ghuman, Department of Family Medicine. Ref: H126/06**

The Biomedical Research Ethics Committee considered the abovementioned application and the proposal was approved at its meeting held on 07 November 2006 pending appropriate responses to queries raised. These conditions have now been met and the study is given full ethics approval and may begin as at **02 February 2007**:

Consent of the following documents is acknowledged:  
- Permission from the Department of Education and School Principals.  
- Questionnaires  
- Consent Document for Adolescents dated June 2005  
- Consent Document for parents of 16-18 year dated June 2005  
- Information for parents/guardians dated June 2005

Approval is valid for one year from **02 February 2007**. To ensure continuous approval, an application for recertification should be submitted a couple of months before the expiry date. When consent is a requirement, the consent process will need to be repeated yearly.

In this opportunity to wish you everything of the best with your study. Please send the

cal Research Ethics Committee a copy of your report once completed.

ncerely

ODLEY  
Biomedical Research Ethics Committee

Buccas  
ical Research Ethics Administrator  
R Mandela School of Medicine  
AL SCHOOL  
ity of KwaZulu-Natal  
frica  
7 31) 2604769  
7 31) 2604609  
buccas@ukzn.ac.za

r ghuman" <ghuman@telkomsa.net> 2007/02/13 03:48 PM >>>  
RAIYA,

YOU - WILL FAX YOU AND BRING ORIGINALS INTO THE OFFICES WHEN THE DEPT POST  
S FOR MY ATTENTION. -PLEASE LET ME HAVE AN EMAILED COPY OF THE FULL APPROVAL  
AND I WILL COME IN TO COLLECT THE ORIGINAL.

HANKS  
S  
GHUMAN

ginal Message -----

Buraiya Buccas

human

Monday, February 12, 2007 12:07 PM

: Re: Permission letters from participating schools and KZN DOE

hanaz

note that our offices have moved to the Govan Mbeki building - Westville  
;. However, we will still be servicing a office at Medical School - room 206 - 2nd  
RC building. I will be there on a Tues, Wed and Fri morning.  
neantime, please fax to 2602384 for my attention.

;

Buccas  
cal Research Ethics Administrator  
Mandela School of Medicine

CAL SCHOOL  
University of KwaZulu-Natal  
Africa  
(27 31) 2604769  
(27 31) 2604609  
: buccas@ukzn.ac.za

"dr ghuman" <ghuman@telkomsa.net> 2007/02/12 11:01 AM >>>  
Suraiya,

ding protocol H126/06, Departement of Education approval had been provided - I will fax you a copy  
approval document and bring in the original which will be posted within due course. Your assistance  
ired in providing me with the full approval document to conduct the study.

You  
Regards  
z Ghuman

Please find our Email Disclaimer here-->: <http://www.ukzn.ac.za/disclaimer>

Please find our Email Disclaimer here-->: <http://www.ukzn.ac.za/disclaimer>

## **APPENDIX C**

**PERMISSION FROM THE DEPARTMENT  
OF EDUCATION TO CONDUCT RESEARCH,  
ACCEPTANCE LETTER FROM THE  
SUPERINTENDENT GENERAL,  
HEAD: DEPARTMENT OF EDUCATION,  
KWAZULU-NATAL**



PROVINCE OF KWAZULU-NATAL  
ISIFUNDAZWE SAKWAZULU-NATALI  
PROVINSIE KWAZULU-NATAL

DEPARTMENT OF EDUCATION  
UMNYANGO WEMFUNDO  
DEPARTEMENT VAN ONDERWYS

Tel: 033 341 8611  
Fax: 033 341 8612

Private Bag X9137  
Pietermaritzburg  
3200

228 Pietermaritz Street  
Pietermaritzburg, 3201

HOVISI

PIETERMARITZBURG

HEAD OFFICE

ancis

Reference:  
Inkomba: 0232/06  
Verwysing:

Date:  
Usuku:  
Datum: 01/02/2007

## PERMISSION TO CONDUCT RESEARCH

### TO WHOM IT MAY CONCERN

serve as a notice that Dr S Ghuman has been granted permission to conduct research  
following terms and conditions:

as a researcher, he/she must present a copy of the written permission from the  
Department to the Head of the Institution concerned before any research may be undertaken at a  
secondary educational institution.

Dr S Ghuman has been granted special permission to conduct his/her research during official  
school hours, as it is believed that their presence would not interrupt education programmes.  
If education programmes be interrupted, he/she must, therefore, conduct his/her research  
during non-official contact times.

The school is expected to participate in the research during the fourth school term, as this  
is a critical period for schools to focus on their exams.

