An exploration of the understandings of adolescents, living in Botswana, pertaining to the risk of their peers contracting HIV and AIDS, and strategies for reducing its spread.

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Harvey Stanley Madalo Henderson BBA; Grad Cert Public Health; MA
Student Number 085396

Avondale College Principal Supervisor
Dr Peter Morey
Associate Supervisor
Dr Cedric Greive

The Dissertation of Harvey Stanley Madalo Henderson is approved

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Avondale College

2015

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Harvey Stanley Madalo Henderson

Dedicated to the memory of my late father

Stanley "John Bull" Justine Henderson (1938-1998)

and

My late mother

Dinah "Mayi Phiri" Henderson (1940-2006)

Student Declaration

I, Harvey Stanley Madalo Henderson, do hereby declare that:

I. This thesis is my own work.

II. All persons consulted, and all assistance rendered are fully acknowledged

III. All references used are indicated in the text and accurately reported in the list of references.

IV. The substance of this thesis has not been presented, in whole, or in part by me to any University for a degree and

This declaration was made at Avondale College on 2 June, 2015

Signed by  **Harvey Henderson**

Researchers' biographical sketch and interest

In this section, the researcher uses the first person language to give a more personal perspective of his life journey and interest. To maintain the professional academic format, the rest of the thesis is written in third person.

I was born in Malawi, Africa in 1966, fifteen years before HIV and AIDS was known. I am married to Luckie Henderson who is a Motswana national and we have two children, Thandizo aged 17 and Yamika aged 8. I completed a Bachelor of Business Administration degree at Solusi campus of Andrews University in Bulawayo, Zimbabwe in 1994, a Masters of Arts degree in Youth Ministry at Andrews University in Berrien Springs, Michigan, in 2004 and a Graduate Certificate in Public Health with Curtin University, Perth, Australia in 2013.

I am a Seventh-day Adventist Christian whose interest and passion are to assist young people to develop to their highest potential and to protect themselves from HIV and AIDS infection thus avoiding its devastating effects. Almost every family in sub-Sahara Africa, has members who are either infected or affected by this disease. In my family, for example, some of my relatives and close friends have died of AIDS and some of them are currently living with the HIV. For these reasons, I have developed a strong interest in learning about this disease, its cause and how people can avoid it.

During my postgraduate studies in the United States of America, I developed an interest in undertaking research on the prevention of HIV and AIDS and constructed a program to equip young people in my church, the Gaborone community in Botswana and Southern Africa region in general, to make decisions that will protect them from infection. In Botswana, my program operated under the Samaritan Youth Trust, which is a non-profit organisation that I developed and which partners with the Botswana government, the Seventh-day Adventist Church and other non-governmental organisations. Recently, I also have partnered with some friends and registered an association in Australia under a trade name Victory for Africa, which is dedicated to mobilize resources for health promotion programs in Australia and Southern Africa. It is my goal to create a cohort of adolescents who will be HIV and AIDS free and who will

themselves contribute to the creation of an HIV and AIDS-free generation. This study is a step towards achieving this goal.

Acknowledgement

Mutu umodzi susenza denga… This Chichewa (a language spoken in Malawi) idiom literally says “One head does not carry the roof,” meaning, “One person alone does not accomplish a worthwhile task without the help or positive influence of others.” in other words – “No man is an island”. This is very true concerning several individuals, friends and organizations that assisted me to complete this study. I would like to express my thanks to the following, without whose help and assistance I would in no wise accomplished this mammoth task.

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- Family members and parents Sister Grace Majawa, Sister Sarah Chamangwana, Sister Mercy & Wycliff Chimwendo, Mercy & Steve Kamanga, Chimwemwe and Kondwani Kabowa, Tamanda Majawa, Justin & William Chamangwana, Mayi Kachepa in Chembera, the Mlangas, the Phombeyas, Stan and Ketlametso Maseko, Tumelo Pilane, Tiroyaone & Nthebe Kgotlwana, Mako Nthebe, Papa in Mochudi, Prof. Matale, the late and Mrs. Mooka, Ken and Susan Williams and all family members for their prayers and support.
- Finally and certainly not least my parents, to whom this dissertation is dedicated: My late father Stanley "John Bull" Justin Henderson, who laid a great foundation for my life and my late mother Mrs. Dinah "Mayi Phiri" Henderson, whose tender motherly love, care, and Christian principles made a lasting positive impact on my life and made me whom I am today. May their souls rest in peace, until soon when we shall meet never to part again at the sound of a trumpet.

ABSTRACT

HIV and AIDS is a major cause of death in most sub-Sahara Africa countries and research shows that older adolescents and young adults are at great risk of HIV infection. It is therefore important to understand and alter those beliefs and practices that put young people at risk of HIV infection.

An exploratory mixed-method approach was employed with secondary students in Gaborone, Botswana which examined their beliefs about the attitudes and behaviours of their peers in relation to the risk of contracting HIV and AIDS and their perceptions of those strategies that may curtail the spread of infection. Phase One (the qualitative component; n = 216) informed the construction of the survey instrument employed in Phase Two (the quantitative component; n = 593).

Findings indicated that adolescents rated the level of risk that their peers would contract HIV and AIDS as very high. However, there was a tendency by most adolescents to transfer personal vulnerability to others. Participants perceived that, in spite of having significant knowledge relating to HIV and AIDS, many of their peers participated in behaviours linked to HIV infection. These behaviours included heterosexual activity, nonuse of condoms and concurrent multiple sexual partners - factors that have been identified in other studies.

Analysis of data from Phase One suggested that a two-stage decision-making process determined adolescent involvement in at-risk behaviour. The first stage of this decision-making process was an initial intention, which most often was to avoid risk behaviours. The second stage involved a reframing process that often overturned the initial

intentions. This resulted from an array of internal and social pressures associated with the journey from adolescence to young adulthood. Results from both Phase One and Phase Two indicated that a number of the reframing pressures for males and females differed. Females indicated that they faced pressure for involvement in intergenerational sex while males indicated that peer acceptance and social pressures often led to circumstances involving sexual activity. For both males and females, an important mediating practice in the reframing process was the use of alcohol and drugs.

The two-stage decision-making model suggests that a reduction in adolescent potential for risk-taking behaviour depends on programs that simultaneously increase the strength of adolescents' initial intentions while reducing the reframing pressures and mediating practices. This leads to a series of recommendations that includes helping adolescents develop those life-skills that enables them to withstand the pressures impacting their initial intentions.

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List of Abbreviations, Terms and Acronyms.

ABBREVIATION/TERM	MEANING
ABC……	Abstain, Be Faithful, and Condomise; A preventative campaign message used in Botswana.
ACHLHREC ……	Avondale College of Higher Learning Human Research Ethics Committee
Adolescents……	Boys and girls aged 13 to 18 years old
AIDS……	Acquired Immune Deficiency Syndrome
ARV……	Anti Retro Viral (Drug used to ameliorate the symptoms associated with AIDS.
ALWHA……	Adolescents living with Human Immune Deficiency Virus and Acquired Immune Deficiency Syndrome.
ANOVA……	Analysis of Variance.
BAIS ……	Botswana AIDS Impact Survey
Batswana ……	A plural term used for people from Botswana.
BME……	Botswana Ministry of Education
BMHRU ……	Botswana Ministry of Health Research Unit.
Bogwera……	Male cultural initiation program
Bojwale……	Female cultural initiation program
Botswana ……	The name of the country under study; it is situated in sub-Sahara Africa.
CCFM ……	Composite Conceptual Framework Model
CDC……	Centre for Disease Control
CIET……	Centro de Investigation de Enfermedandes Tropicales Trust.
Chichewa……	A national language of Malawi where I was born.
Condomise ……	A campaign promotional word used to describe the use of condoms in Botswana.
CSO……	Central Statistics Office
DC ……	Demographic Variables
Form	A term used for each year at secondary level in Botswana.
HAART……	Highly Active Antiretroviral Therapy
HBM……	Health Belief Model
HIV……	Human Immune Deficiency Virus
HIV and AIDS……	Human Immune Deficiency Virus and Acquired Immune Deficiency Syndrome
HLTV……	Human Lymphocyte Virus
LAV……	Lymphadenopathy Associated Virus
Lekgalibe……	A girl or a young woman
Malume……	An Uncle
Mosadi……	A woman
Motswana……	A singular term used for a person from Botswana.
NACA……	National AIDS Co-ordinating Agency
NBPH ……	Higher socio-economic level
NGO……	Non-Governmental Organisations

PACT……	Peer Approach to Counselling Teenagers
PLWA……	People Living With AIDS
PMTCT……	Prevention of Mother to Child Transmission
Preadolescents……	Boys and girls aged between 9 and 11 years old.
Risk……	The probability or likelihood that a person may become infected with HIV.
SDA ……	Seventh Day Adventist
SES ……	Socio Economic Status
Setswana……	As a noun: Setswana is a language spoken in Botswana As an adjective: Setswana describes the characteristic or relating e.g. Setswana culture. or some characteristics of people of Botswana, or relating to Batswana people
Sexual Debut……	A term which is used in literature to mean first sexual experience (This may be by consent or by force).
SIV……	Simian Immunodeficiency Virus
SOS……	Socio-economic Status
Standard……	A term used for each year at primary school in Botswana.
STD……	Sexually Transmitted diseases
STIs……	Sexually Transmitted Infections
TPB ……	Theory of Planned Behaviour
TRA……	Theory of Reasoned Action
Tswana……	An ethnic name for people in Botswana
UB/UPENN ……	University of Botswana/University of Pennsylvania.
UCCSA ……	United Congregational Church in Southern Africa
UN……	United Nations
UNAIDS……	United Nations AIDS Program
UNDP……	United Nations Development Programs
UNICEF……	United Nations Children Fund
WHO……	World Health Organisation
Young Adults……	Boys and girls aged 19 to 24 years old
Youths……	A term which refers to time between childhood and adulthood for boys and girls aged between 9 and 24 years old.

CHAPTER 1

STUDY PURPOSE AND RATIONALE

1.0 OVERVIEW

This study seeks to explore perceptions of adolescents living in Botswana of their peers' risk of contracting Human Immune Deficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS), as a means of contributing to efforts to reduce HIV and AIDS infection among adolescents living in Botswana. This chapter first describes the background of the study, purpose and significance of the study, and finally presents the research questions and sub-questions which guide the study and the structure of the thesis.

1.1 BACKGROUND OF THE STUDY

The AIDS pandemic has affected all world populations and it is estimated that between 31.4 and 35.9 million people worldwide were living with HIV at the end of 2011 (UNAIDS, 2012a). While recent reports have indicated that tremendous progress has been gained in mitigating HIV and AIDS from an acute disease to a manageable chronic medical condition (UNAIDS, 2012a), and that by the end of 2011 many countries including Botswana, Namibia, Swaziland and Zimbabwe in sub-Sahara Africa reported significant decline in new infections, HIV and AIDS, however, is still one of the leading devastating epidemics and causes of death in the world (Khan, Mahase, OReilly, Osborne, & Roseman, 2009; UNAIDS, 2012a; UNAIDS & WHO, 2009; WHO, 2012). While every country has been impacted, and the burden of this epidemic varies between countries and regions, the sub-Sahara Africa region has by far the highest proportion of the population living with AIDS. In total, approximately 23.5 million individuals, nearly

one in twenty adults (4.9%) of sub-Sahara Africa have AIDS (UNAIDS, 2012a). In 1999 research showed that Botswana had nearly two people in five suffering AIDS-related diseases and was second only to Swaziland in the world-rate of HIV prevalence (UNDP, 2001). Given that Botswana is approximately midway on the poverty and affluence continuum among all African countries (CIA, 2013) and that several studies have linked economic status of a country as a major factor in determining infection rates (Ezzy, Visser, & Bartos, 1999; Scott, Simon, Foucade, Theodore, & Gitterns-Baynes, 2011; Twalo & Seager, 2005; UN, 2005; UNDP, 2001), one must ask why Botswana has been affected by HIV and AIDS to this degree.

Existing research shows that the spread of AIDS in sub-Sahara Africa occurs mainly among young people 15-24 years of age (UNAIDS & WHO, 2000). Research also indicates that AIDS in Africa is mainly transmitted through heterosexual activity (UNAIDS & WHO, 2008) and that aspects of African culture may contribute to the rate of infection (Adeniji, 2006; Moyo & Müller, 2011; Mvula & Mfutso-Bengo, 2004). A study accessing data from Ugandans and South Africans has suggested that decisions to engage in sexual intercourse among adolescents and young people are heavily influenced by cultural sexual values and norms and practices and that these influences increase the likelihood of HIV and AIDS infection and unwanted pregnancies (Geary, Baumgarther, Tucker, Wedderburn, & Wagman, 2008). Very little data, however, has been collected relating to the spread of HIV and AIDS in sub-Sahara Africa among the 12 to 18 year old age group, with the typical young people studies focussing on the 15 to 24 year old age group. But it is important to study this age group (12-18 years) as it is most often within this age group that sexual activity commences and thus it is a significant contributor to the spread of HIV and AIDS (Tenkarang, Rajulton, & Moticha-Tyndale, 2009).

Research also indicates that these adolescents and sub-Sahara young adults are unlikely to use contraception in sexual encounters, leaving them unprotected and open to sexually transmitted infection including HIV and AIDS (Hendriksen, Pettifor, Lee, T.Coates, & Rees, 2007). In related research accessing data from Uganda sub-Sahara, girls indicated they believed that there was no need to abstain from sex once they are no longer virgins (Koenig, Lutelo, Zablotska, & Gray, 2005). These practices suggests that sub-Sahara adolescents and young adults, more than any other age group, are more susceptible to HIV and AIDS infection and for this group its consequences are most serious because the greater part of their lives should be ahead of them.

It may be that elements of selected Setswana cultural norms and practices, gender-related behavioural differences and expectations and perceptions about the HIV and AIDS infection and socio-cultural behavioural beliefs give rise to the high percentage of HIV and AIDS infection in adolescents and young adults living in Botswana. This suggestion is supported by Botswana-based studies that link selected young Batswana socio-cultural beliefs and cultural practices with the likelihood of increased probability of HIV and AIDS infection (Chilisa, Nitza, & Makwinja-Morara, 2011a; Chilisa, Ntshwarang, Malinga-Musamba, & Ellece, 2011b; Ntseane, 2004b).

In the absence of a cure, HIV and AIDS prevention programs aimed at assisting sexually active adolescents and young adults to change risky sexual behaviours are being implemented in Botswana. This study seeks to understand the perceptions of adolescents living in Botswana of the risk of their peers contracting HIV and AIDS so that a framework on which effective preventative programs to assist the subsequent generation to reduce HIV and AIDS infection can be developed.

1.2 STATEMENT OF PURPOSE

The first purpose of the study is to expand knowledge and understanding of how adolescents living in Botswana perceive the factors that influence their peers' decision-making and practices pertaining to sexual and other behaviours which may increase the potential for contracting HIV and AIDS. Secondly, the study aims to explore these adolescents' knowledge about and their perception of strategies for the prevention of HIV and AIDS, so that such knowledge can inform the designing of age-sensitive and culturally-appropriate programs to ameliorate the reduction of HIV and AIDS infection among adolescents living in Botswana.

1.3 SIGNIFICANCE OF THE STUDY

Since Botswana has one of the highest prevalence rates of HIV and AIDS in the world this study is highly significant. The study will provide valuable information to educators, governments and those agencies that are implementing various HIV and AIDS prevention programs. In this way the results of the study have the potential to improve many preventive programs, including adolescents' peer education programs, and ultimately to prolong the lives of many young people in Botswana who might otherwise die prematurely of AIDS or whose lives might have severely reduced potential.

1.4 RESEARCH QUESTIONS

The following research questions will guide this study into the perceptions of adolescents living in Botswana about risk behaviours in terms of contracting HIV and AIDS, and consequently inform appropriate actions that the Batswana community could adopt to help reduce HIV and AIDS infection among adolescents in Botswana:

1. *What are the participants' perceptions of the degree to which adolescents living in Botswana are at risk of contracting HIV and AIDS?*
2. *What are the participants' perceptions of behaviours that have the potential to increase the likelihood that adolescents will contract HIV and AIDS?*
3. *What are the participants' perceptions of factors that have the potential to influence adolescents' participation in at-risk behaviours?*
4. *What are the participants' perceptions of strategies that would contribute to a reduction in the likelihood of contracting HIV and AIDS among adolescents living in Botswana?*

This study will further explore the impact of the adolescents' gender, age, family background and their understandings of and views about selected Setswana cultural beliefs has on each of the above broad research questions.

1.5 STRUCTURE OF THE THESIS

This chapter has reviewed the context of the study by providing the background of the study, the statement of purpose and significance of the study has been discussed and the research questions and the structure of the thesis have been outlined.

Chapter two highlights the basis of the study through a review of relevant literature. The chapter describes adolescents, their development and their, risk taking behaviours along with trends that contribute to the risk of HIV infection among adolescents. The chapter also presents a brief outline of the history and nature of HIV, and of the burden of AIDS world-wide with a focus on sub-Sahara Africa. Aspects of adolescent risk behaviours are explored and studies accessing adolescence living in Botswana in the context of HIV and AIDS are examined.

Chapter three defines and develops the conceptual framework for data collection and its analysis. A Composite Conceptual Framework Model which guides this study is presented. Chapter four present an exploratory mixed method that this study has

adopted. This method uses qualitative processes (phase one) and quantitative processes (phase Two). Chapter five uses the qualitative data to explore the four broad research questions as listed in section 1.4 and presents results of these findings. Chapter six presents the analysis of ten conceptual clusters that needed further exploration from findings in chapter five. Chapter seven brings the thesis to its conclusion. It synthesises the results of phase one and phase two and provides discussions of the findings.

CHAPTER 2

LITERATURE REVIEW

2.0 OVERVIEW

This chapter presents a review of literature relevant to the focus of this study - the risk of contracting HIV and AIDS as faced by adolescents living in Botswana. Firstly, the chapter reviews the definitions, adolescences and descriptions of adolescent development, adolescent risk-taking, adolescent sexual behaviour and other trends that contribute to the risk pertaining to HIV and AIDS infection among adolescents. Secondly, the chapter briefly reviews the literature related to the history and nature of HIV and AIDS. It describes how the disease was first recognised and the virus isolated. While the burden of the disease world-wide will be discussed, the chapter focuses on the perspectives of sub-Sahara Africa, and then how Botswana responded to the epidemic when it was first identified in the country. The chapter will then discuss interventions initiated by the Botswana government that were aimed at reducing HIV infections among Batswana adolescents. Finally, the chapter will explore HIV and AIDS studies that have been conducted among adolescents living in Botswana and that examine factors that potentially influence behaviour, with the aim of identifying concepts that will inform this study.

2.1 ADOLESCENCES

The following section reviews the literature related to adolescents and describes aspects of their maturation, physical development, behaviour, perceptions of risk and the impact of cultural influences upon their behaviour.

2.1.1 Definitions and descriptions.

While the age definition of adolescence may vary, all authorities agree that adolescence is the period of growth between childhood and adulthood. Scott and Spencer (1998, p.46) have defined adolescence as "the transition from the dependence of childhood to the independence of adulthood". Rice (1984, p. 29) noted that the word adolescence comes from the Latin verb *adolescere* which means "to grow" or "to grow to maturity". He defined maturity as that "age or condition of life at which a person is considered fully developed physically, emotionally, intellectually and spiritually", while defining *pubescence* as "the whole period during which sexual maturation takes place" (Rice, 1984, p. 30). Generally, the ages between 9 to 12 years are considered to be *pre-adolescence*. This is a period of slow physical growth. At this stage sexual urges may be first experienced, but will not fully emerge until adolescence (Rathus, Nevid, & Fichner-Rathus, 2002).

While all children are different, the ages of approximately 13 to 18 years are generally considered as the age of adolescence (Miyuki et al., 2012). This period begins with puberty and is characterized by rapid growth in stature and the commencement of secondary sex characteristics. As a result adolescents grow increasingly preoccupied with themselves and are self-conscious about their bodies (Biro & Dorn, 2005). This is the developmental stage at which reproduction first becomes possible. The reproductive organs enlarge and mature and sex drives are heightened by the surge of sex hormones (Wallen & Zehr, 2004). These hormones are chemical substances that are secreted by the ductless glands of the endocrine system and discharged directly into the blood stream (Rathus et al., 2002; Scott & Spencer, 1998). In men, testosterone is the sex hormone responsible for lengthening of the vocal cords, the growth of the pubic hair, the

lengthening of the penis, and the production of viable sperm. Correspondingly, 'oestrogens' and 'progesterone' are the female hormones responsible for the development of breasts, pubic hair, the deposit of fatty tissue, widening of the hips, the production of ova and the menarche (Rathus et al., 2002).

Adolescence is considered to be a period of 'brain plasticity'(Giedd, 2008; Paus, 2005). The child's brain is being prepared to function in the world of the adult (Steinberg, 2005). During this time the brain is 'rewired' through the formation of multiple connections that expand the adolescent's brain white matter (Sisk & Zehr, 2005). As a result pre-adolescence becomes a time in which the stable functions and behaviours of late middle-childhood (9-11 years) appear to give way to erratic behaviour and emotional outbursts. This comes at the time when adolescents are internally driven to begin separation from their families, to associate with peers, to press boundaries and to explore their world (Sternberg & Williams, 2010). Cognitive, emotional and moral development is ongoing to late adolescence and even into adulthood (Steinberg, 2005).

The ages between approximately 18 and 24 years are considered to be late-adolescence and the beginning of adulthood. According to Healey (2003, pp. 58-59), the late-adolescent stage is when young people are undergoing developmental processes that potentially reduce the perception of personal vulnerability to risky situations, including risky sexual behaviours. In addition, this stage is characterised by a "belief in one's immortality", "a desire to experiment, to seek peer approval", and by "the consolidation of transitory relationships into their own family bonds". This is the time when young people begin to separate from their family and form social associations with other young people of similar age.

For purposes of this study the term ‘adolescence’ refers to students aged 12 to 18 years who are attending either junior secondary schools or senior secondary schools in Botswana. Further, the adolescent participants in this study will be categorised into one or other of two maturity levels: Junior secondary school students (mostly 13-15 years old) or secondary school students (mostly 16-18 years old).

2.1.2 Adolescents’ behaviours.

When associating with peers, adolescents frequently show off and engage in risk-taking activities to secure group acceptance (Conger & Galambos, 1997). Sexual activity may begin through a combination of factors including: Risk taking, the need for acceptance by others, perceptions of what is normative behaviour, curiosity and pleasure gratification. Gerali (2010), pointed out that at this stage, adolescents begin a roller coaster journey involving confidence and uncertainty. However, as they age and mature they gradually become more confident in their cognitive and social abilities. Socially the vast majority of older adolescents and young adults begin to mimic societal norms regarding gender roles of masculinity and femininity (Sisk & Zehr, 2005; Wallen & Zehr, 2004) .

Although most adolescents experience rapid physical development, including the capacity to reproduce, the stage of cognitive maturity is often delayed until young adulthood and hence adolescents often lack a future orientation and an appreciation of the long-term consequences of their actions (Conger & Galambos, 1997). Adolescent actions may be impulsive and many adolescents do not take into account all the associated risks (Resnick et al., 1997). Morris (1996, p. 381) noted that during earlier generations, young people were “expected to postpone expressing their sexual needs” until they were more mature, responsible and capable of taking the responsibilities

associated with marriage/family life. In those earlier times adolescents' sexual exploration developed within the constraints of cultural and religious beliefs and practices. While this still happens for many young people, there are other social forces at play.

Most available literature relating to the physical and cognitive development of adolescents focuses on adolescents in Western societies such as North America, Europe and Australia. However, all adolescents experience similar physical changes. The distinguishing factors are the norms, beliefs, values and community perceptions by which different societies view sexuality. Yet, in today's society worldwide, and in spite of cultural differences, adolescents are increasingly becoming more sexually active before marriage. In part this trend is driven by greater personal freedom and an almost universal media presence portraying a less restrained life-style for adolescents. This when combined with a reduced ability to make sensible sexual decisions, early and uncommitted sexual activity, and the potential for multiple partners, places adolescents at risk of unwanted pregnancies, educational interruption and sexually transmitted infections (STIs). The delay between the episodes of unprotected sex and its consequence (the first sign of HIV infection) tends to mask the association between the sexual act and the infection and this places adolescents at greater risk of HIV and AIDS infection.

2.2 BOTSWANA: GEOGRAPHY, GOVERNMENT AND CULTURE DIVERSITY

Botswana, one of the countries in sub-Sahara Africa, is situated to the north of South Africa, with Angola to the northwest, Zambia in the northeast, Zimbabwe to the east and Namibia to the west (see Figure 2.1).

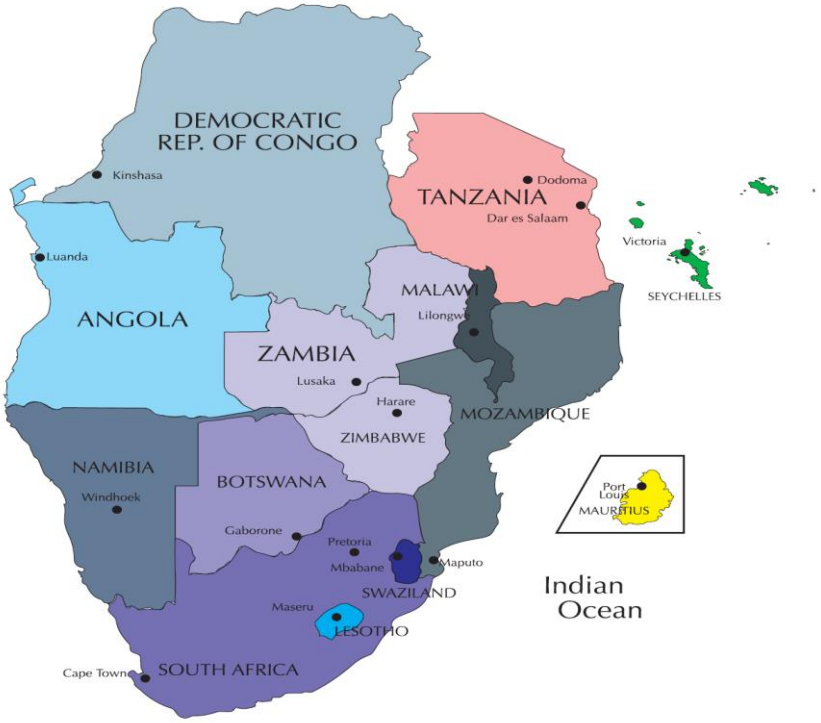


Figure 2.1 A Map of sub-Sahara Africa. (Source: NACA, 2003a)

Botswana has a total area of 231,800 square miles (600,370 sq. km.) and has a relatively stable economy with diamond mining, cattle farming and tourism as its major sources of income (Nage-Sibande & Lya, 2005; Siphambe, 1997). Its current population is close to two million of whom more than three quarters are ethnic Tswana (AVERT, 2007; CIA, 2010). Collectively the people of Botswana are known as Batswana, while the term for an individual is Motswana.

Since independence on 30 September 1966, Botswana has enjoyed more than four decades of uninterrupted democratically elected civilian leadership, progressive social policies and significant capital investment (AVERT, 2007; Scott, 2003). The population has a high level of literacy with more than 70% of those over the age of 15 able to read and write (Maundeni, 2010). Unlike most of the African countries in sub-Sahara Africa,

Botswana has free primary and tertiary education, and has in recent years introduced a nominal fee recovery plan at secondary school (Mafela, Maundeni, & Mookodi, 2011; Maundeni, 2013). Health care is free and there are hospitals and clinics throughout the country.

Ethnically, all the people of Botswana are called 'Batswana'; however, this word has a double meaning (Carter et al., 2007). Firstly the term Batswana refers to all citizens of Botswana and secondly it may also refer to ethnically Tswana people as distinct from other ethnic groups. Beside Batswana as an ethnic group, Botswana as a nation is composed of various other ethnic tribes and these includes: Bakwena, Bayei, Basubiya, Baherero, Batalaote, Batswapong, Bamagwato, Bakalanga, Bangwaketse, Batawana, Bakgatla, Bamalete, Barolong, Basarwa, and Bambukushu . Each one of these different ethnic tribes has some distinct cultural traditions and practices (Carter et al., 2007; Ntseane, 2004b).

While these various ethnic groups have different traditions and practices, generally children in most tribes are raised within their immediate families (Ntseane, 2004b). Families belong to communities where traditional values and customs are learnt. Children are expected to listen to, respect and speak deferentially to their communal elders. Children are also expected to contribute significantly to domestic chores for their families and on behalf of their aging grandparents (Meekers & Ahmed, 1997).

As children become adolescents in today's Botswana communities they form peer-related groups, attend school and socialize more outside the household in ways that did not occur in earlier times. It is within these social settings that the young Batswana of today learn about sexuality. Schapera (1966) states that in the traditional past Batswana adolescent males underwent *bogwera* (male cultural initiation), which included

circumcision and seclusion in the wild, during which time they were taught survival skills and traditional behaviour as well as tribal laws and customs. Batswana adolescent females on the other hand underwent *bojale* (female cultural initiation) through which they receive formal instruction preparing them for the assumption of domestic and agricultural chores as well as appropriate sexual behaviour upon marriage. Meekers and Ahmed (1997) stated that boys and girls traditionally were kept apart as much as possible which prevented sexual activity. Boys were required to spend a lot of time taking care of cattle on farms that were isolated from the villages where girls and women lived. Unmarried girls remained in the village with their mothers, with whom they shared a hut at night. It was within these traditional cultural practices that adolescents in Botswana learned about sexuality, avoided early sexual debut and attempted to keep sexual intercourse within the boundaries of tribal marriage. Meekers and Ahmed (1997) observed, however, that in more recent times, because of the influence of modernization, mass education, Christianity, exposure to Western societies, the internet, economic changes, mass media, and urbanisation in Botswana, many of the traditional values regarding adolescents' sexual training, rituals and behaviour have been challenged. Furthermore, with the changes in life-style brought about by modernisation those initiation programs and practices that facilitated traditional education and had the effect of delaying the onset of sexual activity and restricting it to culturally sanctioned partnerships now occur only sporadically.

The most common past marriage practice in Africa was polygamy where a man with sufficient resources was able to marry more than one wife (Ezeh, 1997; Reniers & Tfaily, 2012). However, because of the influence of modernization and Christianity most marriages are currently between one man and one woman. The most common marriage formalization in Botswana involves negotiation between two families. After spouses

choose each other, family members negotiate the terms of the marriage agreement. Most often marriages involve the exchange of bride-price or *lobola* (Bishai, Falb, Pariyo, & Hindin, 2009; Smith, 2013), where the bridegrooms' family gives either a number of cattle or money as a bride-wealth to the brides' family. While premarital and extramarital sex is common, it is within such formal marriage institutions that sexual activity is considered acceptable in most tribes in Botswana (Smith, 2013). Most Batswana choose to have their marriages registered by the District Commissioner as a civil marriage. They will then conduct marriage ceremonies according to the custom of the people involved as well as have a church-conducted wedding.

Christianity is the predominant form of religion in Botswana (Bianca, 2009; Fish, 2002; Smith, 2013) with small numbers who follow local traditional religious practices. There are also small communities of Muslims, Hindus, and Baha'is in the country (Smith, 2013).

The capital city of Botswana, Gaborone is home to people from various ethnic groups who also have various cultural beliefs and practices. Several non-Batswana nationals also reside in this city. The socio-economic status of the residents of Gaborone is also very diverse. There are sections of this city that have highly affluent residents; however, most of the residents are considered to have middle to lower socio-economic status (Ntseane, 2004a). This study draws its participants from this complex and heterogeneous capital whose residents have diverse cultural backgrounds, hold a wide range of cultural values and beliefs, and norms, have various gender-related expectations and perceptions and residents have varied socio-economic status. It is therefore expected that this study will reflect the complexity of views influenced by a combination of factors: Adolescents' diverse ethnic, cultural and traditional beliefs, a mix of Christian views,

western lifestyle amalgamated with African city modes of behaviour and the effects of the education they are acquiring.

2.3 THE HISTORY AND NATURE OF HIV

The history of HIV and AIDS spans a little over three decades. HIV and AIDS was first recognized on June 5, 1981 when the US Centre for Disease Control and Prevention (CDC) reported five cases of rare opportunistic infection including pneumonia caused by *Pneumocystis jirovecci* (then called *Pneumocystis carinii*) in five homosexual young men living in Los Angeles (Hopp & Rogers, 1989; Merson, O'Malley, Serwadda, & Apisuk, 2008). These five young homosexual men were seen by Dr Gottleib at the University of Los Angeles School of Medicine, and by Dr Pozalski at Cedars of Sinai Hospital (also in Los Angeles California). Opportunistic infections generally affect patients whose immune systems have been compromised. In July 1981 the CDC further noted a high number of homosexual men who were diagnosed with Kaposi Sarcoma. This is a form of a rare cancer which causes pink, brown or purplish skin blotches (Hopp & Rogers, 1989). While the United States of America was reporting increased cases of this new infection, similar cases were also being reported in a number of European countries.

Initially these infections were confirmed only among homosexual men. However, by 1983 similar infections were also identified in Africans who had migrated to Europe and also among female partners of male intravenous drug abusers. It was also in 1983 that scientists led by Dr Robert Gallo in the United States of America collected enough data to determine that these clusters of diseases resulted from the suppression of the immune system, allowing opportunistic diseases to develop. A conference of the CDC (January,

1983) gave the disease the name *acquired immunodeficiency syndrome* (AIDS). Further studies of the disease revealed that AIDS infections were caused by a virus 'protein-coated' particle containing genetic material. The AIDS virus enters the body and slowly destroys genetic components in the CD4 white cells of the immune system (Healey, 2003). It also damages neurons in the nervous system. The infecting agent is a retrovirus, initially labelled HTLVII (H=Human TL=Lymphocyte V=Virus) and later renamed HIV-Human Immunodeficiency Virus. At the same time, similar discoveries about the virus were made by Dr Luc Montagnier and his colleagues Francois Barre-Sinoussi and Jean-Claude Chermann in France where they called the new virus lymphadenopathy-associated virus (LAV). As a result of his own research Dr. J. A. Lev named the virus Associated Retrovirus (ARV). This virus cannot reproduce itself without using the resources of cells from the host animal it infects. The virus depends on the cell that it infects to make copies of the virus so that the infection can spread. Viruses are small enough to lock onto the cell receptors and inject their genetic material into the cytoplasm of the cell (Healey, 2003). After some analysis, results showed that HTLV, LAV and ARV were the same virus with small genetic differences. Thus, a new virus, which we now call human immunodeficiency virus (HIV) was isolated and identified (Hopp & Rogers, 1989).

Hopp and Rogers (1989) further stated that there are several types of retroviruses that have been found in animals. A simian immunodeficiency virus (SIV) can cause AIDS in macaque monkeys. These two authors further believe that HIV was initially found among small isolated groups of monkeys in Central Africa. However, with increasing human population and the rise of the bush-meat trade the virus was transmitted to human beings through contact of contaminated blood. The two authors point out that human blood stored as early as 1959 in Zaire, Central Africa, was found to contain antibodies to

the HIV. This information caused the authors to suspect that HIV originated in Africa. Other authorities are a little more cautious in relation to origins of HIV.

2.4 HIV AND AIDS: A GLOBAL PERSPECTIVE

In 2001 over 29.9 million people worldwide were living with HIV and AIDS. By 2007 this had increased to 33.2 million and by 2011 it had risen to over 33.4 million. The highest incidence at 23.5 million people, was in sub-Sahara Africa in 2011 (UNAIDS, 2012a; UNAIDS & WHO, 2007). The worldwide statistics per region are summarised in Table 2.1. It is estimated that in 2008, 2 million of all the people living with AIDS were children under 15 years of age who largely contracted the virus at the time of their birth (UNAIDS & WHO, 2008) and a recent report indicates that in 2011 this figure increased to 3.4 million for young people under the age of 15 years living with HIV and AIDS. Furthermore, young people between 15 to 24 years account for more than third of all new infections (UNAIDS, 2012a).

In all regions outside sub-Sahara Africa, HIV disproportionately affects mainly injecting drug users, homosexual males and sex workers (UNAIDS & WHO, 2008). By contrast, those who are infected in sub-Sahara Africa tend to be infected through heterosexual transmission.

Table 2.1 Number of Children and Adults estimated to be living with HIV in 2001, 2007 and 2011 by Region (UNAIDS, 2012a; UNAIDS & WHO, 2008)

Region	***Number of adults and children estimated to be infected with HIV***		
	2001	**2007**	**2011**
Sub-Sahara Africa	20,900,000	22,500,000	23,500,000
South and South East Asia	3,700,000	4,000,000	4,200,000
Eastern Europe and Central Asia	1,600,000	1,600,000	1,500.000
Latin America	970,000	1,600,000	1,400,000
North America	1,200,000	1,300,000	1,400,000
East Asia	390,000	800,000	830,000
Western and Central Europe	640,000	760,000	860,000
Middle East and North Africa	300,000	380,000	330,000
Caribbean	240,000	230,000	230,000
Oceania	38,000	75,000	53,000
Total	**29,978,000**	**33,245,000**	**34,300,000**

2.5 HIV AND AIDS: SUB-SAHARA PERSPECTIVE

As mentioned previously, sub-Sahara Africa is the region most affected by HIV and AIDS (see Table 2.1). Sub-Sahara Africa refers to countries south of the Sahara desert including Angola, Botswana, Namibia, Zambia, Zimbabwe, Democratic Republic of Congo, Tanzania, Malawi, Mozambique, South Africa, Swaziland and Lesotho (see Figure 2.1). In 2001, 20.9 million sub-Saharans had contracted HIV and AIDS and by 2007 this increased to 22.5 million people and by 2011 the number reached 23.5 million people in this region. In 2007 approximately 6,800 people were being infected daily by the virus and over 5,700 people were dying every day of AIDS-related illnesses in this region (UNAIDS & WHO, 2007). As a result of this epidemic nearly 12 million children aged under 18 years were orphaned (UNAIDS, 2012a; UNAIDS & WHO, 2008) .

The United Nations Development Program (UNDP) indicates that the devastation caused by HIV and AIDS in sub-Sahara Africa is unique. Aside from its impact on

health and life expectancy, HIV and AIDS also slowed down economic growth through loss of productivity and deepening household poverty. It deprived families, communities and nations of their young and most productive people. It deepened poverty, reversed human development achievements, intensified gender inequalities, eroded the ability of governments to maintain essential services and blocked global and national efforts to improve access to treatment and health care (UNAIDS & WHO, 2008; UNDP, 2001). This effect is ongoing.

The international community remains optimistic that United Nations Millennium Development Goal 6, which aims at halting and beginning to reverse the spread of HIV and AIDS through zero new infections, zero discrimination and zero AIDS-related deaths by 2015, is within reach (UNAIDS, 2011, 2012a). In the context of Millennium Goal 6, a focused effort to identify and understand behaviours and social settings which are most associated with HIV transmission is critical, especially among adolescents of sub-Sahara Africa who are more vulnerable.

2.6 HIV AND AIDS: BOTSWANA PERSPECTIVE

2.6.1 The impact of HIV and AIDS and Botswana government response.

In spite of its economic and political stability, Botswana is adversely affected by the HIV and AIDS pandemic. Because of this disease, in 1998 more than one third of all deaths among children under the age of five were HIV and AIDS related (UNAIDS & WHO, 2008). AIDS is therefore threatening to seriously compromise the most important asset and pride that Botswana has as a nation - its people. AIDS kills individuals who are most needed for productive labour, and families are losing their breadwinners. Illness

associated with HIV and AIDS results in increased absenteeism from the workplace, and when workers die there is a significant loss of skilled labour. HIV and AIDS thus threaten to negate the gains that Botswana has made over the last 49 years since its independence.

Botswana diagnosed and reported its first AIDS case in 1985, and cases quickly multiplied from that time (NACA, 2007). Like most of the sub-Sahara African countries, Botswana went through three stages in response to this epidemic. The first (1987-1989) was denial and slow implementation of strategies in fighting the disease (AVERT, 2007). The main response of the Botswana Government in the fight against HIV at that early stage was to screen blood with the purpose of reducing the risk of HIV and AIDS transmission through contaminated blood transfusion. During the second stage (1989-1995) the government of Botswana began to intensely promote HIV awareness and education through all its communication channels. It was at this time that the 'ABC' awareness program was introduced. Through this program, the Botswana government vigorously promoted [A]bstinence, [B]eing faithful to one partner and the use of [C]ondoms (ABC) as a means of avoiding HIV infection. Billboards, newspapers, magazines, radio and TV drama programs, all featuring HIV and AIDS related issues were and continue to be introduced. The third stage (1995 onwards) included prevention, care and the provision of antiretroviral treatment. In 1995 the government of Botswana approved and adopted the Botswana National Policy on HIV and AIDS through a presidential directive (AVERT, 2007; Bennell et al., 2001; Roache, 2003). In 1997 the government formed the National AIDS Co-ordinating Agency (NACA) with a mandate to mobilize and coordinate a multi-sectoral national response to the HIV and AIDS pandemic. The NACA has an advisory council which is chaired by the State President (AVERT, 2007; NACA, 2000).

In 2000, the government also introduced a program of voluntary HIV counselling and testing. Through this initiative the *Know Your Status* and *Show You Care* programs were promoted through sixteen centres throughout the country. These programs encouraged people to test and know their HIV and AIDS status. By March 2000 the government had begun providing antiretroviral drugs to all HIV-positive people. Beginning with 932 people in 2000 this grew to 85,497 in 2007 (NACA, 2007). These drugs are distributed through the government hospitals and clinics spread throughout the country. From 2003 to 2009 Botswana implemented a National Strategic Framework to guide the whole country in its response to the HIV and AIDS pandemic (NACA, 2003b).

Other initiatives in Botswana included: setting up prevention programs with a focus on behaviour-change messages and implemented at the community level; Sexually Transmitted Infection (STI) control and Prevention of Mother to Child Transmission (PMTCT); care and support programs scaled up to include public provision of Highly Active Antiretroviral Therapy (HAART); home-based care programs for those who were seriously debilitated by the disease; support for the orphans and vulnerable children; and greater involvement with People Living With AIDS (PLWA) (NACA, 2003b).

2.6.2 Mode of HIV transmission in Botswana.

The main mode of HIV transmission in sub-Sahara Africa, including Botswana, is through heterosexual sex (AVERT, 2007; NACA, 2007). Sexually active adolescents, and young adults, especially girls, are disproportionately at risk of contracting HIV in Botswana. The Botswana AIDS Impact Survey III (BAIS III) indicates that females in Botswana have relatively higher and earlier prevalence rates of HIV and AIDS infections (CSO, 2009). The question as to why girls are most affected is discussed later.

UNDP reported that by the end of 1999 Botswana had the world's second highest HIV and AIDS prevalence rate at 35.8% of the adult population (UNDP, 2001). This reality was having a disastrous impact on the socio-economic development of not only Botswana, but all other countries which are most affected by the devastating effects of HIV and AIDS.

2.6.3 HIV and AIDS among young people in Botswana.

Despite the devastation that AIDS has brought to Africa, Botswana and elsewhere, recent data in Botswana indicate a moderate decline in the prevalence rate of infections, especially among young people. According to BAIS III there has been a slight decline in the incidence of HIV and AIDS among young people aged 10 to 14 years from 3.9% in 2004 to 3.5% in 2008. Among young people aged 15 to 19 years the decline is from 6.5% to 3.7% during the same period. However, despite this decline in infections among teens and young adults, the overall national prevalence rate measured against the total population has increased from 17.1% in 2004 to 17.6% in 2008. The 40 to 44 year age group is the most affected with a prevalence rate of 40.6% (CSO, 2009). With incubation period of up to 10 years or more from the time a person first contracts HIV to the time that the first symptoms of infection appear, it is evident that most people became infected when they were adolescents or young adults. The United Nations Development Program (UNDP) identifies the vast majority of young people under the age of 15 as being HIV and AIDS free, and this becomes a window of hope for Botswana. According to UNDP,

> …Botswana can minimize the magnitude of the catastrophe that (HIV prevalence) statistics imply. Its main window of hope is the population who are free of HIV infection. More than half of these are in the under 15 age category, among whom HIV prevalence rates are estimated at less than 2%. Keeping the HIV-negative part of the population uninfected offers Botswana the best prospects for an AIDS-free generation by 2016 (UNDP, 2000, p. 14).

2.6.4 The Botswana HIV and AIDS preventative programs.

One of Botswana's most used HIV and AIDS prevention campaign for the general public is the public communication of the ABC message: "Abstain, Be faithful and Condomise." However, this strategy falls short as an effective program for adolescents. The main message to adolescents and young adults is to abstain because it is illegal for minors to engage in any form of sexual activity in Botswana. The age of sexual consent in Botswana is 16 years. Further, minors cannot undergo an HIV test without parental consent. Whilst these laws were developed to protect youth from sexual exploitation by adults in Botswana, as well as protecting against unwanted pregnancies and the interruption of education, these laws make the promotion of ABC a challenge when it comes to adolescents and HIV and AIDS because the Botswana government cannot directly distribute condoms to young people under the age of 16.

Another limitation of the ABC message is that it focuses on individual behaviour alone and does not address the societal factors that shape vulnerability (Cabassi, 2004; Merson et al., 2008). It also makes it difficult for adolescents who are sexually active to know their own and their partners' HIV status. In obtaining consent from parents for the test, adolescents have to admit that they are involved in sex, and this compounds the difficulty that program presenters face in preventing HIV and AIDS. Such difficulties indicate that a gap exists between the well-intentioned preventative messages, legislation, actual practice, and the changes needed in behaviour for adolescents to avoid infection. Furthermore, Underhill, Montgomery and Operario (2007) found that the message of abstinence only or the free distribution of condoms to adolescents as practised in the United States of America have not been effective in influencing adolescents to avoid HIV infection. This reflects the need for a holistic understanding of

adolescents' perceptions pertaining to their risk of infection and factors that influence them to engage in unprotected sexual intercourse thereby exposing themselves to unwanted pregnancies, STIs and HIV. Ball (1996) correctly noted that such an understanding would promote a better appreciation of how adolescents think, how they place their priorities and how their realities are perceived.