**DEPARTMENTAL INDEPENDENT GENERAL**  
Pietermaritzburg Department of Education



PROVINCE OF KWAZULU-NATAL  
ISIFUNDAZWE SAKWAZULU-NATALI  
PROVINSIE KWAZULU-NATAL

DEPARTMENT OF EDUCATION  
UMNYANGO WEMFUNDO  
DEPARTEMENT VAN ONDERWYS

Tel: 033 341 8611  
Fax: 033 341 8612

Private Bag X9137  
Pietermaritzburg  
3200

228 Pietermaritz Street  
Pietermaritzburg, 3201

DHHOVISI PIETERMARITZBURG HEAD OFFICE

Francis I

Reference:  
nkomba: 0232/06  
Verwysing:

Date:  
Usuku:  
Datum: 01/02/2007

Mr S Ghuman

## APPROVAL TO CONDUCT RESEARCH

You are informed that your application to conduct research has been approved with the following conditions:

As a researcher, you must present a copy of the written permission from the Department to the Institution concerned before any research may be undertaken at a departmental level bearing in mind that the institution **is not obliged to participate** if the research is not a departmental project.

Research should not be conducted during official contact time, as **education programmes should not be interrupted**, except in exceptional cases with special approval of the KZNDoE.

Research is not to be conducted during the fourth school term, except in cases where the Department deems it necessary to undertake research at schools during that period.

If you wish to extend the period of research after approval has been granted, an application for extension must be directed to the Director: Resource Planning.

Research will be limited to the schools or institutions for which approval has been granted.

On completion of the report, dissertation or thesis must be provided to the Research Directorate.

You must sign the attached declaration that, you are aware of the procedures and will adhere to the same.

  
DIRECTOR GENERAL  
Natal Department of Education



ration and Understanding –Ref:0232/06

ndersigned declare that I acknowledge that I have read and understood the abovementioned and conditions and agree to abide by them. The Research, Strategy, Policy Development and Directorate reserve the right to withdraw my approval should I be found not to abide by the and conditions. I undertake to bide myself to the RSPDE directorate, to submit a copy of the eted report, dissertation or thesis as per terms and conditions.

(print): Shanzaz Ghuman

2/02/2007 Signature of applicant: 

## **APPENDIX D**

### **PERMISSION LETTERS FROM THE PRINCIPALS OF THE PILOT SCHOOL AND THE FIVE PARTICIPATING SCHOOLS IN THE EMAWALENI EDUCATION DISTRICT, KWAZULU-NATAL**

## PERMISSION TO CONDUCT A RESEARCH STUDY/TRIAL

This must be completed and submitted to the Medical Superintendent/s / Hospital Manager/s for signature.

*Principals*

or King Edward VIII Hospital (KEH) and Inkosi Albert Luthuli Central Hospital (IALCH) studies please submit the document together with the following:

1. Research proposal and protocol.
2. **Letter giving provisional ethical approval.**
3. Details of other research presently being performed by yourself if in the employ of KEH, (individually or as a collaborator).
4. Details of any financial or human resource implications to KEH, including all laboratory tests, EEGs, X-rays, use of nurses, etc. (See Addendum 1)
5. Declaration of all funding applications / grants, please supply substantiating documentation.
6. Complete the attached KEH Form - "Research Details"

Once the document has been signed it should be returned to Mrs S Buccas, Biomedical Research Ethics Administration, Room 112 Old MRC Building.

To: Chief Medical Superintendent / Hospital Manager */ Principals*

Permission is requested to conduct the above research study at the hospital/s indicated below:

*/ school*

Site 1 address:

2 MAHES ROAD  
ISIPINGO RAIL  
ISIPINGO

X Investigator/s:

Principal: \_\_\_\_\_ **KZN DEPT. OF EDUCATION**  
Co-investigator: \_\_\_\_\_ **REUNION SECONDARY SCHOOL**  
Co-Investigator: \_\_\_\_\_ **MAHES ROAD**  
**ISIPINGO RAIL, 4110**

**(PILOT SCHOOL)**

Signature of Chief Medical Superintendent/Hospital Manager:

*Muntadayeche*

Date: 29/01/2007

Site 2 address:

~~\_\_\_\_\_~~  
~~\_\_\_\_\_~~  
~~\_\_\_\_\_~~

Investigator/s

Principal: \_\_\_\_\_

Co-investigator: \_\_\_\_\_

Co-Investigator: \_\_\_\_\_

Signature of Chief Medical Superintendent / Hospital Manager:

\_\_\_\_\_

Date: \_\_\_\_\_

3: Medical Superintendent/s / Hospital Manager/s to send a copy of this document to Natalia

**PERMISSION TO CONDUCT A RESEARCH STUDY/TRIAL**

Forms must be completed and submitted to the Medical Superintendent/s / Hospital Manager/s for signature.

*Principals*

King Edward VIII Hospital (KEH) and Inkosi Albert Luthuli Central Hospital (IALCH) studies must submit the document together with the following:

1. Research proposal and protocol.
2. Letter giving provisional ethical approval.
3. Details of other research presently being performed by yourself if in the employ of KEH, (individually or as a collaborator).
4. Details of any financial or human resource implications to KEH, including all laboratory tests, EEGs, X-rays, use of nurses, etc. (See Addendum 1)
5. Declaration of all funding applications / grants, please supply substantiating documentation.
6. Complete the attached KEH Form - "Research Details"

Once the document has been signed it should be returned to Mrs S Buccas, Biomedical Research Ethics Administration, Room 112 Old MRC Building.

Signature of Chief Medical Superintendent / Hospital Manager / *Principal*

Permission is requested to conduct the above research study at the hospital/s indicated below:

Address 1:

AMANZIMTOTI HIGH SCHOOL  
P/BAG X20017  
AMANZIMTOTI  
1001

Investigator/s: *L Lemmer*  
 Principal: *Lemmer*  
 Co-investigator: \_\_\_\_\_  
 Co-Investigator: \_\_\_\_\_ *25/1/2007*

Signature of Chief Medical Superintendent/Hospital Manager:

\_\_\_\_\_

Date: \_\_\_\_\_

Address 2:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Investigator/s  
 Principal: \_\_\_\_\_  
 Co-investigator: \_\_\_\_\_  
 Co-Investigator: \_\_\_\_\_

Signature of Chief Medical Superintendent / Hospital Manager:

\_\_\_\_\_

Date: \_\_\_\_\_

Medical Superintendent/s / Hospital Manager/s to send a copy of this document to Natalia



# PERMISSION TO CONDUCT A RESEARCH STUDY/TRIAL

This must be completed and submitted to the Medical Superintendent/s / Hospital Manager/s for signature.

*Principals*

For King Edward VIII Hospital (KEH) and Inkosi Albert Luthuli Central Hospital (IALCH) studies please submit the document together with the following:

1. Research proposal and protocol.
2. Letter giving provisional ethical approval.
3. Details of other research presently being performed by yourself if in the employ of KEH, (individually or as a collaborator).
4. Details of any financial or human resource implications to KEH, including all laboratory tests, EEGs, X-rays, use of nurses, etc. (See Addendum 1)
5. Declaration of all funding applications / grants, please supply substantiating documentation.
6. Complete the attached KEH Form - "Research Details"

Once the document has been signed it should be returned to Mrs S Buccas, Biomedical Research Ethics Administration, Room 112 Old MRC Building.

To: Chief Medical Superintendent / Hospital Manager / *Principal*

Permission is requested to conduct the above research study at the hospital/s indicated below:

Site 1 address:

*EAST COAST CHRISTIAN COLLEGE* X  
122 ELIZABETH AVE  
ILLOVO BEACH

Investigator/s:

Principal: *RICHARD NORTHMORE*

Co-investigator: \_\_\_\_\_

Co-Investigator: \_\_\_\_\_

**EAST COAST CHRISTIAN COLLEGE**  
P.O. BOX 106, ILLOVO BEACH 4155  
TEL: 031 - 916 2330 FAX: 031 - 916 1619

Signature of Chief Medical Superintendent/Hospital Manager:

Date: \_\_\_\_\_

Site 2 address:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Investigator/s

Principal: \_\_\_\_\_

Co-investigator: \_\_\_\_\_

Co-Investigator: \_\_\_\_\_

Signature of Chief Medical Superintendent / Hospital Manager:

Date: \_\_\_\_\_

**B:** Medical Superintendent/s / Hospital Manager/s to send a copy of this document to Natalia

# PERMISSION TO CONDUCT A RESEARCH STUDY/TRIAL

This must be completed and submitted to the Medical Superintendent/s / Hospital Manager/s for signature.

*Principals*

For King Edward VIII Hospital (KEH) and Inkosi Albert Luthuli Central Hospital (IALCH) studies please submit the document together with the following:

1. Research proposal and protocol.
2. Letter giving provisional ethical approval.
3. Details of other research presently being performed by yourself if in the employ of KEH, (individually or as a collaborator).
4. Details of any financial or human resource implications to KEH, **including all laboratory tests, EEGs, X-rays, use of nurses, etc. (See Addendum 1)**
5. Declaration of all funding applications / grants, please supply substantiating documentation.
6. Complete the attached KEH Form - "Research Details"

Once the document has been signed it should be returned to Mrs S Buccas, Biomedical Research Ethics Administration, Room 112 Old MRC Building.