2.6.5 Botswana: HIV Interventions in schools.

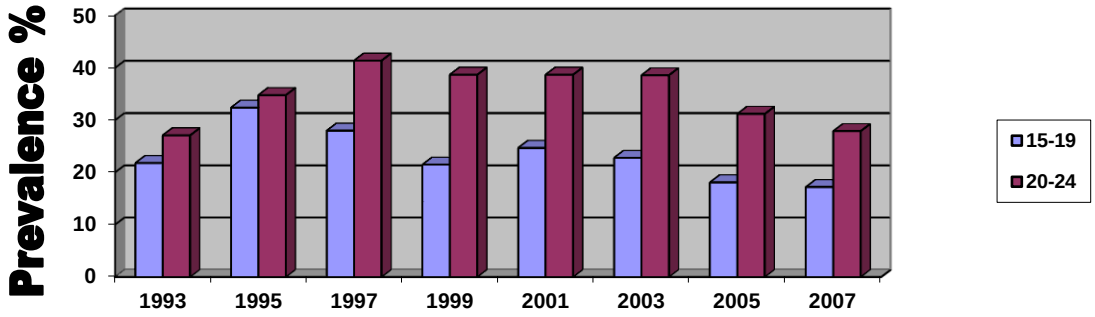
With the view to arresting the spread of infections among adolescents, the Botswana government introduced several sex education programs targeting male and female adolescents in secondary schools in 1994. The aim was to educate school students about behaviours and situations which may put them at risk of contracting HIV and AIDS. The Peer Approach to Counselling Teenagers (PACT) was one such program introduced in all public secondary schools. Through this program and the school curricula, adolescents were given sexual and reproductive health information through guidance and counselling subjects presented by their moral education teachers and by trained peers. The PACT program was designed in the belief that adolescents respond more positively to peer education. As a part of this program, selected adolescents were trained as peer educators. These trained peer educators then worked among their fellow adolescents to give them information about sexual and reproductive health, including HIV and AIDS. Other school subjects such as science also included sexual and reproductive health lessons. In addition to school sexual and reproductive health programs, the Government of Botswana scaled up the laws that protect minors from sexual exploitation.

2.6.6 Botswana policies to protect young people from sexual exploitation.

Besides education about the risks of contracting HIV and AIDS and with the view to addressing the issues of child sexual exploitation such as child sexual abuse, rape and defilement, the Botswana government put in place welfare policies which were meant to protect children. According to Botswana law (Government, 1981; UNICEF, 2007), a child is defined as any person under the age of 18 years, and under the penal code a girl or boy can give consent for sexual intercourse at the minimum age of 16 years. These policies include:

1. Ratifying the International Convention of the Right of the Child by accession on March 14, 1995.
2. Setting the minimum age of marriage without parental consent to 21 years of age.
3. Making sexual harassment a recognised misconduct which can attract penalties.
4. Introducing a minimum sentence from 10 years to a maximum of life imprisonment for conviction of rape.
5. Providing mandatory hearing of rape cases 'in camera'.
6. Developing a national strategic framework that identifies orphans, vulnerable children and children living with HIV as target groups for interventions.
7. Introducing tough new measures for reporting rape cases, defilement or child abuse to the Botswana Police Services through toll-free telephone numbers installed in most of the police stations.
8. Making changes to the education act, so that pregnant girls are now allowed to continue their schooling (UNICEF, 2007, pp. 12-15).

Non-Government Organisations (NGOs) also exist in Botswana to provide food, shelter, emotional support, and counselling to vulnerable children. The Botswana ANC Second Generation HIV and AIDS Sentinel Surveillance Technical Report, (2007) (NACA 2007) indicated that such programs resulted in a levelling off of HIV prevalence and a fall in the number of infections among young people. The estimated HIV prevalence among 15 to 19 years old was highest in 1995 with 32.4% and at its lowest in 2007 with 17.2% (Figure 2.2).



	1993	1995	1997	1999	2001	2003	2005	2007
15-19	21.8	32.4	28	21.5	22.9	22.8	18.1	17.2
20-24	27.1	34.8	41.4	38.7	39.4	38.6	31.2	27.9

Figure 2.2 Age specific HIV prevalence rates in Botswana(1993-2007). Source: (NACA, 2007)

Notwithstanding such efforts and apparent reduction of AIDS prevalence among adolescents, other studies indicated that there was a steady increase in reported rape cases from 1,107 in 1997 to 1,600 in 2003 (Phorano, Thlomelang, & Ntseane, 2005). Although these rape cases records do not specify the ages most affected, a study by UNICEF and Roberta Rivers & Associates involving 378 boys and 422 girls aged between 13 and 16 years of age from twelve rural schools in Botswana indicated that:

1. 38% of the girls questioned reported that they had been touched in a sexual manner without their consent.
2. 17% reported having had sex, with a half of these saying that it was coerced.
3. 34% of the students said they had sex for money, gifts, or favours.
4. Of the sexually active adolescents, almost half said they had never used a condom (Rivers & UNICEF, 2005, p. 21).

Whilst this report did not focused on sexual abuse and rape in Botswana, these statistics indicate that much sexual activity among the 13 and 16 year old adolescents is not by choice and that the problem involving defilement and sexual abuse among adolescents is widespread in Botswana placing them at high risk of contracting HIV and AIDS

(Phorano et al., 2005). Comparatively, in Australia the government established an Institute of Health and Welfare with the aim of protecting children from abuse, neglect or other harm. In each Australian state and territory, there are laws which mandate reports and investigation of suspected abuse, neglect or harm to children (Australia Institute of Health and Welfare, 1999).

2.6.7 Perceptions of risk among adolescents

While Batswana adolescents are at risk of becoming infected with HIV and AIDS, studies indicate that few believe that they are personally likely to become infected (Ball, 1996). This sense of uniqueness and invincibility to infection is not limited to Batswana adolescents or HIV and AIDS infection, but is shared with most other young people and exemplified by such risky decisions and behaviours as driving while drunk, use of illicit drugs and use of tobacco (Benthin, Slovic, & Severson, 1993). Slovic, Fischhoff and Lichtenstein (1979, pp. 36-39) describe nine characteristics that are thought to be important for the way people, including young people perceive their personal risk and these are:

1. Whether the risk is assumed voluntarily or involuntarily.
2. Whether the risk of death from the hazard is immediate or delayed.
3. Whether the risk is known to those exposed.
4. Whether the risk is known to science.
5. Whether the risk from the hazard can be controlled by the individual.
6. Whether the risk is new (unfamiliar) or old (familiar).
7. Whether an accident is likely to kill one person at a time (chronic) or a large number of people at once (catastrophic).
8. Whether the thought of the risk evokes feelings of dread.
9. Whether an accident caused by an activity is likely to result in fatalities.

While these characteristics may not be exhaustive they provide the framework against which risk-taking could be assessed or predicted.

2.6.8 Cultural influences and risk behaviour among adolescents.

There are several studies that have linked the influence of cultural beliefs and risk taking behaviour among adolescents (Marandu & Chamme, 2004; Meekers & Ahmed 1999; Ntseane, 2004b). The following section explores the literature pertaining to various aspects of southern African culture that may have an impact on adolescents' perception of risk of contracting of HIV and AIDS and its prevention.

2.6.8.1 Cultural gender-related expectations.

Several studies in Africa (CSO, 2009; NACA, 2007; UNAIDS, 2012b; UNFPA, 2006) including those in Botswana (CSO, 2009; NACA, 2007) indicate that females are at greater risk of contracting HIV and AIDS than their male counterparts because of gender inequalities, gender-related expectation, coercion including social pressure and gifting and outright violence against women. Ball (1996) states that Setswana culture expects a woman to have a baby to show that she is a mature woman. She says a girl is considered a woman as soon as she has given birth and this change of status brings pride and respect from the community. People would no longer call the new mother *lekgarebe* (a girl or young woman) but would call her a *Mosadi* (a woman) as soon as she had given birth. Such societal respect adds pressure to maturing girls to participate in sexual activity outside of marriage. This pressure is not unique to Botswana. In India, studies show that female adolescents are more vulnerable than their male counterparts mostly due to a combination of factors including biological susceptibility, low level of education, poverty and gender inequalities (Soletti, Guilamo-Ramos, Burnette, Sharma, & Bouris, 2009).

While most adolescent sexual relationships are between African young persons of similar age, indications are that it is not uncommon in the sub-Sahara region for many

young women to engage in sexual relations with older men, who are often referred to as "sugar daddies", for social or financial reasons. For instance in Uganda 75% of unmarried, sexually active adolescent girls reported that they exchanged sex for money or gifts, usually with older men (Darabi, 2008). In Botswana, statistics indicate that for every HIV positive boy aged 15 to 19, there are three HIV positive girls within the same age-range (Khan et al., 2009). Rape, violence against women and girls, as well as abuse of power and money in sexual relationships (Jewkes & Nduna, 2010) are believed to place women at higher risk of HIV infections. While these studies acknowledge the existence of intergenerational sex and its contribution to the spread of HIV and AIDS, there is little analysis on how such relationships contribute to the construction of adolescents' perception of risk of contracting HIV and AIDS. One of the aims of the current study is to explore the contribution that these relationships have on the construction of adolescents' perception of risk of contracting HIV and AIDS.

2.6.8.2 Selected Setswana cultural and sub-cultural beliefs and norms.

While humanity belongs to a single species, it is a species that includes different races and cultures. Morris (1996) has defined race as a subpopulation of a species. According to Morris, different races are identified by distinct physical characteristics such as hair colour or type, or skin pigmentation, as well as other identifiable dimensions such as geographic location. Morris argues that people are further subdivided into ethnic groups. Ethnicity is defined as a common cultural heritage, like shared ancestors and language. Ethnic groups share beliefs, values, attitudes, and traditions which in turn give rise to characteristics, rules and norms that govern or define acceptable and expected behaviour of the people in that society (Coon & Mitterer, 2007; Dobzhansky, 1962; Morris, 1996). Howe (1999, p. 89) has defined culture as "the complex of norms, attitudes, beliefs and values which characterise a given society and distinguish it from other societies" . The

study of risk perceptions must be considered in the cultural context in which such behaviours occur. Several authors agree that culture has a powerful influence on how human beings think, what they do and how they behave (Coon, 2005; Myers, 1998). Various cultures differ in their concepts of human sexuality and what constitutes acceptable and appropriate sexual behaviour in that culture. The term used to define the idea that perceptions of risk and behaviour must be judged relative to the values of the culture, is "cultural relativity" (Coon & Mitterer, 2007, p. 106). For instance, while polygamy is acceptable in one culture it may not be accepted in another. According to Ntseane (2004b) one such practice that may be increasing the risks of HIV and AIDS infection in Botswana is a common belief by some men, that if an older man has unprotected sexual intercourse with a virgin or a young girl, his reproductive system will be cleansed or healed of any infections, including HIV and AIDS.

A study accessing participants from different ethnic sub-groups in Botswana sheds light on different sexual practices and norms which exist in Setswana culture (Ntseane, 2004b). Botswana as a nation is composed of different ethnic tribes. Ntseane's (2004b) phenomenological qualitative study included participants of various ethnic tribes including Bakwena, Bamagwato, Bakalanga, Bangwaketse, Batawana, Bakgatla, Bamalete, Batswapong, Barolong, Basarwa, Baherero, and Bambukushu. According to the researcher, among these tribes are five ethnic groups which have distinct practices that are 'fundamental to sexual activity' and hence may influence the spread of HIV and AIDS.

Ntseane (2004b) goes on to describe the specific cultural practices of these five ethnic groups, the Bakalanga, the Bamangwato, the Basarwa, the Baherero, and the Barolong. She writes that among the Bakalanga, who live in north-east district, there is a cultural

practice known as '*Nkazana*'. This is a practice where a new husband is given authority by the community to ask sexual favours from a younger female sibling of the wife. This practice is derived from the Bakalanga belief that marriage is for procreation and if a woman cannot conceive for whatever reason, then Nkazana children are officially hers. Also, when a wife becomes older or does not satisfy the husband sexually, Nkazana is available.

The Bamangwato, who live in the central part of the country, have a practice called '*Mantsala*'. Ntseane (2004b), explains that this practice allows married uncles to request 'sexual favours' from their unmarried nieces. Girls in this tribe are 'educated' to expect and agree to requests for sexual advances from blood uncles.

Among the Basarwa, who are hunter-gatherer people located in the central Kalahari desert, there is a tradition called '*Xakanaxaamaa*'. Ntseane (2004b), reports that this is a practice that allows multiple sexual partners. It is a practice that condones a woman having sex with any man as long as they leave a spear at the door to alert other men to their presence.

The Baherero, who live in North West district, have a practice called '*Otisira*'. According to Ntseane, this is a belief that for every member of a clan who dies there must be an Otisira or replacement. On the night before burial of any man in the clan, an identified group of girls from the extended family of the deceased will be available for unprotected sex with males from the extended family. This takes place in the hope that one of the girls will conceive to replace the deceased.

The Barolong, who live in the southern part of the country, practice a tradition called '*Seantlo*'. In this practice a man is encouraged to marry a younger sister of his deceased wife. This is done because it is believed that the sister will love and take good care of her deceased sister's children.

It appears that the extent of these five distinct ethnic or group practices in Botswana (that is, how widespread these practices are) have not been investigated. Nor has the influence that these practices may have on the current behaviour of Batswana adolescents been investigated. However, the fact that these practices exist means that an investigation of beliefs and attitudes among Batswana youth in regard to HIV and AIDS transmission should acknowledge the cultural context.

2.7 BOTSWANA DESCRIPTIVE STUDIES

In the literature, there are several Botswana-based descriptive studies (most often funded by the Botswana Government or other interest organisations) aimed at understanding the level of awareness among pre-adolescents, adolescents and adults (aged 10-49 years) of the existence of HIV and AIDS and knowledge in relation to HIV and AIDS transmission and adoption of prevention strategies (AVERT, 2007; CIET, 2008; CSO, 1989, 2009; NACA, 2007; UNICEF, 2001).

2.7.1 Awareness of existence of HIV and AIDS in Botswana.

A study by the Central Statistics Office (CSO, 1989) was one of the first HIV and AIDS studies to be conducted in Botswana. It found that a significant majority (88%) of men and women aged 15 to 49 in Botswana knew of the existence of AIDS. The United Nations Children Fund (UNICEF, 2001) in Botswana also conducted a survey in 2001

among adolescents and young adults aged between 15 and 24. This survey measured knowledge about HIV and AIDS, attitudes and sexual practices of the participants. This research indicated that 90% of all adolescents and young adults in the 15 to 24 year age group throughout Botswana had heard of AIDS but only 15% of the males and only 22% of the females could name four methods of HIV transmission (UNICEF, 2001). A similar study was conducted in 2007 by the Centro de Investigation de Enfermedandes Tropicales Trust (CIET) and its report confirms the high percentage of HIV awareness indicating that 97% of people aged 15 to 49 knew about AIDS and where to get an HIV test (CIET, 2008).

2.7.2 Understanding of HIV and AIDS key issues

A more recent study conducted by the Central Statistics Office (CSO, 2009), in contrast, shows that few adolescents and young adults demonstrated a good understanding of key issues that could change practices and thus reduce HIV infections among Batswana adolescents and young adults. Of the men and women aged 15 to 24 years surveyed, only 43% correctly identified key pieces of information fundamental to HIV and AIDS prevention. These included:

1. Knowing that apparently healthy looking persons can be HIV positive.
2. Knowing how to use condoms correctly.
3. Understanding that condoms have to be used in every sexual encounter.
4. Knowing that having one uninfected partner and being faithful to him/her can prevent HIV and AIDS infection (CSO, 2009, p. 12).

This lack of understanding about HIV transmission has the potential to reduce the perception of risk and personal vulnerability and thus is likely to increase the risk of infection, especially among adolescents who are sexually active.

2.7.3 Sexual activity among young people

Besides Batswana adolescents having a lack of understanding of key issues about HIV transmission, studies also indicate that Batswana adolescents engage in sexual activity at an early age (NACA 2007; UNICEF, 2001). UNICEF states that by the age of 20 more than half of all unmarried males and females in Botswana have experienced sex (UNICEF, 2001) and that in 2001 over 12% of sexually active young girls aged 10 to 14 years became pregnant. When pregnancies occurred among school-attending girls, most left school after becoming pregnant. The same report also indicates that almost 50% of older girls aged 15 to 24 were or had been pregnant. These older girls had already left school, and of those girls who left school, half did not re-enter school after dropping out. Most of these pregnancies led to successful births with only 14% ending before term (UNICEF, 2001, p. 18). Most recent results from the NACA (2007) study indicate that among 15 to 19 years-old adolescents 63% of males and 71% of females were sexually active in Botswana, exposing them to HIV and AIDS infection.

One of the reasons cited earlier, as to why most adolescents are engaging in premarital sex, is the change in traditional restraints on sexual activity making it a norm for most adolescents (Teachman, 2003). Research indicates that the influence of modernization, mass education, and exposure to Western societies has resulted in a change in values that has permitted an earlier onset of and increase in sexual activity among adolescents in several African countries including Botswana (Geugten, Meijel, Uyl, & Vries, 2013; Meekers & Ahmed, 1997).

Research conducted in the United States of America indicates that infection rates of Sexually Transmitted Infections (STIs) among teenagers can be reduced by delaying the

initial sexual experience (Binggeli, 2005; Dixon-Muller & Wasserheit, 1990). Furthermore, research in Uganda suggests that a delay in sexual debut by two years, from age 16 years to 18, has resulted in reduced HIV prevalence (Bennell & Swanson, 2002). While such research has indicated that a delay in sexual debut is associated with reduction of HIV prevalence among adolescents, it has not explored the suggestion that delay may merely mean putting off the onset of the disease by an equivalent amount of time. These studies suggest that the effectiveness of intervention and educational programs for Batswana adolescents will depend largely on understanding, identifying and describing the underlying factors related to adolescents' sexual behaviour across a range of ages and their perception to risk at these ages.

2.7.4 Attitudes of young people pertaining to HIV and AIDS

The 2009 CSO study also explored the willingness of participants aged 10 to 64 years to participate in voluntary counselling and testing, their attitudes towards people living with HIV and AIDS (PLWA) and, in particular their willingness to care for family members who are sick with HIV and AIDS and their opinions about the right of women to decide to use a condom during sexual intercourse. While the majority of the participants in this study indicated their willingness to receive counselling and testing for HIV and AIDS, only 41% of the respondents indicated their willingness to accept a person living with HIV and AIDS in their household. This finding was similar to another study conducted in Papua New Guinea which found that young people generally believed that it would be a waste of money to care for someone who was living with HIV since he or she would die anyway (Kelly et al., 2008). Pertaining to condom usage, the study in Botswana indicated that 92% of the women would insist on condom use.

These informative studies, however, have seldom focused solely upon the attitudes and behaviours of adolescents. Rather they have collected data that included adolescents as a component of participants belonging to wider age-spans (for example 15 to 24 years; 15 to 49 years; 10 to 64 years).

2.8 HIV AND AIDS: PREVENTION STRATEGIES AND RISK PERCEPTION STUDIES

2.8.1 Introduction.

This section of the literature review has an emphasis on prevention strategies and risk perception studies conducted in Botswana and focusing on young people aged 10 to 17 years. These studies will be compared and contrasted with studies based in other countries within the sub-Sahara region and even some from other countries, particularly developing countries, which are also facing the challenge of reducing HIV and AIDS infection rates.

2.8.2 UB/UPENN project studies.

Recently, a series of research projects have been carried out through a partnership between the University of Botswana and the University of Pennsylvania, USA (UB/UPENN Project) focusing on skill development of the researchers in conducting research for HIV and AIDS prevention among Batswana young people. The aim of the project was "to develop, implement, evaluate and sustain culturally competent, developmentally appropriate and sustainable interventions suitable for implementation in a variety of settings to dissuade Batswana adolescents from engaging in behaviours that increase their risk for sexually transmitted diseases (STDs) including HIV and

AIDS'' (Mupedziswa, 2011, p. 5). A number of these theory-based studies have been completed, and published. These studies have made a significant contribution to the understanding and construction of the nature and style of appropriate intervention programs for Batswana adolescents. Most often these studies focused on specific subgroups (school-based samples, churchgoing samples and adolescents living with HIV and AIDS (ALHWA) within the Batswana adolescent community and explored some factors that could potentially contribute to the adoption of behaviours that place young people at risk of contracting HIV and AIDS.

This project targeted young people from two distinct age groups, the 10 to 14 year olds and the 14 to 17 year olds. The 10 to 14 year olds were recruited through two mainstream churches, the United Congregational Church in Southern Africa (UCCSA) and the Seventh-day Adventist (SDA) Churches. The 14 to 17 year olds were recruited from schools located in city and semi-rural areas.

2.8.2.1 Studies accessing data from 14-17 year olds.

Studies of the 14 to 17 year olds concluded that these young people were aware that if people were to reduce the risk of HIV infection they needed to modify their behaviour in relation to sexual activity. This could include: abstinence outside of marriage; limiting sexual activity to fewer sexual partners and ideally having only one sexual partner; and the use of condoms (Chilisa et al., 2011a; Chilisa et al., 2011b; Phibion & Mazile, 2011; Sedimo & Ngwako, 2011). However this information was compromised by other messages about sex derived from cultural myths, the media, other social pressures and the adolescent's desire to explore sex (Chilisa et al., 2011a). While the Botswana government initiated the Abstain, Be faithful, Condomise (ABC) intervention campaign

that has been effective in bringing awareness about HIV and AIDS infection, these campaigns have not been as effective in assisting young people to modify their intentions and behaviours in relation to at-risk behaviours. The study by the Chilisa team highlights the point that accurate knowledge is not the only factor in determining adolescent sexual behaviour. There is an array of socio-cultural attitudes, developmental drives and the desire for gratification that also play a significant part. These findings are mirrored by studies in other countries. For example, a study conducted in Papua New Guinea by the Kelly team concluded that:

> Knowledge of HIV does not determine behaviour. Young people's attitudes towards sex and HIV are important determinants of how fast HIV will spread, because attitudes have as great an influence on behaviour as knowledge (Kelly et al., 2008, p. 8) .

Another UB/UPENN project study explored the impact of the media on adolescent sexual beliefs and attitudes (Sedimo & Ngwako, 2011). This study concluded that the media, especially pornographic content, influenced beliefs, attitudes and values about safe sex and related behaviours. The study suggested that young people are more likely to be influenced by popular media (television, cinema and music) than by their school or parents. These authors mentioned that the popular media has the potential to cause adolescents to develop a carefree attitude towards sexual intercourse. It is important then for intervention programs to utilize the media in a positive manner and also highlight the realities of negative consequences of unsafe sex. A related UB/UPENN project study by Phibion and Mazile (2011) confirmed that the media, especially music, has a strong influence on young people's sexual behaviour. In particular this study revealed that many Batswana young people identified music videos as an influential and informative source on issues related to sex. The lyrics and the artist's dress set the pattern for the way many Batswana young people dress and behave. These adolescents consider the artists to be their role models and imitate their behaviour which sometimes includes

behaviours that have the potential to increase sexual appetite and hence increase the possibility of HIV and AIDS infection.

Another UB/UPENN project study (Onyewadume & Mbingwe, 2011) explored the views of adolescents and their parent about the nature and structure of appropriate HIV and AIDS intervention programs. The results indicated that both the adolescents and their parents were positive about community-based intervention programs. Further, the results indicated that father–son and mother–daughter discussion sessions along with the assistance of external facilitators were perceived as an effective structure for these programs. Interestingly, studies based in India (Giilamo-Ramos et al., 2012; Soletti et al., 2009) and a study based in Papua New Guinea (Kelly et. al., 2008) also found that intervention programs that included separate father–son and mother–daughter sessions would be the most effective design.

After analysing the stories circulating among adolescents and focusing upon the metaphors and proverbs used, another UB/UPENN project study (Chilisa et al., 2011b) concluded that adolescent understandings of at-risk behaviours were to some extent informed by and constructed from the community culture. This study indicated that there were significant gender differences in what constituted at-risk behaviours and the associated ability of males and females to handle social pressures related to these behaviours. Such data indicated intervention programs designed for adolescent males need to be different from those designed for adolescent females if they are to be effective. Studies in other cultures have also reinforced the need for adolescent HIV and AIDS programs to take into consideration issues of gender (Giilamo-Ramos et al., 2012; Kelly et al., 2008; Soletti et al., 2009).