To: Chief Medical Superintendent / Hospital Manager / *Principals*

Permission is requested to conduct the above research study at the hospital/s indicated below:

Site 1 address:

*Kingway High Sch.*  
*P.B. 20007*  
*Buwalintole*  
*41250*

X Investigator/s:

Principal: *G HARRISON*

Co-investigator: *W. SCHRODER*

Co-Investigator: \_\_\_\_\_

Signature of Chief Medical Superintendent/Hospital Manager:

*[Signature]*

Date: *30-1-07*

Site 2 address:

~~\_\_\_\_\_~~  
~~\_\_\_\_\_~~  
~~\_\_\_\_\_~~

Investigator/s

Principal: \_\_\_\_\_

Co-investigator: \_\_\_\_\_

Co-Investigator: \_\_\_\_\_

Signature of Chief Medical Superintendent / Hospital Manager:

Date: \_\_\_\_\_

B: Medical Superintendent/s / Hospital Manager/s to send a copy of this document to Natalia

# PERMISSION TO CONDUCT A RESEARCH STUDY/TRIAL

must be completed and submitted to the Medical Superintendent/s / Hospital Manager/s for signature.

*Principals*

King Edward VIII Hospital (KEH) and Inkosi Albert Luthuli Central Hospital (IALCH) studies must submit the document together with the following:

1. Research proposal and protocol.
2. Letter giving provisional ethical approval.
3. Details of other research presently being performed by yourself if in the employ of KEH, (individually or as a collaborator).
4. Details of any financial or human resource implications to KEH, including all laboratory tests, EEGs, X-rays, use of nurses, etc. (See Addendum 1)
5. Declaration of all funding applications / grants, please supply substantiating documentation.
6. Complete the attached KEH Form - "Research Details"

Once the document has been signed it should be returned to Mrs S Buccas, Biomedical Research Services Administration, Room 112 Old MRC Building.

Signature: Chief Medical Superintendent / Hospital Manager / *Principal*

Permission is requested to conduct the above research study at the hospital/s indicated below:

**KUSWAG SKOOL**

PRIVAATSAK X20005  
AMANZIMTOTI 4125

TEL: 903 5434 903 4328  
FAX: 903 7442

Address 1:

PRIVAATSAK X 20005  
AMANZIMTOTI 4125

Investigator/s:

Principal:

Co-investigator:

Co-Investigator:

*[Signature]*  
VC LINDEQUE

Signature of Chief Medical Superintendent/Hospital Manager:

\_\_\_\_\_

Date: \_\_\_\_\_

Address 2:

~~\_\_\_\_\_~~  
~~\_\_\_\_\_~~  
~~\_\_\_\_\_~~

Investigator/s

Principal:

Co-investigator:

Co-Investigator:

~~\_\_\_\_\_~~  
~~\_\_\_\_\_~~  
~~\_\_\_\_\_~~

Signature of Chief Medical Superintendent / Hospital Manager:

\_\_\_\_\_

Date: \_\_\_\_\_

Medical Superintendent/s / Hospital Manager/s to send a copy of this document to Natalia

# PERMISSION TO CONDUCT A RESEARCH STUDY/TRIAL

This must be completed and submitted to the Medical Superintendent/s / Hospital Manager/s for signature.

*Principal*

For King Edward VIII Hospital (KEH) and Inkosi Albert Luthuli Central Hospital (IALCH) studies please submit the document together with the following:

1. Research proposal and protocol.
2. Letter giving provisional ethical approval.
3. Details of other research presently being performed by yourself if in the employ of KEH, (individually or as a collaborator).
4. Details of any financial or human resource implications to KEH, including all laboratory tests, EEGs, X-rays, use of nurses, etc. (See Addendum 1)
5. Declaration of all funding applications / grants, please supply substantiating documentation.
6. Complete the attached KEH Form - "Research Details"

Once the document has been signed it should be returned to Mrs S Buccas, Biomedical Research Ethics Administration, Room 112 Old MRC Building.

To: Chief Medical Superintendent / Hospital Manager / *Principal*

Permission is requested to conduct the above research study at the hospital/s indicated below:

Site 1 address:

EMKOMAAS SEC .  
2/BAG X1029  
EMKOMAAS  
4170

X Investigator/s:

Principal: L. RAMDHANI

Co-investigator: \_\_\_\_\_

Co-Investigator: \_\_\_\_\_

Signature of Chief Medical Superintendent / Hospital Manager:

L. Ramdhani

Date: \_\_\_\_\_

Site 2 address:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Investigator/s

Principal: \_\_\_\_\_

Co-investigator: \_\_\_\_\_

Co-Investigator: \_\_\_\_\_

Signature of Chief Medical Superintendent / Hospital Manager:

\_\_\_\_\_

Date: \_\_\_\_\_

3: Medical Superintendent/s / Hospital Manager/s to send a copy of this document to Natalia



## **APPENDIX E**

### **INFORMATION AND CONSENT LETTERS FOR PARENTS/GUARDIANS OF THE ADOLESCENT LEARNERS**

## INFORMATION DOCUMENT FOR PARENTS/GUARDIANS OF PARTICIPANTS

**Study title:** Perceived parental practices related to alcohol use by 16-18 year old adolescents in the Public High Schools of Emawaleni District, KwaZulu-Natal

**Greeting:** Dear Parents

**Introduction:** Hi, I am Shanaz Ghuman, from the University of KwaZulu-Natal. I am doing a study on 16-18 year old learners of the high schools in your area. This study will help to understand why some teenagers use alcohol and others do not and how as parents we are able to protect our children from such behaviours. Research is just the process to find the answer to this question. In this study we also want to learn about the teenagers that what they think about alcohol use and what their parents feel about them using or not using alcohol.