The challenges associated with disclosure of HIV status by Adolescents Living With HIV and AIDS (ALWHA) was the focus of another of these UB/UPENN project studies (Ngwenya et al., 2011). In this study, several factors were identified which inhibited ALWHA disclosing their HIV status to people around them. Some of these factors included: fear of being labelled promiscuous; fear of being stigmatised; and fear of being rejected by family and friends. The study also found that there was inadequate information about the available support services to assist ALWHA in dealing with the socioeconomic, health and psychological challenges they face as a result of their HIV status. The study recommended that while HIV status disclosure was a necessary step toward the development of age specific, culturally appropriate and personally relevant intervention programs for these ALWHA, health care providers need to provide the ALWHA with counselling, encouragement and support in order to assist them in making informed decisions regarding the disclosure of their HIV status to parents/guardians and friends (Ngwenya et al., 2011). Disclosure is an important factor in reducing HIV transmission as studies have found that adolescents most often change to safer sexual practices after disclosure (Rugg, Banspach, & Short, 1992; Skogmar et al., 2006).

However, there were penalties for disclosure. A related study that was aimed at identifying the challenges experienced by ALWHA found that adolescents reported that they experienced unfavourable attitudes, beliefs and discrimination from family, friends, and relatives and from school. ALWHA often deny that they are living with the virus and thereby fail to adhere to medication. This study recommends that efforts need to be implemented that educate the general public in Botswana to know the existence of stigma and how to address its impact through multi-pronged intervention programmes (Nthomang, Phaladze, Ngwenya, Oagile, & Kubanji, 2011).

2.8.2.2 Studies accessing data from 10-14 year olds.

Two UB/UPENN project studies explored beliefs relating to abstinence and prevention strategies among 10 to 14 year old participants. These young people were accessed through the UCCSA and the SDA churches. The first study aimed at identifying the beliefs of each denomination in relation to the practice of sexual abstinence. This first study concluded that there were four types of beliefs that influence young people's intentions to abstain. Firstly, there were the health beliefs. These are the beliefs concerning the health consequences associated with contracting HIV and AIDS. Secondly, most of the young people in the study believed that their Christian beliefs and principles were a strong influence on their decision to abstain from sexual activity. They believed that marriage was a state of spiritual commitment in which the sexual act was a part of the bond. Most participants believed that being a Christian made it easier for them to abstain. Thirdly, their moral beliefs were influenced by the Christian utilitarian principle that posits that one's intentions and behaviours must be guided by what is right and what is good for the most number of people. This means that one's behaviour towards another should not harm or denigrate the other person. Fourthly, there were the social beliefs that association with like-minded peers would provide a social environment conducive to abstinence. Yet at the same time young people recognised that abstinence was often difficult and that they did not always have the self-efficacy to make the decision to abstain (Modie-Moroka et al., 2011) . The second study sought information about the churchgoing 10 to 14 year olds' perception in relation to possible intervention strategies to prevent the transmission of HIV and AIDS and STI's. In this study most of the participants welcomed and accepted the idea of intervention programs. These young people indicated that they have the intrinsic motivation to abstain because of their Christian beliefs, and that they derive strength and support from their Christian principles. The participants mentioned that some of the topics that would be appropriate

for such programs include: the biblical perspective of sex; topics related to sexual health and knowledge; skills to handle peer pressure; topics related to alcohol and its effects and topics dealing with substance abuse. They believed that if such programs were to be effective, they should involve parental participation (Pilane et al., 2011).

2.8.3 Studies about predictors of condom usage as a means of prevention of HIV infection.

2.8.3.1 Introduction

This section will focus on Botswana-based studies that have been conducted to examine the present community attitudes to condom use in an attempt to better design programs for the prevention of HIV and AIDS within the specified community. These studies will be compared and contrasted with studies discussing condom usage based in other countries within the sub-Sahara region and from other developing countries, which also face the challenge of reducing HIV and AIDS infection rates. However, the Botswana-based studies did not consider adolescents as a specific group and so the conclusions reached may not be all directly applicable to this age group. Since the adolescent age-groups were included in these studies there will be some components of the studies that may apply to them.

2.8.3.2 Botswana-based condom usage studies

A study accessing 1,349 (492 under 21 years old, 623 aged 21 to 24 years, 174 aged 34 to 44 years and 60 aged 45 and over) was conducted in 2004 (Marandu & Chamme, 2004). This study was aimed at examining people's attitude to condom use for prevention of HIV infection in Botswana. The study found that there were a range of beliefs and attitudes that influence the use of condoms. The attitudes included: the view that condoms may be effective in preventing pregnancies but were not effective in

protecting people from contracting HIV; the view that it was embarrassing to be known to carry or buy condoms; and the view that the use of a condom interfered with sexual pleasure. Attitudes related to traditional cultural values included: the view that having a child proves that one is a real man/woman; the male view that having multiple sexual partners was enviable; and also the view that it was possible to know the HIV status of someone through their appearance. The study accessed a wide age range of participants from under 21 to 65 and over. Analysis of this study indicated that those under the age of 21 years were more likely to have unprotected sex after drinking alcohol and more likely to perceive that a condom was not effective in preventing HIV infection. The findings suggested that males were more likely than females to have attitudes that would encourage the non-use of condoms. The study found that youth tended to hold the view that males were the ones who must determine the use of the condom. A related Botswana-based study accessing 1,268 adults (18-59 years) found a correlation between the lack of use of condoms and alcohol consumption. This study concluded that there was a strong association between non-use or improper use of condoms and alcohol consumption (Weiser et al., 2006). In this study, participants with heavy alcohol consumption (greater than 14 drinks/week for females and greater than 21 drinks/week for males) had a higher proportion of non-use of condoms than those who drank less than 14 drinks a week.

The Weiser team (2006) also found that besides non-use of condoms heavy alcohol consumption was also associated with greater intergenerational sexual relations, higher frequency of multiple sexual partners and participation in sex in exchange for money or gifts.

These studies indicated that the development of preventative strategies against HIV and AIDS infection must address several local beliefs. These involved views related to the effectiveness of condom use and the belief that responsibility for the decision to use a condom lay with the male. In addition these strategies must address the critical factor of the effect of alcohol use on decision-making.

2.8.3.3 sub-Sahara Africa region based condom usage studies.

A review of a number of studies conducted in the sub-Sahara African region that examined the knowledge of correct condom use and consistency of use by those adolescents who indulged in sex indicated that there were several factors that influenced the use or non-use of condoms. Non-use of condoms was associated with factors including: 'trust and relationship commitment' where being in a relationship for more than six months was associated with non-use of condoms in subsequent sexual intercourse (Hendriksen et al., 2007); early age of sexual debut, where those who engage in sex before the age of 15 were more likely to have sex without a condom (Pettifor, Straten, Dunbar, Shiboski, & Padian, 2004); sexual power dynamics which included forced sex, coerced sex and intergenerational sex where adolescents participated in sexual relationships with older men or older women where condoms were not used (Dunkle, Jewkes & Brown, 2004; Dunkle et al. 2004, Jewkes, Levin, Mbananga, & Brandshaw, 2002; Koening, Lutalo, & Zhao, 2004; Tsai et al., 2011); gender difference in which male adolescents reported higher frequency of condom use than did their female counterparts (Dunkle et al., 2004; Jewkes, Vundule, Maforah, & Jordaan, 2001; Munthali et al., 2006); partner age difference, where partners with an age-difference of greater than 9 years were less likely to use a condom than those with an age range of less than 5 years (Bankale, Ahmed, Neema, Oudraogo, & Konyani, 2007).

Like the Botswana-based studies, two separate studies conducted in South Africa associated incorrect or non-use of condom with alcohol and drug usage (Simbayi et al., 2004), and with situations in which adolescents were having sex in exchange for money or reward (Vundule, Maforah, Jewkes, & Jordaan, 2001). Several studies also found a correlation between fear of being considered unfaithful and an inability to negotiate condom usage (Hendriksen et al., 2007; Swart-Kruger & Ritcher, 1997). Participants in these studies indicated that they were unable to negotiate condom-use because they believed that if they asked for or suggested the use of condoms during sexual intercourse their partners would consider such a request as an admission of infidelity to the relationship.

The HIV and AIDS literature also indicated that several misconceptions circulating among adolescents in the sub-Sahara region undermined the promotion of condom usage as a measure against HIV and AIDS infection. Such misconceptions included: a belief that condoms had holes that allow the virus to penetrate through; a perception that condom can disappear into the vagina (Feldman, O'Hara, Baboo, Chitalu, & Lu, 1997); a perception that condoms that are distributed by government free of charge are of low quality (Bankale et al., 2007); and a perception that you can tell someone who has HIV and AIDS by their appearance (Munthali et al., 2006). Correcting such misconceptions among adolescents in sub-Sahara Africa is one of the challenges encountered by those implementing intervention programs aimed at increasing the use of condoms to prevent HIV and AIDS infection among sexually active adolescents.

By contrast, correct and consistent use of condoms was linked to participation in discussions about the use of condoms, and also the use of condoms during a first sexual experience was associated with consistent condom use in subsequent sexual intercourse

experiences (Hendriksen et al., 2007). Furthermore, adolescents who have witnessed demonstrations of condom use were more likely to have a greater knowledge and use of condoms (Bankale et al., 2007). Those adolescents who had optimistic views about the future were most likely to use condom during sexual intercourse (Hendriksen et al., 2007). These studies would suggest that the HIV and AIDS studies accessing adolescents should consider the role of open discussion about condom usage among adolescents, especially condom usage during the first sexual experience.

2.8.3.4 Other regions condom usage studies

The Botswana and sub-Sahara based studies have provided valuable information for the development of preventative strategies against HIV and AIDS infection among adolescents. However the adoption of such strategies must also be considered against the cultural context in which adolescents function. The following study conducted in a region outside sub-Sahara Africa underscores the need of contextualizing strategies.

McMillan (2008) conducted a comparative study, accessing two distinct cultures, which aimed at identifying the availability and use of condoms among Tongan and Vanuatuan young people aged 18 to 25 years. This study noted many differences between the two groups. The young people from Tonga predominantly believed that condoms can help to protect them from HIV infection. However, most of them indicated that access and use of condoms was relatively difficult. One of the reasons given for such difficulty was that most of their peers had the attitude that condoms were good for other people thereby excluding themselves from their use. Many Tongan young people also felt they disliked condoms because of an unpleasant smell, look and feel. These young people associated condoms with promiscuity and illicit sex and therefore not appropriate for those who were in committed relationships. Further, Tongan young people also felt that accessing

condoms from familiar places was extremely difficult because the Tongan Islands are geographically small and the extended family structure means that knowledge of individual purchases would reach family members and, church and traditional leaders who frowned upon condom use. Indeed, there were a number of Tongan young people who indicated that they had never seen or used a condom before. In contrast to the Tongan young people, those from Vanuatu (also comprising a cluster of small islands) were positive about the use of condoms and found it easy to carry them around. The main concern of the Vanuatuan young people was that the supply of condoms was a problem because shops in rural areas did not always have them in stock. The study concluded that in order to improve the access to condoms and their use among young people in Tonga and Vanuatu, different approaches needed to be made in order to meet the different needs and attitudes of various young people living in different cultural contexts. For the Tongan young people, the study recommended that influential people holding high traditional office, family members and church leaders, need to be convinced of the importance of putting physical safety first. They can then transmit this information to the younger generations. The study also recommended that condom distribution points should be in positions where the privacy of the young people is ensured. By contrast, in Vanuatu peer education would be the most effective way to promote condom usage. These variations in attitudes and views between young people from different nationalities underline the need to gain an understanding of the attitudes and socio-cultural contexts in which young people live if one aims to develop effective prevention strategies to combat HIV and AIDS infection.

2.8.4 Summary

Each of the Botswana-based UB/UPENN project studies has provided a greater understanding of young people's intentions relating to specific risk behaviours and/or their beliefs about effective HIV and AIDS prevention programs. Such studies provide a valuable framework for further Botswana-based research in this area. Even though most of these studies were age-specific they were not solely adolescent focussed, rather they most often included combinations of pre-adolescent, adolescent and late-adolescent participants.

These intention studies indicate that the messages of "abstain, refrain from multiple sexual partners, and use condoms" were being heard but adolescents' intentions were also being influenced by other external factors. These studies further indicate that knowledge was not the only influence on their intentions. A number of studies reviewed the influence of the media, in particular the lyrics of the music they listened to and the pornographic content within the visual media, which can give rise to a more care-free attitude towards sexual intercourse. These studies also indicated that young peoples' understandings of at-risk behaviours were informed by and constructed from community-wide beliefs. These studies highlighted the gender differences in adolescent risk perception and recommended that intervention programs needed to be gender specific. It was noted that the risk of contracting HIV and AIDS among adolescents could possibly be lowered if there was disclosure by those adolescents living with HIV and AIDS (ALWHA). However, increase in disclosure will only occur when the stigma attached to HIV status by the community is reduced. For the pre-adolescents studied, the intention to abstain from sexual activity was influenced by health beliefs, Christian

beliefs, the utilitarianism principle and the potential socioeconomic problems associated with HIV and AIDS.

According to data arising from adolescent groups, effective prevention programs should be community based, involve parents and include separate father-son and mother-daughter sessions. By contrast, those studies of pre-adolescent groups emphasized self-efficacy development and knowledge-expansion programs. These studies into HIV and AIDS prevention program assumed that young people's views would indeed contribute to the development of effective preventive programs.

The studies involving condom- use as a means of preventions of HIV and AIDS found that condom use or non-use was significantly influenced by a range of factors and by the context of its use. In particular, condom use was related to complex factors. These included: socio-cultural and traditional cultural values exhibited by the community; beliefs and attitudes among adolescents; the prevalence of intergenerational sexual activity; and certain beliefs among older affluent men who can induce sexual favours for payment of rewards. These studies however did not restrict participants to adolescents only, so these conclusions may not always apply to them.

Most of these risk-perception studies were designed to evaluate the participants' intentions to participate or not participate in at-risk behaviour. The assumption in these intention studies was that intentions are good predictors of behaviour. However, this was not tested. This appears to be a limitation in the research relating to adolescents and HIV and AIDS infection in general and Botswana-based research in particular. Furthermore, many of these HIV and AIDS risk-behaviour studies focused on the influence of one or

two factors and did not address the potential of the interaction of these potential risk-behaviour determinants.

2.9 IMPACT OF OTHER SOCIO-DEMOGRAPHICAL FACTORS

Socio-demographic factors can often include age, gender, ethnicity, family, religious affiliation, nationality, family composition, living arrangements of the family, and education level of the head of a household. Demographic factors such as age, gender, ethnicity, and nationality have been discussed in the literature review prior to this section. This section addresses four demographic factors not already covered by the literature review thus far, but that are considered important in a study that explores adolescent behaviour. These include: Influences arising within the family; influences of religious beliefs; and those influences arising as a result of education and/or maturity levels. In particular these factors would appear to have a greater influence on the behaviour of adolescents than that for other age groups.

2.9.1 Family influence.

Several studies have demonstrated that there is a strong association between adolescents' upbringing and the development of their perceptions of the appropriateness or otherwise of various behaviours (Brook, Morojele, Zhang, & Brook, 2006; Wagner & Rehfuss, 2008). In particular such studies indicate that the family environment is one of the more powerful influences on the way children develop their values, attitudes and perceptions. It is within a family that children and adolescents learn how to love, receive care and develop empathy and responsibility. Parents teach children moral values and issues of sexual behaviour. Parents control the home and family environment. This environment

becomes the crucible in which children develop moral values, and learn responsibility and self-discipline.

Howe (1999, p 37) defines family ‘as an institution within every society in which children are conceived and nurtured’. The family regulates human relationships including sexual practices. Howe goes on to assert that it is within the family that the education process commences, and that such education includes the process of socialisation by which young members are inducted into the society and culture and learn appropriate and expected behaviours. He further observes that it is within the family that children learn the sensibilities expected by the larger society. A study conducted in United States of America observed that adolescents who did not have strong family support, such as those who have run away from home and live in group homes or shelters, were at a higher risk of contracting HIV and AIDS through risky sexual and drug-abuse behaviours than those who have strong family support (Liverpool, McGhee, Lollies, Beckford, & Levine, 2002).

While parents have the responsibility to teach their children about sexuality, they may not have the skills to do so effectively. Janus and Janus (1993) noted that most parents, especially in African cultures, are too embarrassed or too sexually illiterate to discuss sex with their children and have only a vague awareness of their children’s sexual knowledge and experience.

The family’s socio-economic status may also play a role in the construction of risk perceptions. Marmot (2006) indicates that there is a relationship between socio-economic status of an individual and their health, wellbeing and education, with higher-income individuals enjoying better health status and education than those with lower

economic status. Another study in the United States of America by Binggeli (2005) indicates that the median age at which adolescents who come from families with lower incomes, indulge in their first sexual experience, is six months earlier than those from higher income families. Even though Botswana as a nation is not amongst the poorest of the African nations, 50% of its citizen are still living below the international poverty line of US $1.25 a day (UNDP, 2007). At a household level many Batswana families still face economic hardship.

2.9.2 Influence of religion.

Studies based in Botswana indicate that there is a strong relationship between Christian beliefs and participants' intentions to abstain from risky sexual activity (Modie-Moroka et al., 2011; Pilane et al., 2011). For these studies the participants ranged in age from 10 to 14 years. There is very little literature that covers Botswana-based studies exploring the relationship between religion and at-risk behaviour in adolescents. A study accessing 980 university students in Uganda, however, identified one's religion as an important determinant of sexual behaviour (Agardh, Tumwine, & Ostergren, 2001). In this study, those young people who reported high religious engagement reported a lower number of sexual partners and were less likely to engage in premarital sex, than those who were not religious. The study explained that young people from a strong religious background "were brought up in a closed system of rigid institutionalized choices, less exposed to the 'outside' world and thus less likely to engage in early sexual activities" (Agardh et al., 2001, p. 10). While most of the participants in the study were in the late adolescence age-range, the influence of one's religion could well be similar for younger age groupings. The researchers in this study posit that religion for most people in Uganda is a lifetime commitment. Most people are born into Christian families, they get baptised

and then attend faith-based schools and most often marry someone of their faith. It is therefore expected that religion would likewise be a strong influence on adolescent behaviours. This may not be the situation for other countries and cultures.

2.9.3 Influence of type of education and maturity levels.

Even though a number of Botswana-based studies exploring factors that influence risk behaviour in terms of HIV and AIDS infection were age specific (Chilisa et al., 2011a; Pilane et al., 2011; Sedimo & Ngwako, 2011), there was an apparent lack of research comparing the differences in risk behaviours across age groups. One study which examined how type of education affects adolescents AIDS knowledge and sexual activity was conducted in Belgium (Rossem, Berten, & Tuyckom, 2010). This study was designed to access participants within the same age grouping but from two types of educations systems. The first group of participants for the study were from 'lower status education systems' that prepared students for vocational job markets. Most of these students were from families of lower social economic status. The second group of participants were from 'higher status education systems' that prepared students for higher education. Most of the students in these schools were from middle and higher social economic status families. This study found that students who were studying in lower status education systems were at increased risk of contracting HIV and AIDS compared to those from higher status type. Those students from higher status education systems had a higher overall AIDS knowledge, in particular knowledge relating to myths, transmission, risk behaviour and blood transfusion issues, than those from lower status education systems. This study also observed that the older students (16-17 years old) had greater HIV and AIDS knowledge than the younger students (14-15 years old). The study also observed that beside a poorer knowledge about HIV and AIDS, those

from lower status education systems were more likely to be sexually active earlier in their lives than those from higher status education systems. This study highlighted the need to take into consideration a number of factors when exploring HIV and AIDS among adolescents. These include the influence of the adolescent's maturity level, the standard of education and the socio-economic status of the family.

2.9.4 Summary.

The literature, though not all specifically related to the Botswana context, indicates that there were quite strong relationships between adolescents' involvement in HIV and AIDS at-risk behaviours and specific demographic factors. In particular those with strong family support were less likely to be involved in risky sexual behaviour. Adolescents from lower socio-economic status families most often had their first sexual encounter earlier and had less knowledge about HIV and AIDS than those from higher socio-economic status families. Finally, adolescents who reported high religious engagement are less likely to be involved in early sexual activity. These findings suggest that greater understanding of risk-taking by Batswana adolescents needs to consider socio-demographic variables.

2.10 CONCLUSION

This chapter has painted a dire and complex picture of the HIV and AIDS situation in Botswana. The situation is dire because of the devastating effects that the HIV and the resulting diseases have upon individuals, families, the economy and ultimately the nation. Approximately one in every six persons in Botswana is known to either carry the virus or display symptoms of AIDS. Infants have been infected as a part of the birth process; children have been orphaned as a result of AIDS; young people have been

infected through heterosexual sex; workers with AIDS have sickened and died thus depriving the nation of their skills; the national average life expectancy has dramatically declined; and the cost of treatments for those with HIV or AIDS has risen. In total the effects of HIV and AIDS have dealt a grievous wound to the nation.

The complexity of the situation in Botswana arises from a spread of situations, characteristics, beliefs and behaviours that are in some way connected to HIV and AIDS. Firstly, the desire to indulge in sexual activity is driven by deep desires awakened in adolescence by natural bodily functions at a time when cognitive controls have yet to fully develop. Further, Batswana include a diversity of peoples of differing ethnic backgrounds and differing socio-economic statuses and who range from those who have rudimentary education and who remain close to their traditional roots, to those who are better, even highly educated, who live in the city and who hold down significant positions. Children and adolescents include those who live in villages and who attend small rural schools, and those whose families can afford to send them to sophisticated, fee-paying schools in the city, where they become steeped in current communication technologies and well acquainted with modern media. For many adolescents, modern schooling has irrevocably altered those teenage gender-roles that traditionally separated the sexes.

In Southern Africa the HIV is mostly spread through heterosexual activity. There is an incubation period of around a decade. The prevalence of AIDS increases during the latter period of young adulthood and therefore much of the infection transmission is likely to occur during of the years of maximal sexual interest and sexual activity – those of late adolescence or early adulthood. While this thesis acknowledges that older men play a part in sexual exploitation of younger women it also argues that these predatory

behaviours are largely entrenched and resistant to change. For these reasons, this research project will focus on school-age adolescents. If young people are provided with strategies that enable them to successfully handle situations of risk, the proportion of those in the next generation infected with AIDS could be greatly reduced.

Much needs to be done. Approximately two in every three adolescents aged between 15 and 19 years are sexually active and because of the nature of traditional practices and local beliefs that encourage intergenerational sex, girls of this age-range tend to be more sexually active and as a result they are at greater risk than their male counterparts. The literature suggests that because of certain social factors and beliefs much of this sexual activity involves unprotected sex. Many adolescents appear to believe that condoms are ineffective in protecting against the transmission of HIV and that the use of condoms interferes with sexual pleasure. Attitudes prevalent among young people also hold that the desire to use condoms is a betrayal of trust in the partner. Further, adolescents have reported multiple sexual partners, early sexual debut and disparity of sexual power that favours the male partner. In addition, alcohol consumption is reported to be associated with adolescent sexual activity.

The literature also suggests that there are tools that can be used to address adolescent risk behaviour. Research indicates that almost all adolescents are aware of HIV and AIDS and its effects, that those who are associated with churches believe that religious values help them to abstain from sexual activity, that their intentions must be guided by what is right and good for other people, and that association with like-minded peers would assist their resolve to abstain from at-risk behaviour. Further, the literature also suggests that information supplied to adolescents is more effective if parents are

involved and if the information is delivered in a way that is culturally appropriate and gender-sensitive.

There is one further point. While culture evolves over time, it changes faster when it is placed under the pressure of situations like the current HIV and AIDS crisis. In the light of potential change, adolescent intentions, beliefs and behaviours need to be periodically reviewed. This raises the following questions: What do Gaborone adolescents currently believe about the risks associated with HIV and AIDS? What do they believe about behaviours that could increase their risk of contracting HIV and AIDS? What do they believe about the reasons why adolescents participate in at-risk behaviour? What strategies do Gaborone adolescents think could be effective in changing current patterns of at-risk adolescent behaviour?

Finally, this research project is to be conducted in a social situation of great complexity. In order to meet the demands of this complex situation this research project will choose a research method that contains a major element that is flexible enough to adapt to the complexity of society in Gaborone.

The following chapter describes the research methodology adopted for this study.

CHAPTER 3

CONCEPTUAL FRAMEWORK

3.0 OVERVIEW

This chapter defines and develops the conceptual framework for data collection and its analysis. Firstly, the chapter defines the term 'conceptual framework' and discusses its implications for this study. Secondly, the chapter outlines two theories that have often been used in related health studies. Of these, the first is the Health Belief Model (HBM) and the second is the Theory of Reasoned Action (TRA). Finally, the chapter synthesises these two models into the Composite Conceptual Framework Model (CCFM) that will guide the study.

3.1 DEFINITION: CONCEPTUAL FRAMEWORK

Polit and Beck (2006, p.46) have defined a theoretical framework as "interrelated concepts or abstractions assembled together in a rational scheme by virtue of their relevance to a common theme." The importance of theory-based research within the context of the HIV and AIDS pandemic, including Botswana-based studies, has been well documented (Chilisa et al., 2011a; Cox, 2009; Lindsay, 2009; Odu & Akante, 2009; Onyewadume & Mbingwe, 2011; Sedimo & Ngwako, 2011; Tenkarang et al., 2009). Most of these studies indicated that theoretical frameworks aid the researcher in understanding the predictors of people's health-related behaviours, and assist in the development of data collection tools. The use of theoretical frameworks focuses attention upon key factors, ensures adequate data is collected and guides in the analysis of that data. However, King (1999) noted that the use of such theories should not ignore the larger social context within which behaviours or perceptions occur. He further

recommended that theories need to be adapted to address diverse social contexts in which studies are being conducted.

3.2 HEALTH BELIEF MODEL (HBM)

The Health Belief Model (HBM) is an expectancy-value theoretical framework that has been employed in several relatively recent HIV and AIDS research studies (Cox, 2009; Joseph, Burke, Tuason, Barker, & Pagick, 2009; Lindsay, 2009; Odu & Akante, 2009; Tenkarang et al., 2009). The HBM was first developed in the 1950s by social psychologists Hochbaum, Rosenstock and Kegels to explain people's health-related behaviours or perceptions (Becker, 1974). The HBM relates mainly to internal factors (cognitive processes) influencing one's health behaviours (Becker, 1974). In brief, the model suggests that people make decisions about participating or not participating in health-risk activities relating to a particular disease based on two specific beliefs about the disease, as well as their beliefs about the utility of possible preventive action against contracting the disease (Cox 2009).

These two specific beliefs about the disease are, one *Susceptibility,* which refers to the extent to which a person believes that he or she is potentially vulnerable to contracting the disease in question and two, *Severity,* which relates to the extent to which a person believes that the consequences of the disease are so serious that he or she feels the need to protect himself/herself from contracting the disease.

The belief about the utility of possible preventive action against contracting a particular disease initially consisted of two components: *Benefits of Action,* which refers to the extent to which a person believes that there are effective protection strategies available

to protect himself/herself from the disease in question; and *Barriers to Action***,** which relates to the extent to which a person believes that they have the ability to perform these protection strategies.

According to this model, if people believe they are personally susceptible to contracting the disease and that the disease is severe and has drastic consequences, and they believe that they have sufficient knowledge, ability and resources to protect themselves, they are most likely to make decisions that avoid putting themselves at-risk to the disease.

Two more components relating to beliefs about the utility of possible preventive action were later added to this theory: *Cues of Action and Self-efficacy* (Sharma & Romas, 2012). Cues of action, refer to those precipitating factors that make a person feel the need to take action. Self-efficacy refers to the confidence in ones' ability and readiness to act in a particular way.

In relation to this study these beliefs would translate to the following: individual beliefs about the severity of AIDS; an assessment of personal vulnerability to contracting HIV and succumbing to AIDS; personal beliefs about the effectiveness of preventive measures against the HIV; a sense of personal urgency to take preventive action; and an inner confidence that the individual is able to take preventive action within the context of his or her life and social situation. These belief factors are illustrated in Figure 3.1.

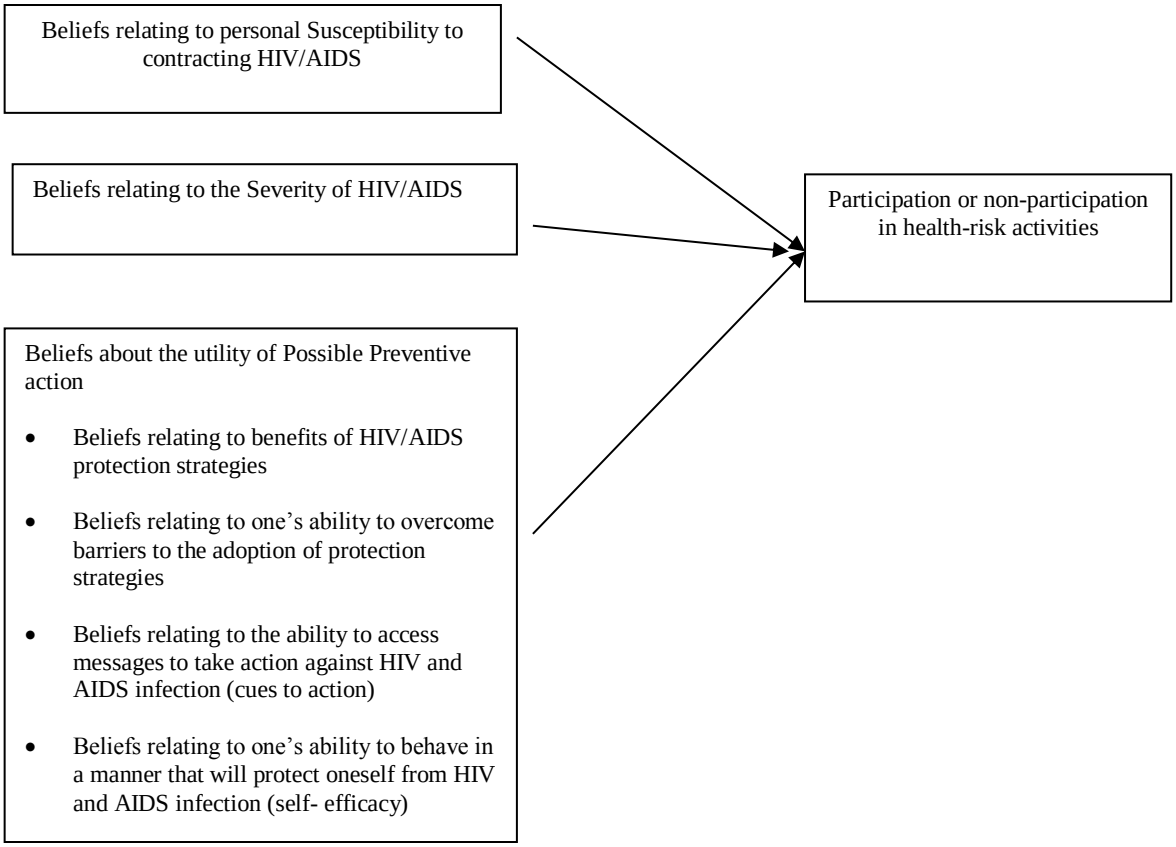


Figure 3.1 A construct of the Health Belief Model adapted for the HIV and AIDS context. Adapted from (Sharma & Romas, 2012).

The Health Belief Model is particularly applicable for the study of topics such as HIV and AIDS in that it focuses on the particular health beliefs that an individual may have about a specific illness and the beliefs about the potential ability he or she has to avoid this illness. The HBM stresses the impact that the illness could well have on the individual in terms of susceptibility and severity. These beliefs can then be linked back to knowledge that is accessible to those who design preventive strategies.

A limitation of the HBM, however, is that it assumes that people always act rationally and make systematic use of information when they confront a situation of risk and have to make decisions in relation to that situation. Whilst this assumption could be true for some adults who are mature and can make a reasonable analysis of information before them, this is most likely not the case for most adolescents who are still in the process of

maturing and who face a range of pressures emanating from their immediate social context. In terms of these social/cultural pressures Sharma and Romas (2012, p.85) write, "cultural factors, socioeconomic status, and previous experiences also shape health behaviours, and those factors are not accounted for in the model". Importantly, the model does not address the impact of social and cultural influences on individual intentions and behaviours. Many of these social pressures were discussed in Chapter Two. Finally, the model does not address the relative importance of the three components within the model and so does not indicate a hierarchy of importance.

3.3 THEORY OF REASONED ACTION (TRA)

The Theory of Reasoned Action (TRA) is another expectancy value theory that was first presented by Fishbein and Ajzen (1975). Fishbein and Ajzen (1980) further developed this theory into a more elaborate theory called the Theory of Planned Behaviour (TPB). In contrast to the HBM theory the TRA includes the impact of social influences on intentions and thus behaviours. In general terms the TRA posits that behaviours, including risk behaviours, are highly associated with one's beliefs, emotions and intentions. According to this theory, people behave in a particular way based on the strength of their beliefs and intentions when an opportunity allows (Fishbein & Ajzen, 1975; Glanz, Rimer, & Lewis, 2002; Sharma & Romas, 2012; Simons-Morton, McLeroy, & Wendel, 2012). That is, the stronger an individual's intention to do something, the more likely he or she will actually perform the action. The theory further states that intentions are highly influenced by beliefs and feelings towards an object or action. In the context of this theory the authors state that although attitudes (a combination of beliefs and feelings) cannot be observed directly, they can be inferred from observed behaviours. Further, belief strengths and intentions can be indicated in

discussion (interviews) or measured by such survey devices as the Likert scale. Figure 3.2 illustrates this relationship between beliefs, attitudes, intentions and behaviours.

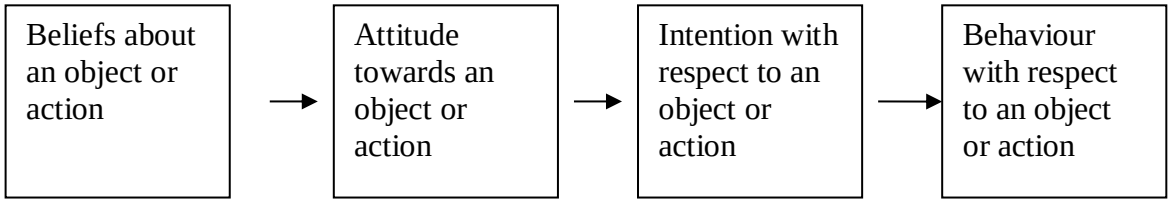


Figure 3.2 Schematic of conceptual framework relating beliefs, attitudes, intentions and behaviours. Adapted from (Fishbein and Ajzen, 1975).

The TRA further suggested that besides holding beliefs about the consequences of a particular behaviour, people also place value on anticipated outcomes of the particular behaviour. The theory suggests that one's attitude toward a particular behaviour is generated from one's view of the consequences of that behaviour along with the value placed on such consequences.

Further the TRA states that perceptions about the importance of social approval (referred to as subjective norms) also contribute to the formation of intentions. Subjective norms are the opinions of others, particularly significant others (others with whom there is a meaningful relationship). People are therefore also concerned about how close friends, the peer group, classmates, workmates, parents, and teachers perceive the action or object. According to the TRA the subjective norms are a composition of normative beliefs that include: perceptions of how significant others would expect or like him/her to behave; personal motivations to comply; and the degree to which a person wants to act in accordance with the perceived wishes of those significant others. The opinions of these significant others influence the strength of the intentions to perform certain behaviour. Figure 3.3 illustrates the inclusion of the subjective norms to the theory.

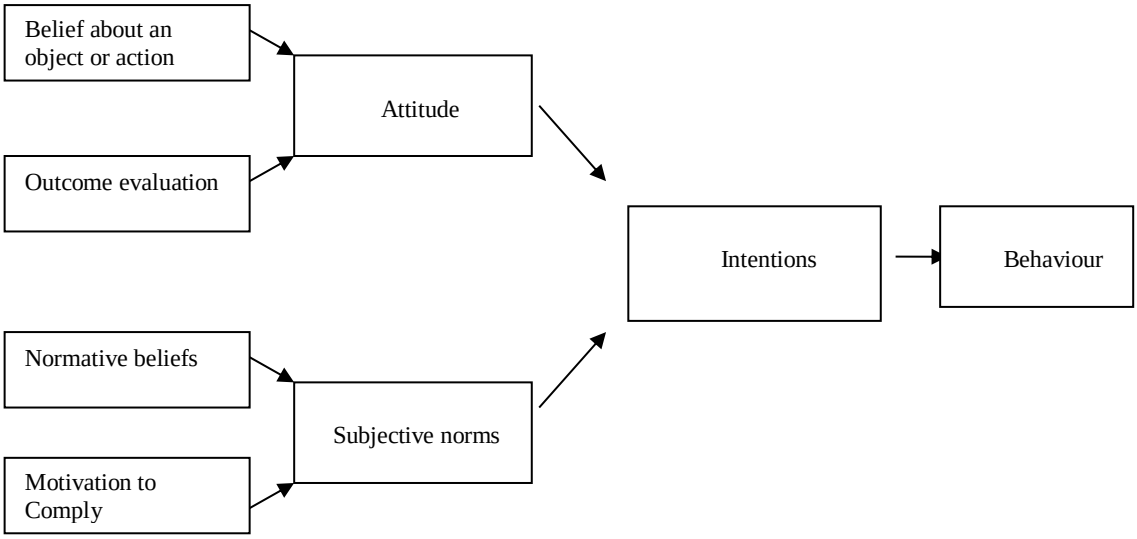


Figure 3.3 Illustration of the TRA, including the subjective norms component. Adapted from (Simons-Morton et al., 2012)

The TRA has been applied in several health studies, including: HIV and AIDS studies (Chilisa et al., 2011a; Kinsler, Sneed, Morisky, & Ang, 2004; Koniak-Griffin & Stein, 2006); predictors of adolescents' cigarette smoking (Greive, 1992); diagnosis of depression (Voorhees et al., 2005); and attitudes toward cancer screening (Zimmerman, Tabbarah, Trauth, Nowalk, & Ricci, 2006) to name some of the studies. These studies have suggested that the TRA provides a theoretical framework that assists in understanding the predictors of individual human behaviours. A number of HIV and AIDS studies have applied the TRA to assist in the understanding of an individual's intentions with respect to delay adolescent sexual activity, use or non-use of condoms, having multiple sexual partners and other sexual behaviours.

The Theory of Planned Behaviour (TPB) is a further elaboration of the TRA, such that another component, 'perceived behavioural control', is added to the TRA framework (Fishbein & Ajzen, 1975). The TPB modification of the TRA posits that besides attitudes and subjective norms, one's intentions to act are also influenced by one's

perceived behavioural control. This refers to one's self-evaluation of their ability to act in a certain manner. According to TPB such perceived behaviour control consists of two components: *Control Belief* and *Perceived Power*. Control Belief refers to one's perception about internal and external factors that may inhibit or facilitate the performance of the behaviour and Perceived Power refers to one's perception about how easy or difficult it is to perform the behaviour. Figure 3.4 illustrates the TPB modification of the TRA framework.

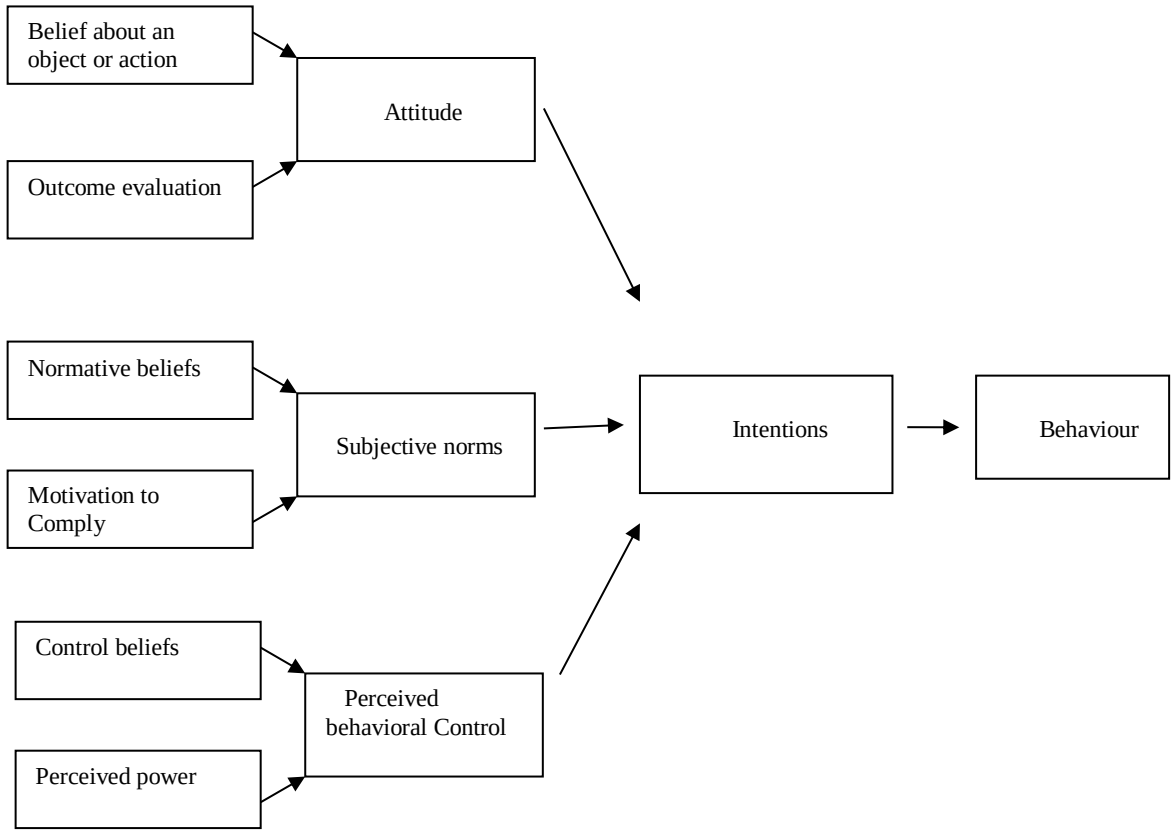


Figure 3.4 Illustration of the TPB modification of the TRA.

As rightly noted by Sharma and Romas, (2012, p.132) the TRA and the TPB have some limitations in that these theories do not "consider personality-related factors, cultural factors, and demographical variables". Ogden (2003) suggested further that the theories are limited in that there is no adjustment for the relative importance of the beliefs/attitudes and subjective norms. Another limitation of the TRA and the TPB is

that they assume that when someone forms an intention to act, he or she will be able to perform that action without any other pressures. In a real-life situation there may be (or is even likely to be) other factors that limit an individual's ability to perform a specific action, including the lack of ability to overcome external pressures. Myers (1998) gives an example of how this might happen. He comments that some people may have an accurate and detailed knowledge of factors related to good health (beliefs that can contribute to attitude), and still participate in behaviours that are detrimental to health. For example, a person may know about the harmful effects of smoking tobacco and still continue to smoke or understand the importance of losing weight but, because of external pressures, continue to indulge unhealthy food choices and perform little exercise (Myers, 1998). Similarly, perception of risk and risk-taking behaviours, such as sexual activity, can be mitigated by the impulse of the moment that is driven by strong desires that run counter to the attitude or knowledge held by the individual (Morris, 1996; Myers, 1998). Finally adolescents can behave in unpredictable ways and are susceptible to immediate social situations that amplify the likelihood of indulging in at-risk behaviour.

3.4 COMPOSITE CONCEPTUAL FRAMEWORK MODEL (CCFM)

Botha and Atkins (2006 p. 2) found that when different theoretical frameworks do not contradict each other, a combination of the frameworks into a composite framework offers "very useful constructs for studying" behaviour. Such a combination is one that merges the concepts of the HBM and the TRA. For this study this combined framework has been labelled as the Composite Conceptual Framework Model (CCFM) .

This CCFM mitigates the limitation of the HBM, which excludes the influence of subjective norms, by initially adopting the TRA as the basic framework that includes a

subjective norms component. The CCFM then consist of two components that influence intentions with respect to a specified behaviour: one's beliefs and attitudes towards the behaviour; and the influence of subjective norms on the behaviour. The HBM framework posits that beliefs about and attitudes toward a particular behaviour in relation to disease is in part dependent upon beliefs that relate to the severity of the consequences of indulging in the behaviour and one's susceptibility to those consequences. The TRA framework has a variant on this relationship in that it hypothesises that one's attitude towards a particular behaviour is generated from one's view of the consequences of that behaviour and moderated by the value placed on the activity itself. For example, a smoker may limit the incidence of smoking because of the health consequences, but continue smoking because of the enjoyment of (or value attached to) the act of smoking.

The third component of the HBM framework includes beliefs about the utility of possible preventative action - that is, the belief that the individual has sufficient knowledge and ability and resources to protect himself/herself. The addition of this component completes the CCFM framework. In a sense, this is an amplification of a self-efficacy component. This component, interestingly, somewhat parallels the addition to the TRA framework that generated the TPB framework.

The CCFM allows behaviour to be influenced by a combination of factors. These include: beliefs about consequences of indulgence in the behaviour; beliefs about personal susceptibility to those consequences; beliefs developed within the social milieu (subjective norms); beliefs about the utility of possible preventive action; and the value (pleasure) attached to indulgence in the behaviour.

This study relates to HIV and AIDS in Botswana where HIV and AIDS is prevalent. Chapter Two has described the Botswana Government reduction campaigns. These have largely been based upon concepts of severity (consequences), susceptibility and prevention. The CCFM as applied in this project will seek information related to the following components: knowledge and beliefs about the consequences of HIV and AIDS; beliefs in relation to personal susceptibility to HIV; beliefs about HIV and AIDS developed within the social milieu of Gaborone; values expectation attached to indulgence in the behaviour; and beliefs about the utility of possible preventive action to contracting HIV.

This thesis acknowledges that eliciting information about beliefs related to the value (or pleasure) attached to sexual activity poses a particular problem. Information in relation to this study will be sought from adolescents. The researcher feels that it is neither proper nor ethical to directly ask adolescents questions in relation to personal sexual behaviour, including beliefs about the 'value' attached to sexual behaviour. Hence Chapter Four describes Phase One of the research method and outlines an indirect approach to gathering data with implications for adolescents' attitudes and practices in relation to sexual behaviour. Figure 3.5 provides a graphical representation of the application of the CCFM to the collection of data from adolescents in Gaborone.