**Invitation to participate:** I would like to include your child in this study and would like to request your permission.

**What is involved in the study:** Your child together with all the learners at the school will be given a 45 minute written questionnaire to complete while I am present. Your child will be informed that they may refuse to answer any question/s they are uncomfortable with. All the 16-18 year old learners from the schools in your area will be invited to participate. The questionnaire is anonymous and confidential. None of the questionnaires will be linked to any school or a learner, even by the researcher herself. Participation is completely voluntary and your child may withdraw from the study at any time before the completion of questionnaire. Names are neither required of the learners nor of the schools.

**Risks:** I assure you that there is no risk involved to you as the parents/guardians of the child, or to your child or the school he/she attends. Total confidentiality and anonymity will be maintained all the times.

**Benefits:** The outcome of the study will provide important information about how to prevent alcohol use in adolescents. The results of this study will be made available to you to read after the completion of this research. In terms of public health, this study will help all parents not only in this district but also in other areas and the provinces of the country.

**Participation is voluntary:** You may refuse to participate and this will involve no penalty or loss of benefits to your child. I have attached a consent document for you to read and sign. If you are willing to let your child participate in the study please sign the document and return via your child to the schoolteacher.

**Confidentiality:** The study is completely confidential and anonymous. School staff will have no access to this information and will not be involved in the process of completion of questionnaire.

**Contact details of researcher:** Should you require any further information about the study please do not hesitate to contact me or the University Research Committee who will provide you with further details at the numbers below:

Shanaz Ghuman  
Nelson R. Mandela School of Medicine  
Department of Public Health Medicine  
University of KwaZulu-Natal  
Cell: 083 588 3245  
[ghuman@telkomsa.net](mailto:ghuman@telkomsa.net)

**Contact details of BREC Administrator and Chair – for reporting of complaints / problems:**

Biomedical Research Ethics Committee – Administrator: Mrs S Buccas, telephone: (031) 260 4769; Fax: (031) 260 4529 – e-mail: [buccas@ukzn.ac.za](mailto:buccas@ukzn.ac.za)

Thank You  
**Shanaz Ghuman**

**CONSENT DOCUMENT FOR PARENTS OF 16-18 YEAR OLD ADOLESCENT LEARNERS**

**Please complete this page of the consent document and return as soon as possible. You may keep the Information Document above for your records. Thank You!**

**Study title:** Perceived parental practices related to alcohol use by 16-18 year old adolescents of the Public High Schools of Emawaleni District, KwaZulu-Natal

Your permission is required for your child to participate in this research study in which we would analyse the influence of parenting practices with respect to adolescent alcohol use. You have been informed about the study by the main researcher, Shanaz Ghuman.

You may contact Shanaz at 083 588 3245 if you have further questions about your child's rights as a research subject. Your child's participation is absolutely voluntary, and you or your child will not receive any sort of penalty in case you refuse to participate or withdraw from this study. Your child will be informed that they may refuse to answer any question/s they are uncomfortable with. If you are willing to let your child participate, please sign this consent document and return as soon as possible. You may keep the participant information sheet.

**CONSENT**

The research study, including the above information, has been described to me in the information document. I understand what my involvement in the study means and I agree to participate on a voluntary basis, that my participation will be anonymous and that confidentiality will be maintained.

\_\_\_\_\_

Signature of Parent/Guardian\*

(\*Delete whichever one is not applicable)

\_\_\_\_\_

Date

\_\_\_\_\_

Witness

\_\_\_\_\_

Date

## **APPENDIX F**

### **INFORMATION AND CONSENT LETTER FOR ADOLESCENT LEARNERS**

**CONSENT DOCUMENT FOR ADOLESCENTS**

**Study title: Perceived parenting practices related to alcohol use by 16-18 year old adolescents of the Public High Schools of Emawaleni District, KwaZulu-Natal**

**Dear Grade 11 & 12 Learners**

You have been asked to participate in a research study that will help understand why some adolescents drink alcohol and why others do not, also how parenting skills may relate to alcohol use in adolescents.

The main researcher Shanaz Ghuman will inform you about the study. You may contact Shanaz Ghuman on 083 588 3245 at any time if you have questions about the research.

You may contact the Medical Research Administration Office at the Nelson R Mandela School of Medicine at 031-260 4769 (Suraiya Baccus) if you have questions about your rights as a research participant.

Your participation in this research is voluntary, confidential and anonymous, and you will not be penalized or lose benefits if you refuse to participate or decide to withdraw.