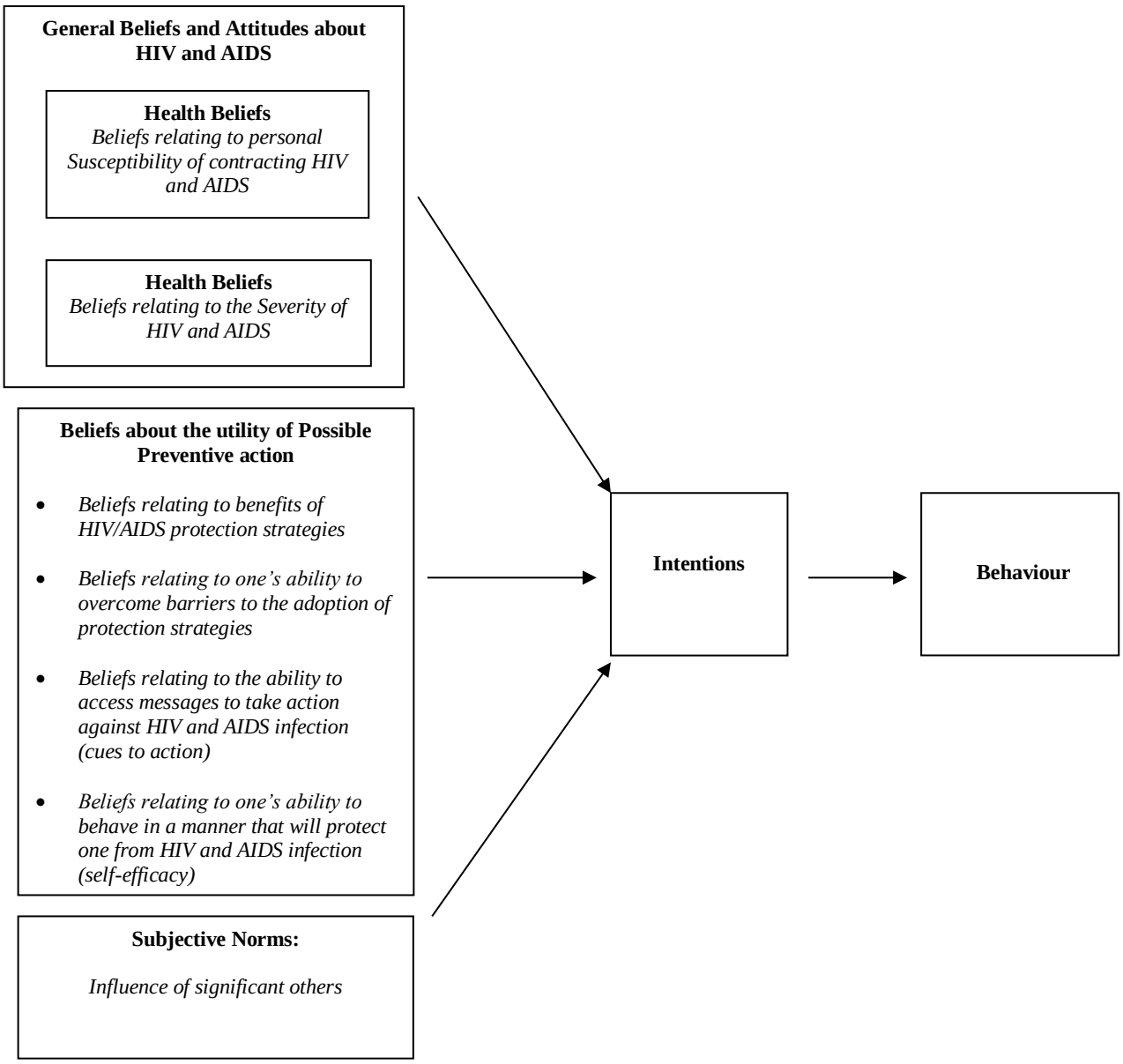


Figure 3.5 Composite Conceptual Framework Model

The arrows in Figure 3.5 indicate the direction of influence and the model suggests the underlying factors for such influences. Whether to participate or not to participate in risky sexual activity will be influenced by the strength of personal intention. A build-up of anticipatory intention only requires an appropriate set of circumstances to trigger actual behaviour. The model suggests that the strength of intention to engage in sexual behaviour will be influenced by four sets of attitudinal factors.

The CCFM suggests that the first set of factors to have influence upon a personal 'intention' to engage or not engage in risky sexual activity includes: beliefs related to personal vulnerability to HIV; and beliefs about the severity of HIV and AIDS and the resulting consequences of infection by HIV. The second set of factors to influence personal 'intention' involves: beliefs about personal ability to recognise (identify) situations that require protective action (cues); beliefs about the effectiveness or lack of effectiveness of protection (prevention) strategies; beliefs about personal ability to adopt protective strategies; and finally beliefs about personal abilities to execute protective strategies (self-efficacy). The third set of factors includes factors representing a values expectation (for example, pleasure) in relation to sexual activity that satisfies a basic psychological drive. As will be described in Chapter Four, information related to this set will be elicited indirectly and data will arise by inference. Finally, 'intention' to participate in risky sexual activity may be influenced by the nature of beliefs common to the social milieu involving significant others. This is the subjective norm within the society from which the research participants are drawn.

It must be noted that general beliefs, specific health beliefs, beliefs about the utility of preventative action and the subjective norms components of the CCFM will also be influenced by various socio-demographic variables. Such socio-demographic variables include age, gender, ethnicity, family religion affiliation, nationality, family composition, living arrangements of the family, and the education level of the head of each household.

This CCFM provides guidance for this study that seeks to explore the perceptions of adolescents' from the city of Gaborone concerning the perceptions of their peers in relations to risk to contracting HIV and AIDS.

3.5 CONCLUSION

This chapter developed a conceptual framework by merging aspects of the Health Belief Model (HBM) and the Theory of Reasoned Action (TRA) to form the Composite Conceptual Framework Model (CCFM). This CCFM combines four of sets of attitudinal factors that were hypothesised to influence actual behaviour through the mediation of an 'intention-to-act' factor. The CCFM was described in terms of the HIV and AIDS situation in Gaborone, Botswana.

Chapter four describes the mixed method approach adopted by this research. Phase One of the research method follows a typical qualitative approach, while Phase Two uses a questionnaire to elicit data that can be subjected to statistical analyses. Chapter two has indicated the complexity of human behaviour in relation to HIV and AIDS in Botswana. In doing so it noted the combination of ethnicities, cultural and traditional beliefs, Christian views and other adopted lifestyles in relation to HIV and AIDS. In order to meet this complexity Phase One data collection will involve the flexibility of qualitative research. Even so, the questions asked in interviews, focus groups and of written responses will also follow the structure of CCFM.

Phase Two of the research method will be informed by the data and results obtained from Phase One. The CCFM will therefore involve the construction of a survey (questionnaire). The question items in this questionnaire will produce variables that are consistent with the factor-sets and structure as described by the CCFM.

CHAPTER 4

RESEARCH METHOD: PHASE ONE

4.0 INTRODUCTION

This chapter draws together a number of disparate elements related to a mixed-method approach. In so doing it outlines an exploratory mixed-method approach that divides the research procedures into a qualitative process (Phase One) and a quantitative process (Phase Two). The chapter then focuses on those aspects related to the Phase One qualitative procedures. It discusses the characteristics of sound research questions before presenting the Phase One research questions. It then considers the social, cultural and ethical issues involved in the sensitive process of researching adolescent perceptions and behaviours in relation to HIV and AIDS. The chapter then discusses aspects involving 'trustworthiness' (Guba, 1981) and sampling before describing the trialling of the Phase One procedures and concludes with a detailed account of the Phase One research method. Chapter five will provide the results of the Phase One process and the description of the Phase Two research procedures will be found in chapter six.

4.1 OVERVIEW OF A MIXED-METHOD APPROACH

This section draws together details from the literature review and argues for an exploratory mixed-method design to research process.

4.1.1 The impact of social complexity upon the research questions and research method.

There are two important implications arising out of chapter two that impact upon both the research questions and the research method. Chapter two indicated that the few published Botswana-based HIV and AIDS studies dealing with adolescents focused on

the adolescents' intentions rather than their actual behaviours. In addition, these studies were generally restricted in the range of issues relating to HIV and AIDS that they considered. Typical were studies that explored the impact of the media or the impact of religion on adolescents' intentions to abstain from sexual activity or studies that explored factors that influenced intentions to use condoms. Very few of the published studies describe factors related to socio-demographic influences. As a result this study intends to examine a range of socio-demographic and socio-cultural factors that influence the perceptions of young adolescents (aged 12-18 years) attending school in Gaborone in relation to HIV and AIDS and their perceptions of the behaviours of other Gaborone adolescents in relation to risks posed by the AIDS pandemic.

Chapter two also detailed the complexity of the Batswana social and cultural structures. This thesis argues that in order to unravel the effects that this complexity may have upon those perceptions, beliefs and behaviours of Gaborone adolescents that impinge upon the spread of HIV and AIDS, the research questions must maintain a balance between clarity and generality. That is, while the questions must be clearly stated, they also should allow room for the research method to explore issues raised by the participants. This, of course, means that the same complex mix of Batswana social and cultural factors that demands generality of the research questions also requires that the research method be sufficiently flexible to explore these issues when they are raised by the participants.

It is for this reason that a mixed-method design utilizing procedures of both qualitative and quantitative research was chosen for this research project. These two distinct types of research procedures complement each other as each elicits different kinds of data bringing its own advantages and disadvantages (Cresswell, 2008). This chapter argues

that a qualitative approach introduces the flexibility needed to explore in-depth descriptions of adolescent perceptions and behaviours in relation to HIV and AIDS. However, a qualitative approach limits the number of adolescent participants. On the other hand quantitative procedures using various survey techniques permits a large number of respondents to indicate factors related to adolescent perceptions and behaviours in a manner that can be subjected to statistical analyses. However, survey techniques also introduce inflexibility in that once the questionnaire has been crystallised and prepared for circulation, it cannot be altered.

The next section will explore the possible structures of mixed-method research and will describe the design chosen for this research project.

4.1.2 Choice of mixed-method design.

Creswell (2008) suggests that a mixed-method approach could be one of three possible designs: an embedded design; an explanatory design; or an exploratory design. Creswell further states that an embedded design permits both qualitative and quantitative data to be collected simultaneously. The analyses of these two bodies of information produce results that are potentially mutually supportive. The explanatory mixed-method design involves the sequential collection of data in which the quantitative phase of data collection precedes the qualitative phase of data collection. Information arising from the qualitative phase is used to help explain or elaborate the results of the quantitative analysis. On the other hand, the exploratory mixed-method design reverses the sequence of the two phases of an explanatory mixed-method design. In the exploratory mixed-method design the qualitative phase is used to explore issues in a flexible manner and the results of its analyses are then used to inform the quantitative procedures. Analysis

of the quantitative data permits an exploration and quantification of relationships suggested by the qualitative data.

The current research used the exploratory mixed-method design where participants first provided qualitative data and based on the analysis of these responses a survey instrument (questionnaire) was constructed for the collection of quantitative data. This quantitative data included measures of factors related to the demographics of the adolescent respondents and their perceptions and behaviours in relation to HIV and AIDS. The collection of qualitative data has been labelled ***Phase One*** of the research method and the use of a survey instrument (a questionnaire) has been labelled ***Phase Two*** of the research method (see Figure 4: 1). Those young people involved in Phase One of the study will be called 'participants' and those who complete the survey instrument (Phase Two) will be called 'respondents'.

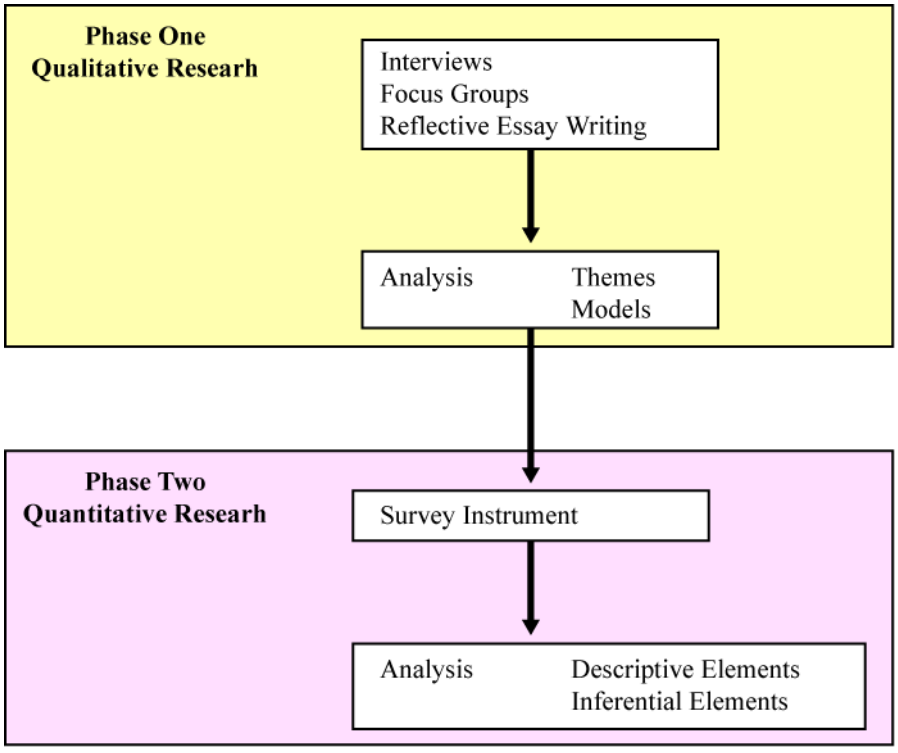


Figure 4:1 Representation of research design

This design was chosen because the research questions under study are social in nature, context bound and there is very little previous research within Botswana of a similar nature. As a result there are no suitable prior instruments (questionnaires) for data collection that can inform and guide the construction of an appropriate quantitative data collection instrument for this present study. The choice of an exploratory mixed-method design permits the preliminary results of Phase One to inform the direction and construction of the instrument for Phase Two.

4.1.3 Phase one data collection: flexibility and depth of investigation.

Phase One of data collection (the qualitative procedures) employed one-on-one interviews, interviews with focus groups and reflective essay writing. These procedures will be described in detail later in this chapter.

The use of semi-structured procedures in the interviews and the focus groups introduced a flexibility that allowed the participants to determine the issues and allowed these issues to be explored in depth. Semi-structured techniques involve the use of a prepared core of key questions for all interviews and a separate list of key questions for all focus groups. Flexibility and depth of investigation were introduced through the spontaneous use of subsidiary questions that permitted the exploration of issues raised by the participants.

The reflective essay writing allowed the participants to freely respond to questions in any way they wished. Hence the participants were permitted to introduce and comment upon issues that they felt were important.

A major disadvantage of a qualitative research method arises out of its flexibility and potential for in-depth investigation, because these aspects are time-consuming and as a consequence only a limited number of participants and focus groups can be involved in the research.

4.1.4 Phase two data collection: patterns and relationships.

According to Beanland et al., (1999), the quantitative research method generates numerical data and the analyses of these lead to measures of characteristics, states, beliefs, behaviours and/or phenomena that pertain to a large number of respondents. There are a variety of quantitative procedures available. For example, some methods involve creating hypotheses that relate to the comparison of experimental groups (groups that receive experimental treatments) to control groups (groups that are free of experimental treatments) and rigorously testing these hypotheses by subjecting the respective measures to comparative statistical analyses.

The technique employed in Phase Two of this study involves the creation of a survey instrument based on data arising from Phase One. The structure of the instrument will be such that it elicits numerical data in the form of measures of variables representing demographic information about the respondents and measures of factors related to adolescents' perceptions, beliefs and behaviours in relation to the potential spread of HIV. The analyses of the resulting data involve the use of inferential techniques to explore for patterns between measures or to return coefficients that indicate the strength of relationships between measures (variables). In this study the survey was employed with some 600 Gaborone adolescents who were middle and upper secondary school students.

There are limitations to quantitative methods of data collection. According to Winter (2000), quantitative researchers fragment and delimit phenomena into measurable and observable common categories that are then applied to all subjects in similar situation or context. Although quantitative researchers acknowledge that they do not operate in a fully value-free environment, they attempt to minimise the impact of their presence and remain somewhat separate from the research process, particularly during the analysis of the data. The advantage of quantitative research lies in a large number of participants who can respond to a questionnaire. The limitations of quantitative research lie in its restricted flexibility because once the questionnaire has been determined it cannot be changed.

The remainder of this chapter will focus on Phase One of the research method. A detailed description of Phase Two will be provided in Chapter six of this thesis.

4.2 RESEARCH QUESTIONS: CLARITY AND GENERALITY

Creswell (2008) states that with a qualitative research approach the researcher asks broad and open-ended questions on a subject matter that allow participants to provide words or text describing their views, feelings and perceptions. The qualitative method places emphasis on meanings and personal experience of individuals or groups of individuals within a specific social context (Winter, 2000). The primary aim in qualitative research is to gather and analyse narrative information which is driven by the constructivist idea that researchers are personally involved in interpretation of the information gathered (Teedlie & Tashskkori, 2009). Rather than beginning by creating a hypothesis that is then tested, the qualitative researcher first explores the phenomena

under study, gathers narrative data and, finally, inductively generates constructs and theories that may make sense of observations or descriptions of the research participants. The observations and descriptions of the participants form the data and the constructs and theories developed by the researcher(s) are grounded in the data. The advantages of qualitative research procedures lie in their flexibility and their potential for detail. However, the limitations of qualitative research revolve around the comparatively small number of participants involved.

Further, according to Beanland, Scheneider, LoBiondo-Wood and Harber (1999), the research questions determine the research method. Therefore, while the research questions employed in this study must be clearly stated they must also be sufficiently broad as to allow them to explore elements of the participants' (in this case adolescents resident in Gaborone) perceptions, beliefs and behaviours in relation to HIV and AIDS that have not been the foci of previous research in Botswana. What is more, the research questions and the research procedures must be fully consistent or compatible with each other.

In keeping with the discussions of Chapter two the following four research questions were chosen for examination within Phase One of this Research study:

1. *What are the participants' perceptions of the degree to which adolescents living in Botswana are at risk of contracting HIV and AIDS?*
2. *What are the participants' perceptions of behaviours that have the potential to increase the likelihood that adolescents will contract the HIV?*
3. *What are the participants' perceptions of factors that have the potential to influence adolescents' participation in at-risk behaviours?*
4. *What are the participants' perceptions of strategies that would contribute to a reduction in the likelihood of contracting HIV and AIDS among adolescents living in Botswana?*

While these four questions will also apply to Phase Two of the research method, additional research questions will be specified in Chapter six. These will explore the impact of such socio-demographic variables as gender, age, family and cultural background, upon the respondents' understandings of and views in relation to selected Setswana cultural beliefs, and adolescents' perceptions and behaviours in relation to the risk of contracting HIV. These latter variables will be established according to the findings of Phase One.

4.3 ETHICAL AND SOCIO-CULTURAL CONSIDERATIONS

In that this research study explored minors' perceptions of attitudes and behaviours relating to sexuality, it was important to be sensitive to a number of ethical and cultural issues in conducting the research. This section outlines how these ethical and cultural issues were addressed.

Participants were not asked about their own sexual behaviours or about their own intentions with respect to future behaviours. However they were asked to give their perceptions of the behaviours of other (unnamed) young people in their communities with respect to HIV and AIDS. The intention of this process was to permit the participants to indirectly and anonymously mix descriptions of their own behaviours with descriptions of the behaviours of their peers. It was hoped that this apparent anonymity would encourage honesty and openness in participants' responses. It was assumed that the descriptions of behaviour generated in this way would provide a clear indication of the risk faced by young Gaborone adolescents.

Since there was a period of time between Phase One data collection (the qualitative phase, involving interviews, focus groups and reflective essay) and Phase Two data collection (the quantitative phase involving the administration of the questionnaire) ethics clearance was obtained in a two-tier approach. Firstly, clearance and approval was obtained from Avondale College of Higher Learning Human Research Ethics Committee (ACHLHREC), the Botswana Ministry of Health Research Unit (BMHRU), as well as the Botswana Ministry of Education (BME) for permission to conduct Phase one of the research project which involved interviews, focus groups and the writing of reflective essay by the participants. (See Appendices 5, 6 & 7 for copies of approval for the first phase). Secondly, ethics clearances and approvals were obtained from the same administrative bodies for Phase Two once the questionnaire was developed based on the initial analysis of the first phase (See appendices 8, 9 &10 for copies of the approval for the second phase).

All students who participated in the study were volunteers. The survey instrument was completed anonymously and all the data obtained from reflective narratives, focus groups and interviews were treated as confidential. Any potential risk to the welfare of the respondents was carefully monitored. During interviews, participants were not pressed to disclose information that could cause embarrassment. They had the right to refuse to answer any question or terminate participation. This was explained in the information sheet to the questionnaires and on the consent form for participation in the reflective narratives, interviews and focus group discussions. The questions used in the instruments for data collection were carefully screened for clarity, ease of understanding, and for age-and culture-sensitivity.

Interviews and focus group discussions were conducted in designated rooms in the schools thus ensuring that participants were not seen by other students. This assisted in maintaining their anonymity. The seclusion involved in these processes also meant that participants were free from interruptions from other school activities. Although the interviews and the focus group discussions were audio-recorded, participants were given the right to refuse to have their responses recorded. Participants were consistently reminded that the recorder could be switched off at any time during the interview or group discussion.

The current study also recognized and respected the personal and private lives of the participants. All the questions asked were in generic format so that participants were not required to provide personal information about themselves or their families and friends. In addition, participants had the right not to answer any question. The guidance and counselling teachers were available to advise the researcher and research assistants to pause or discontinue the interview if any student showed signs of discomfort of any kind. If a student in the focus group context chose to provide a personal example of actual sexual activity, the researcher or his assistants immediately used standard techniques of protective interruption. That is, the researcher or the assistant would draw the participant back to the generic nature of the discussion and away from disclosure of personal details by interrupting mid-sentence and saying, for example, "at the moment we are talking about if *a person* …." If necessary a strong statement could be made to the effect that, "We do not want to discuss details of personal experience." In the possible event that a participant continued to disclose information of a personal sexual nature, the interview or focus discussion would be interrupted and the participant would be given the opportunity to spend time with the counsellor or guidance teacher. These

plans in relation to ethics were reviewed and approved by all three ethics authorities (the ACHLHREC, BMHRU and BME).

When the data collection exercise was completed for each phase, the researcher transported the completed responses and survey sheets from Botswana to Australia for analysis. All the audio-files of interviews were securely downloaded to a pass-word protected computer.

4.4 THE PHASE ONE PROCEDURES AND "TRUSTWORHINESS"

Both quantitative and qualitative researchers need to demonstrate that their studies are credible (Golafshani, 2003). While the concepts of validity and reliability arose from quantitative research and relate to accuracy and consistency in variable measurements, qualitative researchers have struggled with the initial narrow definitions of these two concepts (Cutcliffe & McKenna, 2004b; Golafshani, 2003; Krefting, 1991; Lincoln & Guba, 1985; Rolfe, 2006; Shenton, 2004). It appeared logical that research should do what it was intended to do and that the results should be, in some way, repeatable. However, qualitative research explores the depths of personal experience, often through narrative recounting. In situations where multiple participants encounter similar events, the experiences of each participant can vary in their own ways. So, to an extent, the credibility of qualitative research depends on the ability and skill of the researcher to provoke responses from the participants that are seen to be accurate representations of the respective experiences of each individual respondent.

Bearing this in mind, Guba (1981) and Lincoln and Guba (1985) argue that there have to be alternatives to the concepts of validity and reliability that better indicate the

truthfulness and, as far as possible, accuracy of the findings of qualitative research (Lincoln & Guba, 1985). Guba (1981) coined the term "trustworthiness" and in order to establish trustworthiness she and Lincoln (Lincoln & Guba 1985, p. 290) asked the following four questions:

1. 'Truth value':
How can one establish confidence in the truth of the findings of a particular inquiry for the subjects (participants) with which, and the context in which the inquiry was carried out?