**Please detach the consent to participate and the researcher will collect this.**

Thank You

**Shanaz Ghuman**

-----  
**The research study, including the above information, has been described to me orally. I understand what my involvement in the study means and I voluntarily agree to participate.**

\_\_\_\_\_  
Signature of Learner

\_\_\_\_\_  
Date

\_\_\_\_\_  
Witness

\_\_\_\_\_  
Date

## **APPENDIX G**

### **INFORMATION LETTER AND QUESTIONNAIRE FOR 16-18 YEAR OLD ADOLESCENTS WHO PARTICIPATED IN THE STUDY**

## **16-18 YEAR OLD ADOLESCENT QUESTIONNAIRE**

**DEAR GRADE 11 AND 12 LEARNERS**

**Thank you very much for your willingness to participate in my study. The aim of my study is to investigate the relationship between perceived parenting practices and the behaviours of their adolescents with regards to alcohol use.**

**Your contribution in answering the questions as honestly and truthfully will help in the development of parenting programmes for parents of adolescents that will allow other young people like yourself to have supportive relationships with their parents and to reach their full potential in life.**

**I will make the research report available to your school principal if you are interested to read it.**

**You have been selected with a group of learners from your school to participate in my research study, which requires you to complete the attached questionnaire. It will take you approximately 45 minutes to answer.**

**PLEASE ANSWER THE QUESTIONS AS HONESTLY AS POSSIBLE.**

**The information you provide will be CONFIDENTIAL and ANONYMOUS and will be used for research purposes only.**

**THANK YOU FOR YOUR PARTICIPATION.**

**Shanaz Ghuman**

## QUESTIONNAIRE FOR ADOLESCENTS 16-18 YEARS OLD

Please mark the appropriate box with X or  $\checkmark$  or fill in the answer where required

### SECTION 1:

1. How old are you?

<input type="text"/>	<input type="text"/>	Years
----------------------	----------------------	-------

2. What is your sex?

<input type="checkbox"/>	1	Female
<input type="checkbox"/>	2	Male

3. In what grade are you?

<input type="checkbox"/>	1	11 <sup>th</sup> grade
<input type="checkbox"/>	2	12 <sup>th</sup> grade

4. How would you describe yourself? (Optional)

<input type="checkbox"/>	1	Asian/Indian
<input type="checkbox"/>	2	Black African
<input type="checkbox"/>	3	Coloured/Mixed Race
<input type="checkbox"/>	4	White

5. What is your home language?

<input type="checkbox"/>	1	Afrikaans
<input type="checkbox"/>	2	English
<input type="checkbox"/>	3	Zulu
<input type="checkbox"/>	4	Other (Specify)-----



**6. Who takes care of you at home?**

<b>1</b>	Father and Mother
<b>2</b>	Mother Only
<b>3</b>	Father Only
<b>4</b>	Female Guardian
<b>5</b>	Male Guardian
<b>6</b>	Other (specify, e.g. Step parent/s)-----

**7. What is the age of your (approximate if you are not sure):**

Mother/female guardian	
Father/male guardian	

**8. Who do you live with at your home?**

<b>1</b>	Father and Mother
<b>2</b>	Mother Only
<b>3</b>	Father Only
<b>4</b>	Female Guardian
<b>5</b>	Male Guardian
<b>6</b>	Other (specify, e.g. Step parent/s)-----

**9. What level of education has parents/guardians completed? (mark all levels they have completed)**

<b>Education</b>	<b>Mother/female guardian</b>	<b>Father/male guardian</b>
No Education	<b>1</b>	<b>1</b>
Primary School	<b>2</b>	<b>2</b>
Secondary School	<b>3</b>	<b>3</b>
Matric	<b>4</b>	<b>4</b>
Graduate/Diploma	<b>5</b>	<b>5</b>
Postgraduate	<b>6</b>	<b>6</b>

**10. Are your parents/guardians employed or unemployed?**

<b>Work</b>	<b>Mother/female guardian</b>	<b>Father/male guardian</b>
Employed	<b>1</b>	<b>1</b>
Unemployed	<b>2</b>	<b>2</b>

**11. Are your parents .....**

<b>1</b>	Married living together
<b>2</b>	Married not living together
<b>3</b>	Unmarried living together
<b>4</b>	Unmarried not living together/Single
<b>5</b>	Divorced
<b>6</b>	Other (specify e.g. State if parent is ill/hospitalised/at home)-----

**12. To which religion does your family belong?**

<b>1</b>	Christian
<b>2</b>	Hindu
<b>3</b>	Jewish
<b>4</b>	Muslim
<b>5</b>	No religion
<b>6</b>	Other (specify)-----

**13. How religious are you?**

<b>1</b>	Not religious at all
<b>2</b>	Somewhat religious
<b>3</b>	Very religious

**14. How many children other than you are in your family? Fill the number in the box provided. You may fill a number/s in more than one box.**

<input type="text"/>	Girls younger
<input type="text"/>	Girls older
<input type="text"/>	Boys younger
<input type="text"/>	Boys older

**15. In terms of money is your family..... ?**

<b>1</b>	Very Rich
<b>2</b>	Rich
<b>3</b>	Average
<b>4</b>	Poor
<b>5</b>	Very Poor

16. Do you have the following for your use? (You may choose more than one).

1	TV
2	Satellite TV
3	Computer
4	Internet Access
5	Cell phone

**SECTION 2:**

17. Who do you consider to be most influential (in a positive sense) with regards to your attitudes and behaviour regarding alcohol?

1	Parents/Guardians
2	Brothers/sisters
3	Friends
4	Grandparents
5	Other adults e.g. teachers

18. During a 1(one) month period, how many times have you had at least one drink of alcohol other than a few sips?

1	Never
2	Once
3	2 times
4	3 times
5	4 times
6	5 times and more

19. How old were you when you had your first drink of alcohol other than a few sips?

1	Never had a drink other than a few sips
2	8 years old or younger
3	9 or 10 years old
4	11 or 12 years old
5	13 or 14 years old
6	15 or 16 years old
7	17 years or older

20. Who offered you your first alcohol drink?

1	Parents/Guardian
2	Friends
3	Another person
4	Never been offered

**21. During the past month, on how many days did you have at least one drink of alcohol other than a few sips?**

<b>1</b>	0 days
<b>2</b>	Every Day
<b>3</b>	Once a week
<b>4</b>	More than once a week
<b>5</b>	Once a month

**22. During the past month, on how many occasions did you have 5 or more drinks of alcohol in a row, that is, within a couple of hours?**

<b>1</b>	Not at all
<b>2</b>	Once
<b>3</b>	Twice
<b>4</b>	Three times
<b>5</b>	More than four times

**23. Do your parents/ guardians know that you drink alcohol?**

Parent/Guardian	Yes	No	Don't Drink
Mother/Female guardian	<b>1</b>	<b>2</b>	<b>3</b>
Father/Male Guardian	<b>1</b>	<b>2</b>	<b>3</b>

**24. Have you ever used drugs?**

<b>1</b>	Yes
<b>2</b>	No

**25. If Yes, what drug did you use?**

**26. How often have you used drugs in your life?**

<b>1</b>	Never
<b>2</b>	Once
<b>3</b>	Twice
<b>4</b>	Three times
<b>5</b>	More than four times

27. Do you think any of your parents/guardians would allow you to drink alcohol in their presence?

Parent or guardian	Yes	No	Don't Know
Mother/female guardian	1	2	3
Father/male guardian	1	2	3

28. Would your parents/guardian allow you to drink alcohol when you are with your friends?

Parent/Guardian	Yes	No	Don't Know
Mother/Female Guardian	1	2	3
Father/Male Guardian	1	2	3

29. How often do your friends drink alcohol?

1	Often
2	Sometimes
3	Never

30. Have your parents/guardian ever warned you about the risks associated with drinking alcohol?

Parent or guardian	Yes	No
Mother/female guardian	1	2
Father/male guardian	1	2

31. What do you think is the most serious risk associated with drinking alcohol?
- .....

32. What do you think safe drinking of alcohol means?
- .....

33. Have your parents/guardian ever explained to you what "safe drinking" means?

Parent or guardian	Yes	No
Mother/female guardian	1	2
Father/male guardian	1	2

34. **Have you ever seen any of your parents /guardians drunk?**

<b>Parent or guardian</b>	<b>Yes, often</b>	<b>Sometimes</b>	<b>Never</b>
Mother/female guardian	1	2	3
Father/male guardian	1	2	3

35. **Here are some "house rules" about drinking alcohol. Indicate to what extent each statement is true for you and your family.**

<b>Statements</b>	<b>Definitely True</b>	<b>True</b>	<b>Not true</b>	<b>Definitely not true</b>
1. In our house there are very clear rules about drinking alcohol.	1	2	3	4
2. Adults are allowed to drink alcohol at our home but not children.	1	2	3	4
3. My father/male guardian is against the use of alcohol.	1	2	3	4
4. My mother/female guardian is against the use of alcohol.	1	2	3	4
5. I am not allowed to drink alcohol at home or anywhere else.	1	2	3	4
6. No one is allowed to drink alcohol in our house.	1	2	3	4

**PLEASE TURN TO THE NEXT PAGE!**

### SECTION 3:

**36. The following questions are about your relationships with your family. Please be sure to read each statement carefully and indicate to which extent you agree or disagree with the statement. .**