2. 'Applicability':
How can one determine the extent to which the findings of a particular inquiry have applicability in other contexts or with other subjects?

3. Consistency':
How can one determine whether the findings of an inquiry would be repeated if the inquiry were replicated with the same (or similar) subjects (participants) in the same (or similar) context?

4. 'Neutrality':
How can one establish the degree to which the findings of an inquiry are determined by the subjects (participants) and conditions of the inquiry and not by the biases, motivations, interests, or perspectives of the inquirer?

Time and academic discussion have transposed the four elements as proposed by Lincoln and Guba (1985) into: credibility; transferability; dependability; and confirmability (Cutcliffe & McKenna, 2004a; Shenton, 2004; Tobin & Begley, 2004). This thesis adopts this model and will describe the latter four components in this section. The concepts of validity and reliability will be described in Chapter five where the procedures of the Phase Two research method will be detailed.

4.4.1 Credibility.

The establishment of credibility depends on a broad array of potential characteristics of the research process. The process begins with the formation of the research questions, the choice of the research method and the rigor with which this method is prosecuted (Shenton, 2004). Credibility is enhanced if the researcher understands the culture and context in which the study occurs and engrosses him or her- self in it (Cutcliffe & McKenna, 2004b; Patton, 2002). Just as important to credibility is the need for the research procedures to match the social and cultural context in which the participants of the study are embedded (Shenton, 2004; Yardley, 2007). Credibility is also enhanced if defensible procedures of sampling are employed to locate potential participants (Shenton, 2004) Credible research procedures use appropriate checks and balances to ensure that the product (usually a transposition of the audio-recording) has fidelity (Tobin & Begley, 2004); that is, the record of the data matches the intentions of the participants. Credible processes of analyses are those generally accepted by members of the academic community and further, these processes are implemented with care and attention to detail (Shenton, 2004). Credibility is enhanced when, in the words of Yardley (2007), the "…findings and observations which may conflict with the investigator's understanding of the topic are not merely noted, but are actively sought, minutely examined and satisfactorily accounted for" (p. 221). Finally, credibility ensures that the documentation of data, the processes of analyses and the emerging theories of description and explanation provide adequate "audit trails" that permit reviews by members of the academic community (Cutcliffe & McKenna, 2004b; Lincoln & Guba, 1985; Tobin & Begley, 2004).

4.4.2 Transferability.

Lincoln and Guba (1985) argued that qualitative studies that are trustworthy are those with findings that can be transferred (generalised) to other contexts that share similar qualities and characteristics to the contexts from which the participants came. They point out that this is a kind of external validity and argue that there is no sense in trying to generalise findings if the study under consideration lacks internal consistency (internal validity) .

However, the ability to generalise findings does not have universal agreement. Many who employ qualitative procedures argue that it is not possible to generalise the findings of qualitative research (Merriam, 2009; Shenton, 2004). They point out that the experience of each participant is sufficiently unique to disallow generalisation. In addition, and in contrast to quantitative research, qualitative research involves in-depth consideration of the experiences of a few participants and not the usually large numbers of subjects as employed by the former.

In response to those who demur, Lincoln and Guba (1985) argued that "the burden of proof lies less with the original investigator than with the person seeking to make the application elsewhere. The original inquirer cannot know the sites to which transferability might be sought, but the appliers can and do" (p. 298). In so doing those seeking to make the case for the transfer of findings need to note the similarities in contexts, characteristics of persons involved and the boundary conditions of the studies. Shenton (2004) provides a list of boundary conditions that should accompany any qualitative study. These include:

a. The number of organisations taking part in the study and where they are based;
b. Any restrictions to the type of people who contribute data;
c. The number of participants involved in the fieldwork;
d. The data collection methods that were employed;
e. The number and length of the data collection sessions;
f. The time period over which the data was collected. (p. 70).

4.4.3 Dependability.

The quality that Lincoln and Guba (1985) labelled as 'consistency' was meant to be the qualitative equivalent of 'reliability'. Reliability assumes that if a study was to be replicated under similar circumstances with the same participants or participants bearing similar characteristics, then a similar set of results would be obtained. Lincoln and Guba (1985), pointed out that the concept of reliability assumes that the experience of phenomena is "tangible and unchanging" (p. 299). They then argue that the experience of life is "ephemeral and changing" (p. 299) and therefore replication of a qualitative study will not necessarily reproduce the initial results. In commenting on narrative research Florio-Ruane (1986) stated that "published descriptions are static and frozen in the 'ethnographic present' " (p. 5). In other words, replicability is not always a possibility with qualitative research. What is more important is that the descriptions of the experiences of phenomena are dependable for a particular moment in time (Shenton, 2004). That is, the report of the study must be clearly stated and sufficiently detailed so that readers can understand the research procedure, feel that they know the participants, can read the participants' narratives and can follow the arguments and findings of the research record. Thus a dependable report of qualitative research allows a reader to undertake an audit (an appraisal) of the aims, design, procedure, descriptions and the emergence of constructs and ultimately of explanatory theory.

4.4.4 Confirmability.

In qualitative research, the researcher is not an impartial onlooker, objectively observing or dispassionately measuring variables. The researcher is an integral part of the process. He or she conducts the interview or leads the discussion and determines the direction of supplementary questioning. It is for this reason that Lincoln and Guba (1985) argued that the researcher should establish a neutral stance and not allow personal biases to influence the elicitation of data or the analyses of data. In order to confirm this neutral stance, the researcher should declare interests, predispositions and biases (Shenton, 2004). These along with a clear audit trail permit the reader to weigh the whole process from research questions, through research procedure and data collection to the emergence of descriptive theory.

4.4.5 Strengthening trustworthiness through triangulation.

Triangulation essentially involves viewing a phenomenon from two or more research perspectives. There is a range of different forms of triangulation involving the use of variant theories, different investigators or the use of different methods (Tobin & Begley, 2004). The form of triangulation employed in this study involves the planned use of two or more research procedures to generate distinct bodies of data within the one study (Patton, 2002). For example, this form of methodological triangulation can include the use of interviews, focus groups and written narratives (Shenton, 2004), as is the case in this study.

Triangulation can also combine the use of qualitative and quantitative procedures (Tobin & Begley, 2004), again as is the case in this study. Analyses of data arising from qualitative and quantitative procedures provide separate and possibly complementary

perspectives of the phenomenon being considered and certainly have the potential to produce findings that both verify and enrich each other (Tobin & Begley, 2004). Creswell (2008) suggests that the combination of qualitative and quantitative methods provides a better understanding of issues than is provided by either research approach when separately applied. According to Polit and Hungler (1993) one of the advantages of using both quantitative and qualitative approaches is that it allows a combination of generalizability, precision, flexibility and reliability of measurement through the quantitative method and richer more detailed examination of issues through the exploration of subjective narratives as given by participants within the qualitative approach .

If each of the distinct methodological procedures involved in triangulation are pursued with rigor and if the analyses of the data leads to a degree of consistency in terms of descriptive constructs and theories then this form of triangulation contributes to the credibility and dependability of the research. Further, providing the written records of the study leave a clear audit trail, the reporting can argue for confirmability. Finally, if the analyses of the qualitative data garnered by Phase One of this study guide the development of the survey instrument of Phase Two, then the triangulation contributes to transferability. This means that triangulation has the potential to strengthen the trustworthiness of this study.

4.5. POPULATION AND SAMPLE

The target population for this study was all Junior and Senior Secondary students attending either private or government secondary schools in Gaborone in 2011. It must be acknowledged that students attending high school will have characteristics that are

distinct from unschooled village (rural) adolescents. The students are learning about the larger outside world and they are in the capital where they are more susceptible to the influences of popular media and a broader pattern of thought and fashion. However, there are links between the Gaborone students and those adolescents who remained in their home villages. A significant number of the school students come into Gaborone from outlying regions of Botswana and it can be argued that these adolescents are well aware of the patterns of village life and in discussion and creative writing they can express thoughts and descriptions that not only apply to the current Gaborone scene, but can also represent the nature of adolescent village life.

4.5.1 Sampling.

The sampling of participants was limited to schools in Gaborone rather than sampling the entire population of Botswana. This means that convenience sampling criteria was employed. According to the Botswana Ministry of Education statistics, Gaborone city has thirteen government junior secondary schools and four government senior secondary schools and fifteen private secondary schools with an estimated enrolment of twenty thousand adolescents (South East Region, Ministry of Education, 2009). Gaborone is also the central commercial hub for the country. A number of these students completed their primary education outside of Gaborone since the secondary education system in government schools in Botswana is based on a selection process where students who complete their primary school are located by the ministry of education in schools where they can do their secondary education. While most primary school students around the country are located in the area of origin, some are transferred to locations elsewhere including Gaborone for secondary education. The heterogeneous cultural nature of the Gaborone residents therefore provides this study with an opportunity to collect data from

participants representing the diverse cultural backgrounds of Botswana. Further, these participants are likely to hold a range of the cultural values, beliefs, norms and gender-related expectations and perceptions to be found across the nation.

Two categories of government secondary schools operate in Botswana: junior secondary, for forms one (year 8) to three (year 10) and senior secondary for forms four and five (year 11& 12) and these operate on separate campuses. The approximate age-range for students attending junior secondary is between 12-15 years of age and between 16-18 years of age for senior secondary schools. The students enrolled in government schools tend to come from families of various socio-economic levels.

All of the fifteen private (non-government) secondary schools in Gaborone have all the forms (Forms 1 to 5) studying on the same campus. Students admitted into both government and private secondary schools are enrolled after successfully completing their primary education. Private schools charge higher school fees than government schools, which often means that their parent-communities are more affluent than their government secondary school counterparts. The age ranges for students in private schools are approximately the same as those attending government secondary schools. Many young people who are educated in Gaborone will stay on to work in the city on completion of their education.

4.5.2 Sample selection criteria and techniques.

This study used a modified random sample selection technique to choose the schools and the students within those schools for the study. Because it was convenient, the capital city of Botswana, Gaborone, was chosen as the city from which the schools were

selected. Three schools from each sector (Government and Private) were then randomly selected. Further, two schools in each sector were also randomly selected as potential replacement schools should the principal of a chosen school decide not to allow the study to be conducted in that school. In fact one of the originally selected private schools was unable to participate in the study and it was replaced. The principals of each of the six participating schools granted permission for the study to be conducted in their schools.

The researcher was then granted permission by each school principal to make a verbal presentation to introduce the study to the potential participants. Each student willing to be a participant in the study was then given an information letter, together with a modified version for their parents/guardian, seeking consent and approval. Only those students whose parents, caregiver or guardian signed the consent forms participated in the study. Each class teacher, from whose class participants were drawn, received an information sheet and signed a consent form. In addition it was arranged that each school would provide the guidance and counselling teacher to be present and/or available during interviews and focus group discussions in the event that counselling and advocacy would be required.

4.6 PHASE ONE: THE QUALITATIVE COMPONENT

This section describes in detail the research procedures and methodology employed in Phase One (the qualitative phase).

4.6.1 Qualitative data collection.

Three qualitative data collection techniques were employed in the study. These were: the one-on-one semi-structured interviews; the focus group discussions; and the reflective written narratives. The use of several data collection techniques rather than one approach has been chosen to provide a degree of triangulation and hence contribute to the trustworthiness of the findings. The nature of the introductory questions for the interviews, the scenario for discussion in the focus groups and the topics for the reflective narrative essays, were informed by the literature reviewed (chapter two) and the composite conceptual framework model (Figure 3.5) presented in chapter three. The questions were open-ended and aimed to solicit unrestricted responses on the topic.

The aim of the one-on-one semi-structured interviews was to solicit responses in locations where the participants were less likely to be influenced by their peers and where the interviewees were more likely to express their personal views. On the other hand the aim of the focus groups was to generate a degree of general anonymity since each participant could voice thoughts from the body of the group. It would also allow the participants to comment upon or build on the perspectives of others. In addition the focal group discussions would permit participants to generate new thinking prompted by the comments of others.

While the focus group discussions were lengthy and time-consuming, they provided an opportunity to collect data from several people simultaneously. One of the limitations of the focus group discussions was that individual participants could withhold the expression of their real feelings on sensitive issues because of the presence of others. Another limitation of focus group discussions was that, in spite of the facilitator's aim to

reduce this happening, the whole group could be influenced by one member's view, if he or she was to dominate the discussion. Individualised interviews on the other hand minimise these limitations.

The current study also employed the use of reflective narratives where participants were given a take-home task to write their views on an assigned topic. One of the advantages of this approach was to provide participants with the freedom to express their thoughts and feelings on paper without being limited by the presence of others or the researcher. Requesting participants to write these narratives as a take-home task allowed participants sufficient time to reflect and write on the topic without the limitation of time constraints. Participants were specifically directed to refrain from writing their names on the narrative paper. This anonymity allowed participants to discuss more freely those sensitive topics that involved sexuality and HIV and AIDS.

To enable the data to be collected in an appropriate time frame and to provide for both male and female options as data collectors, four research assistants, two male and two females, were trained and employed (they were paid for their time). Their training (see training template in Appendix 1) stressed the need for the interviewers and focus group convenors to remain neutral in discussions and refrain from reacting to the statements of participants. It also emphasised the critical importance of refraining from the passing of any information obtained from participants to those not involved in the study.

4.6.2 Qualitative questions trialling.

Prior to formal data collection a trial was conducted by the researcher and his four research assistants in order to refine the resource questions to be used in the qualitative data collection and to get the 'feel' of interacting with adolescent students. Three girls and three boys living in Gaborone were interviewed. The researcher then discussed with the interviewees the appropriateness or otherwise of the language used and the intent of the questions posed. Three focus groups were also conducted: one group consisting of six males, another consisting of six females and a final group consisting of three males and three females. At the completion of the focus group discussions, the participants were invited to comment on the process and the questions posed by the researcher. The researcher then debriefed with the research assistants. The feedback from the students, plus discussion with the assistants, led to adjustments in terminology and wording of the questions as well as alterations in procedure.

This process ensured that the questions were easy to understand, that the language was appropriate for the target age-group, that the procedures facilitated student cooperation in focus group discussions, and that the questions were culturally relevant.
Some of the changes that were made after this trial process are as follows:

1. The time allocation for the focus group was lengthened from 30 minutes to 45 minutes. This was done because the trial showed that 30 minutes was not sufficient to cover most of the questions. On the other hand, time allocation above 45 minutes was considered by both the participants and researchers to be too long to maintain participants' concentration on the topic.
2. Participants were observed to express themselves more freely when in same-gender groupings than in mixed-gender groups. This was confirmed by post-trial discussions

with the participants. It was decided that while some focus groups would remain mixed-gender, same-gender groups would and must be included. Further, the researcher and assistants also felt that the interviews would be more effective if female research assistants interviewed female participants and male research assistants interviewed male participants.

3. The mention of the word 'condoms' in the discussions was perceived by the participants to be somewhat culturally inappropriate. Participants felt more comfortable saying "*sekauso*", a Setswana word that translates literally to "*socks*". Participants also felt it was easier to use the terms '*thakanela dikobo*' or its English translation, '*sharing blankets'*, rather than using the terms '*having sex'* or '*sexual intercourse*'.

4. One of the intended data collection techniques for the reflective narratives was to ask participants to generate a one-week journal relating to the topic of young people and HIV and AIDS by daily recording their reflections on this topic. The writing of this one-week journal was eliminated because participants in the trial expressed the opinion that each day's entry would most likely be a duplication of the entry on the previous day. Discussion led to the decision that reflective narratives of about one-page would be sufficient. The researcher therefore opted for a one-page, one-night reflective narrative as one of the data collecting techniques.

4.6.3 One-on-one Interviews.

The one-on-one semi-structured interview key questions were aimed to access participants' personal and cultural beliefs about and their views on the risk of contracting and/or preventing HIV and AIDS. Interviews were conducted in locations where privacy and confidentiality were assured.

The individualized interviews were conducted with the help of the same four trained research assistants. The interviews were conducted in English, but students were allowed to express themselves in the local Setswana language if they so desired. These research assistants used written interview starter questions but were given the discretion to use related supplementary questions to more fully explore the points raised by the participants. The interviews were audio-recorded.

The following are examples of the interview key questions used to initiate the interview conversations:

1. Is it inevitable that all young people will become infected with HIV and AIDS?
2. In your view, how can young people avoid HIV and AIDS infection?
3. Do you know any traditional initiation programs?
4. What do you know about cultural practices in which adults ask sexual favours from teenage boys or teenage girls?
5. What can you tell me about Nkadzana, Mantsala, Otusira, Xakanaxaamaa, or Seantlo?
6. The Government has been sending the ABC message for a long time now. In your view, do you think it is working? Why/why not? What should the Government do in future?
7. What is life like for the families of those people who are HIV positive?

(see the interview questions database: Appendix 2).

4.6.4 Focus group discussions.

Students selected from both the junior and senior student groups participated in focus group discussions. Each focus group consisted of six students of either single gender (six males or six females) or groups of mixed gender (three boys/three girls). Kitzinger (1995) asserts that group discussions allow people to share their personal experiences more freely than in the one-on-one discussion setting in that it removes the potential of embarrassment by providing a collegial environment. The focus group discussions were also audio-recorded.

The following scenario was given to the focus groups in order to seed discussions:

> Thabo and Matshidiso are two young people in Botswana. Thabo is a 16 years old boy and Matshidiso is a 13 years old girl. Both Thabo and Matshidiso live in Gaborone and go to secondary school. Thabo comes from a rural community and goes to a government secondary school. Matshidiso comes from the city and goes to a private secondary school.

The scenario was followed by a series of questions and further elements of information in order to provoke thought and discussion (see Appendix 3). The following is typical of these questions and elements:

1. Are Thabo and Matshidiso at risk of contracting HIV and AIDS?
2. If Thabo (Matshidiso) is like other Batswana teenage boys (girls), what common situations/practices or behaviours might Thabo (Matshidiso) be engaging in that places him (her) at risk of contracting HIV and AIDS?
3. If Thabo or Matshidiso becomes infected with HIV and AIDS, would it be the result of their personal choice, or is it inevitable?
4. What will happen to Thabo (Matshidiso) if he (she) becomes infected with HIV and AIDS before he (she) is 24?

5. What can Thabo (Matshidiso) do to prevent being infected with HIV and AIDS?
6. Is it OK for Thabo (Matshidiso) to have a child before he (she) is married? At what age should Matshidiso get married?

The names for the boy and the girl in the scenario (Thabo and Matshidiso) were chosen because these are, respectively, very common Setswana names among boys and girls. This was done to assist participants to easily identify with the characters and contextualize the HIV and AIDS situation in Botswana. The introduction identified the characters' places of origin (rural and city), school categories (Government and private secondary school), gender and age in order to elicit responses that might indicate how different situations and demographics could cause shifts in the participants' perceptions of behaviour patterns and perceptions of risk.

4.6.5 Reflective narratives.

Use of the reflective essay allowed participants to write their perceptions and views relating to the risks that their peers have of contracting HIV and AIDS. These reflective narratives were handwritten by the participants at their place of abode and returned the following day. This meant that writers were free of the limitations inherent in the interviews or the focus group discussions. The researcher transcribed, and where necessary, translated these into English word documents (discussed earlier).

The following statements and questions were used for the reflective narratives (Appendix 4):

Topic 1

Choose one of the following topics and *write one page*

EITHER

a. Batswana young people **ARE** at risk of contracting HIV and AIDS because ….

OR

b. Batswana young people **ARE NOT** at risk of contracting HIV and AIDS because ….

Topic 2

Choose one of the following topics and *write one page*

EITHER

a. What can/should **Batswana Young People** do to avoid HIV and AIDS infection?

OR

b. What can/should the **Botswana Government** do to help young people avoid HIV and AIDS infection?

4.6.6 Qualitative data analysis.

The focus group discussions and one-on-one interviews were audio-recorded and transcribed into word documents and the handwritten texts of the reflective narratives were also converted to word documents. These three sets of documents were imported into the QSR NVivo 9.1 qualitative analysis software for coding and analysis. Guided by inductive thematic analyses (Boyatsis, 1998; Strauss, 1997; Strauss & Corbin, 1998), critical elements within the transcriptions of responses were coded within QSR NVivo 9.1 under node-titles that were indicative of the content. Inductive thematic analysis involves the process of identifying key themes, concepts and categories direct from the data. The researcher does not approach the data with pre-structured themes.

In the initial stage of thematic analysis an open coding process was employed where descriptive labels were given to data elements having distinctive content or characteristics that were important to the research questions. The second stage of analysis coalesced these initial nodes into an array of higher-order categories based on

the relatedness of the contained thoughts. In the third and final stage of analysis, reflection upon these higher-order nodal categories allowed the emergence of a system of interrelated issues, processes and themes. These collectively described broad patterns within the data that afforded a greater understanding of the contexts and pressures faced by the participants in their daily life. The research process is meant to ensure that emergent theories will be grounded in the data (Cresswell, 2008; Drew, Hardman, & Hosp, 2008).

4.7 PHASE ONE PROCEDURES: COMPLIENCE WITH THE CRITERIA

It is contended that Phase One procedures have the potential to comply with the criteria of trustworthiness.

Firstly, the study met the demands of no less than three independent ethics committees. Approvals were sought and granted from no less than two government departments. In order that students could become participants in the study, consent was obtained from government authorities, school administrations, teachers, parents/guardians and finally from the participants themselves. Participants had the right to abort the process at any time they so desired.

Secondly, the research process followed the demands of credibility. In this study, relevant literature and previous studies conducted in Botswana have been explored and acknowledged. The research procedures were thoroughly planned with clearly stated research questions. They included a detailed mix of four distinct triangulated data-collection methods that were consistent with the principles of sound research. These procedures and associated terminologies were trialled and adjusted to ensure that they

were effective. The planned analyses followed standard procedures of thematic analysis and the chosen software (QSR NVivo 9.1) is widely used in research.

Further, the researcher is a Malawian who has resided in Botswana's capital city, Gaborone, for more than twenty years (see the biographical sketch, page xi). He understands the cultural milieu of Gaborone and is able to plan and function within it. During his two decades in Gaborone the researcher was involved as a volunteer in various HIV and AIDS intervention programs with young people. Therefore while the researcher is knowledgeable and sensitive to the local culture, he is also external to it to some degree.

Thirdly, the inclusion of the Phase Two quantitative procedures designs into the research method provides the possibility to generalise (transferability). The survey instrument will be informed by the findings of the Phase One quantitative processes and it will be completed by almost 600 respondents. It can also be argued that the results of Phase One of this research will comply with Shenton's (2004) boundary conditions.

Fourthly, the research method as outlined in this chapter meets the requirements for dependability. It proposes an unambiguous audit trail that can be appraised by those who will find interest in this study.

Fifthly, it can be argued that the information provided in this thesis will meet the requirements of confirmability. The researcher has declared his background, his involvement in HIV and AIDS work within Botswana and his interest in the field. The following chapters will record the findings in an open and clear manner.

4.8 CONCLUSION

The exploratory mixed-method procedure adopted by the study and described in this chapter utilizes both qualitative (Phase One research method) and quantitative approaches (Phase Two research method). The chapter then detailed the Phase One research method. The following chapter, Chapter five, presents the results of the Phase One method and deduces from these results a structure for the survey to be employed with some 600 secondary school students. Chapter six describes the Phase Two research method. It outlines the statistical analyses and presents the findings of Phase Two.