Statement	Strongly Agree	Agree	Disagree	Strongly Disagree
1. I feel loved by my family.	1	2	3	4
2. Everyone in my family accepts me just as I am.	1	2	3	4
3. I feel like an important part of my family.	1	2	3	4
4. I do not get the support and encouragement that I need from my family.	1	2	3	4
5. I feel that I can talk to one of my parents/guardian about most things in my life.	1	2	3	4
6. At least one of my parents/guardians know exactly where I am when I am not at home.	1	2	3	4
7. I have to tell at least one parent/guardian at what time I will be at home when I go out.	1	2	3	4
8. My parents do not trust my friends.	1	2	3	4
9. There are strict rules in our house about what I am allowed to do or not.	1	2	3	4
10. I do a lot of things that my family would not approve of if they knew about them.	1	2	3	4
11. I feel that no one should tell me what to do anymore.	1	2	3	4
12. As a family we do a lot of things together.	1	2	3	4
13. We never have money to go out as a family.	1	2	3	4
14. I think that I have a happy home life.	1	2	3	4
15. My parents use harsh punishment if I do things they do not like.	1	2	3	4
16. I am not allowed to go out during weeknights.	1	2	3	4
17. During the weekends I can stay out as late as I want at night.	1	2	3	4
18. If I do not do well at school I am encouraged at home to do better.	1	2	3	4

**37. The following statements are about your relationships with your friends and how you feel about yourself. Indicate your agreement or disagreement with the following statements.**

<b>Statements</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
1. My friends are willing to help me if I have problems.	1	2	3	4
2. I always want to do what my friends want me to do.	1	2	3	4
3. My friends respect the police.	1	2	3	4
4. My friends have problems at school.	1	2	3	4
5. My friends drink alcohol and want me to drink with them.	1	2	3	4
6. My friends and I encourage each other not to use alcohol	1	2	3	4
7. If I got drunk, my friends would care and make sure I was safe.	1	2	3	4
8. My friends and I encourage each other to get drunk.	1	2	3	4
9. I can tell my friends that I don't want to use alcohol.	1	2	3	4
10. My friends' parents allow them more freedom than what my parents allow me.	1	2	3	4
11. I feel that I am a person of worth, at least on an equal basis with others.	1	2	3	4
12. I feel that I have a number of good qualities.	1	2	3	4
13. I certainly feel useless at times.	1	2	3	4
14. At times I think I am no good at all.	1	2	3	4

**THANK YOU VERY MUCH FOR YOUR PARTICIPATION**



## **APPENDIX H**

**EXCERPT FROM ABSTRACT  
PROCEEDINGS OF THE 4<sup>TH</sup> PUBLIC HEALTH  
ASSOCIATION OF SOUTH AFRICA  
CONFERENCE, 2-4 JUNE, 2008**



4<sup>th</sup> Public Health Association  
of South Africa

CONFERENCE 2008

2 - 4 June 2008

Abstract Book

*"Making Alma Ata principles a 21st century reality: what will it take?"*



Co-hosted by:



Department of  
Health,  
REPUBLIC OF SOUTH AFRICA



Sponsored by:



## 2 - PERCEIVED PARENTAL PRACTICES RELATED TO ALCOHOL USE IN 16-18 YEAR OLD ADOLESCENTS IN THE PUBLIC HIGH SCHOOLS OF EMAWALENI DISTRICT, KWAZULU NATAL

S. Ghuman, A. Meyer-Weitz, S. Knight

University of KwaZulu Natal

### INTRODUCTION

Adolescence is a developmental period presenting special considerations in the study of socially mediated relationships within the family. Alcohol consumption among South African adolescents from the age of 18 years is the norm rather than the exception. The aim of this study assessed whether perceived parental practices influence adolescent alcohol consumption at high schools in KwaZulu-Natal.

### METHODS

A cross-sectional, descriptive epidemiological study was used. All 16-18 year old adolescent students in Grades 10 to 12 from 5 selected public high schools were selected, 704 adolescents completed a self-administered questionnaire.

### RESULTS

Key factors that affect the adolescents drinking behavior were the parents (51.3%) and peers (33.8%). An alcoholic drink were reported offered by peers (20.9%), and 12.9% parents. More than two thirds of adolescents consumed an alcoholic drink, increasing between 13 and 16 years of age. Two

thirds felt parents communicated with them, while a third had warned them about the dangers of alcohol. Perceived parent drinking status for parents reported mothers as 20.9% seen drunk and fathers 47% drunk. Clear house rules regarding alcohol use was reported by 79.8% of adolescents. Alpha for house rules is 0.723. Parental monitoring indicates that 82.2% of parents monitor adolescent's whereabouts. Peer relations showed that 88% of adolescents could tell their friends not to use alcohol, 93% could depend on peers when in trouble, 86% of the adolescents who drank alcohol indicated that peers would take care of them when drunk, and 77% of adolescents reported that they discouraged their peers from getting drunk.

### CONCLUSION

The evidence demonstrates a basic understanding of the processes by which parents influence adolescent alcohol use behaviors. Further research into parental roles in adolescent risk behaviors in South Africa is necessitated. Future prevention interventions targeted at parents of adolescents are needed so that they may be translated into effective health education programs.