CHAPTER 5

RESULTS: QUALITATIVE COMPONENT

5.0 INTRODUCTION

This chapter describes the analysis of the data obtained from phase one of the research method (the application of qualitative procedures). In so doing the chapter, firstly, aims to present an understanding of the participants' perceptions about the degree to which adolescents living in Botswana are at risk of contracting HIV and AIDS. Secondly, the chapter explores the participants' perceptions about those behaviours exhibited by their fellow adolescents that they think will increase their potential for contracting HIV and AIDS. Thirdly, the chapter seeks to identify the factors that influence these adolescents to participate in at-risk behaviours. Finally, the chapter focuses on the participants' perceptions of those strategies that may be effective in reducing the HIV and AIDS infection rates among adolescents living in Botswana. This chapter also explores in a broad sense the impact of socio-demographical variables upon the participants' perceptions of the following: risks in relation to HIV; the prevalence of at-risk behaviours in relation to HIV; those factors that may increase the likelihood of participation in at-risk behaviours; and those strategies that may reduce adolescents' likelihood of contracting HIV. These socio-demographic variables include gender, age, family background, and participants' understandings of and views about selected Setswana cultural beliefs.

5.1 DATA COLLECTION

5.1.1 Participants

In total 216 students participated in the collection of qualitative data. Of these, 51 students wrote reflective narratives, 21 students participated in one-on-one interviews and 144 participated in 24 separate focus discussions groups. Of the 216 participants 103 were male and 113 female; 128 attended private schools and 88 attended government schools; and 121 were aged 12 to 15 years and 95 were aged 16 to 18 years. Table 5.1 provides information about the numbers of participants and their distribution across the various modalities of data collection (reflective narratives, one-on-one interviews, and discussion focus groups).

Table 5.1. Distribution of students across data collection modality

Demographics	**Data Collection Modalities**			
	Reflective Narratives	One-on-One Interviews	Focus Group Discussion	Totals
Males	22	9	72	103
Females	29	12	72	113
Total	51	21	144	216
Private Schools	29	9	90	128
Government Schools	22	12	54	88
Total	51	21	144	216
Age Group 12 – 15 years (Junior)	34	15	72	121
Age Group 16 – 18 years (Senior)	17	6	72	95
Total	51	21	144	216

A total of 51 participants wrote reflective narratives. Of these, 22 were males and 29 females; 29 attended private schools and 22 attended government schools; 34 were aged 12 to 15 years and 17 were aged 16 to 18 years. A further 21 participants took part in the one-on-one interviews. Of these, nine were males and 12 were females; nine attended private schools and 12 attended government schools; and 15 were aged 12 to 15 years

while six were aged 16 to 18 years. Finally, of the 144 who participated in the 24 focus groups, 72 were male and 72 female; 90 attended private schools and 54 attended government schools; 72 were aged 12 to 15 years and 72 were aged 16 to 18 years.

Table 5.2 indicates that 24 focus groups were conducted in 6 secondary schools (three private secondary schools and three government secondary schools). As stated earlier most schools in Botswana have separate campuses for junior students (Forms 1-3; Aged 12-15) and senior students (Forms 4 & 5; Aged 16-18).

Table 5.2. Distribution of students' participation in focus group discussions.

School Type	Data Collection Modalities				
	Number of Junior Students (12-15 years Old)		Number of Senior Students (16-18 years Old)		
	Male	Female	Male	Female	Totals
School 1 (Private School)					
Group 1	6	-			
Group 2	-	6			
Group 3	3	3			
Group 4			6		
Group 5			-	6	
Group 6			3	3	
Total	9	9	9	9	36
School 2 (Private School)					
Group 7	6	-			
Group 8	-	6			
Group 9	3	3			
Group 10			6	-	
Group11			-	6	
Group 12			3	3	
Total	9	9	9	9	36
School 3 (Private School)					
Group 13			6	-	
Group 14			-	6	
Group 15			3	3	
Total			9	9	18
School 4 (Government School)					
Group 16	6	-			
Group 17	-	6			
Group 18	3	3			
Total	9	9			18
School 5 (Government School)					
Group 19	6	-			
Group 20	-	6			
Group 21	3	3			
Total	9	9			18
School 6 (Government School)					
Group 22			6	-	
Group 23			-	6	
Group 24			3	3	
Total			9	9	18
Total Number of Participants	36	36	36	36	144

Two of the private secondary schools had both junior and senior students on the same campus. Each of these two schools had six discussion focus groups. Two were males-only groups (one focus group composed of junior students and one focus group for

senior students) and two focus groups were female-only groups (one comprising junior students only, and the other limited to senior students). Two of the six focus groups were mixed-gender (one being composed of junior students and the other one composed of senior students).The last private secondary had only senior students. In this school three focus groups were conducted. Of these, one included only male students, one included only female students, and the remaining one was composed of mixed-gender students.

Two of the government schools that participated in this study were junior secondary campuses and each had three discussion focus groups. Of these, one was a male-only group, one was a female-only group and the third was a mixed-gender group. The third government school was a senior secondary campus and three discussion focus groups were organised there. Again, there was one male-only group, one female-only group and one mixed-gender group.

All focus groups contained six participants. In the case of mixed-gender groups there were three male and three female participants.

5.2 QUALITATIVE DATA ANALYSIS

5.2.1 Four issues pertaining to the analyses

There are four issues that need clarification before the results of the qualitative analysis are presented. These issues are described below.

Firstly, it must be noted that of the 216 participants only those who participated in one-on-one interviews (21 students) could be linked to a particular transcript. By contrast, 144 participants were divided across 24 focus groups where individuals were effectively anonymous. Further, the 51 participants who wrote reflective narratives were told not to

add any identifying comments to their drafts (name, age or gender). This means that effectively it would be meaningless to attempt to link the quoted statements of a particular participant to a code name. Therefore the quotations taken from participants' written or oral statements that appear within this chapter will not be linked to any code-names.

The second issue relates to the nature of those transcriptions cited in this chapter. Editing of the participants' statements was done only in those instances where the researcher believed that the vocabulary or grammar interfered with the meaning of the statement. Hence, almost all quotations appear in their original idiomatic state.

The third issue deals with the handling of the data for the purpose of analysis. As per standard practice, the one-on-one interviews and the focus group discussions were audio recorded and transcribed to word documents. In addition, the reflective narratives were also transcribed into word documents. All of these documents were imported into the NVivo 9 software for qualitative analysis. Normally, each of the three modalities (interviews, focus groups and reflective narratives) would be separately analysed. However, during the process of transcription and importation significant similarities in participants' statements were noted. Exploratory coding of the data in the three different modalities confirmed these similarities and hence it was decided to combine the three data sources into a single combined set for collective analyses. This would have the effect of speeding the qualitative analysis.

Finally, the fourth issue has to do with an apparent recapitulation that will appear in the presentation of participants' views. This is done in order to provide the reader with an understanding of the iterative nature of the process of the analysis while still retaining a

focus of the finding of the research. In this chapter, then, there are times when the researcher revisits the same point on more than one occasion, each time gaining a greater and clearer understanding of the participants' views.

5.2.2 Summary of the analysis process

The transcripts were reviewed using the NVivo 9 software and elements of data were divided into coded nodes. A node is an NVivo term used to contain and represent basic ideas, major ideas and themes. Each node was identified by a label that indicated the characteristics of its textual content. For example, one node labelled '*Sexual activity: Means of infection*' contains 132 independent statements provided by participants that linked sexual activity to HIV infection. Within the initial round of thematic analysis a total of 238 codes (labelled nodes) were employed. In the second stage of analysis these codes coalesced into 54 higher-order categories (also nodes) based on the relatedness of the propositions within. In the third and final stage of analysis these higher order categories were further separated into 17 major issues and/or processes that gave rise to themes that matched the four research questions. These major issues and themes are addressed in the rest of this chapter.

5.3 PERCEPTIONS OF THE RISK LEVEL

This section searches the data in an attempt to address the first broad research question:

> *What are the participants' perceptions of the degree to which adolescents living in Botswana are at risk of contracting HIV and AIDS?*

The data indicated that among the participants there was a broad consensus that most, if not all of adolescents living in Botswana, irrespective of their background and family

connections, were at considerable risk of contracting HIV and AIDS. The following quotes provide evidence of this.

> Every single one of us, poor or rich young or old is at risk of getting HIV.
>
> I think that this social demographic [adolescents living in Botswana] is prone to HIV infections, because they are unaware of the true danger of this epidemic.
>
> I think all young Batswana people are more prone to catching the virus.

Even though the participants perceived that all adolescents living in Botswana were at risk of contracting HIV and AIDS, they indicated varied perceptions about the risk levels faced by different subgroups within the adolescent population. Statements were made about the different levels of risk faced by males as compared to females, by adolescents living in a rural area as compared to those living in the city, and by adolescents attending government secondary schools as compared to those attending private secondary schools. Most participants gave their reasons for their perceptions.

For example, there appeared to be a majority of participants who believed girls faced greater risk of HIV infection than boys. The following are a selection of such statements.

> Most girls are having sex more than guys.
>
> Women are more infected because if you go to a nightclub you see that its women who are selling their bodies for sex. You do not see men selling their bodies for sex. While men are the buyers these women sleep with many men which put women at a higher risk than men.
>
> 100% of girls are at risk because girls get involved [in sexual activity] while they are young and they get involved with older people and this place them at risk of contracting HIV and AIDS.
>
> Girls are more at risk because of their physiology like the uterus how it is designed.
>
> Girls are more at risk of contracting HIV and AIDS because they like money. The girls are having sex with older people.
>
> 80% of girls are at risk. This is so because girls get raped. Boys are not raped like girls.

> 95% of girls are at risk because most girls don't think about being infected by HIV and AIDS because most girls think only about preventing pregnant only, not the issue of HIV and AIDS infection.

The following statements are characteristic of those given by participants who felt that boys faced the higher level of risk. Those holding these views appeared to be a minority.

> Boys are at a higher risk than girls because they are naughty and they influence each other through peer pressure. Boys can have many sexual partners so that places young boys more at risk than girls.
>
> Boys are higher percentage than girls. 89% of all boys will contract HIV and AIDS due to your place and who you want to be like, all the people like going to parties and you would like to go there too.
>
> Men are more infected than women because they cannot stay and stick to one sexual partner. Guys are more promiscuous than girls. Girls are involved in sex but they try to use protection more than boys. Men like sex more than girls.
>
> Men are more sexually active than women because women fear pregnancy. It is also the men who get drunk. When a man is drunk you cannot control a man he can do anything that a woman would not control it.

Mixed opinions were expressed about the risk of HIV infection faced by adolescents living in rural areas of Botswana as opposed to those who are living in the cities. There appeared to be a majority indicating the belief that a higher risk lay with those in rural regions. The following statements have been selected to represent these views. Again the participants gave reasons for their views.

> Young Batswana people at the village contract HIV and AIDS mainly because they don't know that condoms exist and they are not taught how to use condoms.
>
> Another reason as to why I say Batswana young people are at risk of contracting HIV and AIDS is the fact that some of them are not exposed to much information concerning issues like sex and the like, due to the fact that they are situated in rural areas. People in rural areas usually consider it a taboo to talk about these issues.
>
> Young people from rural areas and come to the urban area, they may attend parties in the night and get involved in sexual activity. In these parties people fight and then they can get contact with blood and get infected of HIV and AIDS.
>
> They may know about condoms, they do not know how to use condoms correctly. Mostly young people from rural backgrounds do not know how to use them correctly. Young people from rural areas are not taught about the virus.

There was a small minority of the participants who, by contrast, perceived that adolescents living in Botswana cities were more at risk of contracting HIV and AIDS and defended their opinion as follows:

> City girls may be more at risk because girls think they know it all. Some of them are influenced by the media and they try to impersonate the characters on TV.
>
> Most rural young people are taught about morals and sexual kind of things, their parents teach them about the good and the bad about sex, drugs and morals.

Furthermore there appeared to be a widely held belief that the level of the risk was greater for students who were attending government secondary schools compared to those students who attended private secondary schools. It is important to note that these beliefs were held by almost all the students regardless of the school system they attended. One government secondary school student participating in a focus group discussion responded to a starter question about Thabo an imaginary government-school student by observing that "Thabo might be more at risk because at government secondary schools, we are more packed." A private secondary school student presented a perception of the different risk levels between the two secondary school systems, saying that, "In government secondary school young people are more at risk than the private secondary school because in government secondary schools there are more pregnancies than in private secondary schools." Another government secondary school student said, "When young people get into to the secondary education [government] it's different from private school. Secondary school [government] students are exposed to different things [risky behaviours] like drinking and smoking especially youths aged 13-19."

In summary, there was almost unanimous agreement among the participants that, in general terms, the level of risk for adolescents living in Botswana of contracting HIV and AIDS was high. While they perceived this level of risk to be high for all adolescents living in Botswana, they indicated a general belief that it was: greater for girls than boys,

greater for rural Batswana young people than those living in the city, and greater for the students in government secondary schools than those in private secondary schools. These beliefs are, of course, perceptions and not necessarily a reality.

5.4 BEHAVIOURS THAT INCREASE THE POTENTIAL OF HIV INFECTION

This section explores the data in an attempt to address the second of the broad research questions:

> *What are the participants' perceptions of behaviours that have the potential to increase the likelihood that adolescents will contract HIV and AIDS?*

5.4.1 Risk behaviours

A majority of participants understood the term *risk behaviours* to mean those activities that they believed would potentially increase the likelihood that an individual would contract HIV and AIDS. Further, they identified several behaviours that they perceived to be risk behaviours for adolescents living in Botswana.

There appeared to be general agreement that these behaviours involved the exchange of, or contamination by, bodily fluids infected with the HIV, or the use of syringes also contaminated with the HIV. For example, participants identified contaminated blood as a risk factor.

> Some of the common situation of contracting HIV is through blood transfusion and through accidental cuts and being exposed to blood.

However, there was an implication in some of the statements below that merely touching blood was of itself a risk. If so, there is the misunderstanding of the barrier that unbroken skin provides.

> Batswana young people are at a risk of contracting HIV and AIDS because some people touch other's blood: if a child is playing with one another, let me say they are riding their bicycle and the other one fall down the other child will touch his or her blood.

> They can contract the virus because of disrespecting their parents. Parents often tell their children to be aware of their surrounding and to try by all means not to contract the virus. But many of them do not listen. For example when a person's friend gets hurt and is bleeding, the friend will rush to her without thinking and one touches the blood of an infected friend.
>
> Touching somebody, us young Batswana like touching each other blood without wearing gloves e.g. we like touching each other's blood when we are playing in order to help the person with a cut.
>
> Some of them help each other when there is an accident and they don't wear gloves so they end up touching someone's blood may be that person would be infected.
>
> Well, the boy might be more on the side of contracting the disease, because, well boys that age usually fight a lot and some of them might get cuts and others and the city if a big place where there are a lot of people and you don't know that disease they may have in their system.
>
> She could also get it from helping someone with a cuts . . .

They also indicated that exposure to saliva when kissing would increase the risk of being infected with HIV and AIDS. In support of this view, one of the participants said, "Kissing may also place young people at risk because they may be having sores in the mouth". In this context, another participant commented saying, "If they have unprotected sex, kissing when the other has sores in the mouth which is 75% of how young people get infected". However, the frequency of infection through kissing was perceived to be lower than exposure to blood.

They also identified pregnancy, childbirth and breast-feeding as a means of transfer of infection from mother to child before and/or during the birth process. However, they implied that this was not a strong risk factor.

> Most teenagers or young people are at risk of contracting HIV and AIDS because of childbirth. Teenagers may have sex and get the disease and then pass it on to their children, who may then pass it on to other people, which increases the risk of contraction.
>
> Because like may be like the parents did not use like PMTCT [Prevention of Mother To Child HIV Transmission] like the mother, had HIV and AIDS and then she did not use PMTCT the mother could have HIV and AIDS then Thabo could have contracted from the mother.

> Breast feeding also contribute to HIV infection. An infected mother has a higher risk of infecting their child through breast feeding.

Several participants also identified the problems that result from drug use in this age group as a risk factor. They mentioned that adolescent drug-users sometimes share contaminated needles and that this places them at-risk of contracting HIV and AIDS. Even though this was identified as a possible factor by a number of participants, the perception was that only a few of the adolescents living in Botswana were involved in this activity.

> When people inject others with drugs, for example cocaine, they do not ask if the needle is sterile. These are the fastest ways of transmitting of HIV and AIDS. I think.
>
> Also through the use of some needles there will be blood transfusion [possible contamination].
>
> Young people typically associate drug abuse and HIV and AIDS with injection drug use and needle sharing. Injection drug use and needle sharing, injecting drugs use refers to when a drug is injected into a tissue or vein with a needle. When injection drug users share "equipment" such a needles syringes and other drug injection HIV can be transmitted between users, other infections such as hepatitis C can also be spread this way. Hepatitis C can cause liver diseases and permanent liver damage.
>
> ...also through the use of some needles there will be blood transfusion.
>
> The young people should not be in contact with infected needles. Some needles may contain a virus which may come from a person who has the disease. Needles should be sterilized or changed. For example a person with the disease inject himself then the next person comes in contact with it knowing that the needle has been used. So protection against diseases is an important aspect on our lives.

Despite the acceptance of possible infection transmission as described above, there was an almost universal perception that sexual activity was the single greatest at-risk behaviour in terms of contracting the HIV. This was particularly so because participants perceived that adolescents living in Botswana were frequently participating in sexual activity that exposed them to HIV infection. One participant contended that sexual activity was so widespread that, "all young people engage in sexual activity whether you are from rural areas or from the city." Yet another participant stated that their peers

became entangled in “groups and social activities that demand sex activity” and that these social involvements are “the situations that put young people at risk”.

Further, participants also indicated that sexual activity among adolescents often involved the non-use of condoms. In relation to unprotected sex one participant stated that “young Batswana these days see condoms as a waste of time and money and some of the young people don’t know how to prevent this disease and how to use condoms.” Yet another said, “young people don’t use condoms because they say they get a bit loose and they fall off.”

Participants also suggested that the risk was increased when adolescents were involved in unprotected sexual intercourse with multiple concurrent sexual partners.

> This [behaviour] increase the risk of young people contracting HIV and AIDS, if the person may have multiple partners before. Carelessness may arise of people just choose and think it does not matter if they use a condom or not.

Aspects of sex with multiple partners will be discussed again later in this chapter. While the participants readily identified the major behaviours they believed to have the potential to increase HIV and AIDS infection, it is also important to note what was not directly mentioned. Within all the recorded data, no reference could be found to sexual activity other than heterosexual sexual intercourse. There was no reference to oral sex, anal sex, masturbation, lesbian or homosexual sex and deep petting. Further, the participants appeared to be reticent to mention that such activities were practised by adolescents living in Botswana. Yet, in informal discussions with adolescents and young adults the researcher heard that these activities certainly did take place in Botswana.

The participants were clearly forthright. While they acknowledged that minor transmission could occur through exposure to blood, kissing, use of contaminated drug

needles and mother to child transmission, they pointedly identified sexual activities as the greatest of the HIV and AIDS risk factors faced by adolescents. They suggested that this resulted from the frequent participation of their peers in unprotected vaginal sexual activities, often involving multiple partners.

5.5 FACTORS THAT INFLUENCE PARTICIPATION IN RISK BEHAVIOURS

This section explores the data in an attempt to address the third of the broad research questions:

> *What are the participants' perceptions of factors that have the potential to influence adolescents' participation in at-risk behaviours?*

The participants in phase one of the study implicated a number of factors that, they believed, could potentially influence young adolescents to participate in those behaviours that put them at risk of contracting HIV and AIDS. After engrossing himself in the transcripts the researcher concluded that many of the statements made by the participants fell into a pattern that described various interactions within these background factors. The cumulative effects of these interactions impacted on the choices made by adolescents in relation to their behaviour. While participants described elements of this pattern, none appeared to see it in its entirety. This section presents a model that describes the choice process and that arises from the researcher's perception of this pattern. This section then uses the model to structure the participants' statements about those factors that, in their stated views, were and are able to influence adolescent choices in relation to risk behaviours.

5.5.1 Emphasis upon choice

The participants perceived that the risk of their peers contracting HIV and AIDS was great because they (the peers) *chose* to engage in risk behaviours. The participants clearly understood the term risk behaviours and linked the term to behaviours that they knew would potentially increase the likelihood of contracting HIV and AIDS. Many of the participants described a tension between knowledge and choice. Their words indicated an assumption that while knowledge of HIV and AIDS was widespread within the Gaborone adolescent community, many of their peers ultimately chose to indulge in behaviours that put them at risk of contracting the HIV. Some of the comments from participants included:

> It [contracting HIV and AIDS] is by choice because you have been educated about the dangers of HIV and AIDS and you make personal choice to be involved [in risky behaviour].
>
> It [contracting HIV and AIDS] will be out of personal choice because most young people are given enough information about HIV and AIDS and it's up to us to make right decisions.
>
> Although there is a lot of information about HIV and AIDS available and people are being educated about it, they choose to ignore the warnings and engage in risky behaviours.
>
> Batswana young people are at risk of contracting HIV and AIDS because they don't take seriously the knowledge that is passed onto them and this is [a] disappointing matter to me and many other young people out there.

A vast majority of participants in the study believed that many Batswana adolescents often participated in behaviours that had the potential of HIV and AIDS infection – even though they knew about the repercussions of infection. Paradoxically, there were numerous occasions when the participants' responses suggested or implied that many adolescents living in Gaborone – and certainly many of the participants themselves - were initially committed to avoiding engagement in risk behaviours. Despite this, the participants also indicated that these same adolescents became caught up in those high-risk behaviours. The question is why do they allow themselves to be caught up in the

behaviours if they knew about the disease and its consequences and if they initially chose to avoid those risk behaviours?

The responses from the participants also indicated that they felt that there were many other factors, such as the influences stemming from socio-economic factors, culture, peer pressure, social factors and natural adolescent drives that led to either unpremeditated involvement or deliberate participation in risky behaviours.

Extensive analysis of the data suggested that this apparent contradiction between knowledge of the disease and involvement in at-risk behaviours may be more fully understood by exploring the antecedents of the final decisions that lead adolescents living in Botswana to participate in such risk behaviours. Indeed, it was only when a greater understanding of the decision-making process that led to participation in risk behaviours was achieved, that some of the participant's apparently contradictory statements could be reconciled.

5.5.2 Modelling the decision-making process

This section will now describe a decision-making framework that provides an understanding of those factors that influence many Gaborone adolescents to participate in those behaviours that increase the potential for contracting HIV and AIDS. It will become clear that, in the views of the participants, these behaviours revolved around sexual activity.

The decision-making process that emerged from the data consisted of two major stages (see Figure 5:1) that, for many Gaborone adolescents, appeared in opposition to each other. Though the participants described elements within these decision-making stages,

they appeared unaware of any broader pattern. But when the data were explored, the participants' responses clearly implied that two major stages were indeed part of the pathway to adolescent decision-making.

To a large extent, the first stage of the decision-making framework (or model) grows out of a consideration of the two models of health-related attitude and behaviour discussed in Chapter Three. These are the Health Belief Model (HBM) and the Composite Conceptual Framework Model (CCFM). In particular the HBM posits that the strength of one's initial intentions relating to activities potentially connected to the health problem (in this case HIV and AIDS) depended upon the following: one's knowledge of the health problem; the strength of beliefs about one's susceptibility to the symptoms (contracting HIV); one's understanding of the severity of the consequences of having the health problem (AIDS); and the perception of the efficacy and availability of preventative measures and one's ability to access and implement these preventative measures. Hence stage 1of the model links a package of beliefs and attitudes about the disease (in this case HIV and AIDS) to initial intentions in relation to at-risk behaviours.

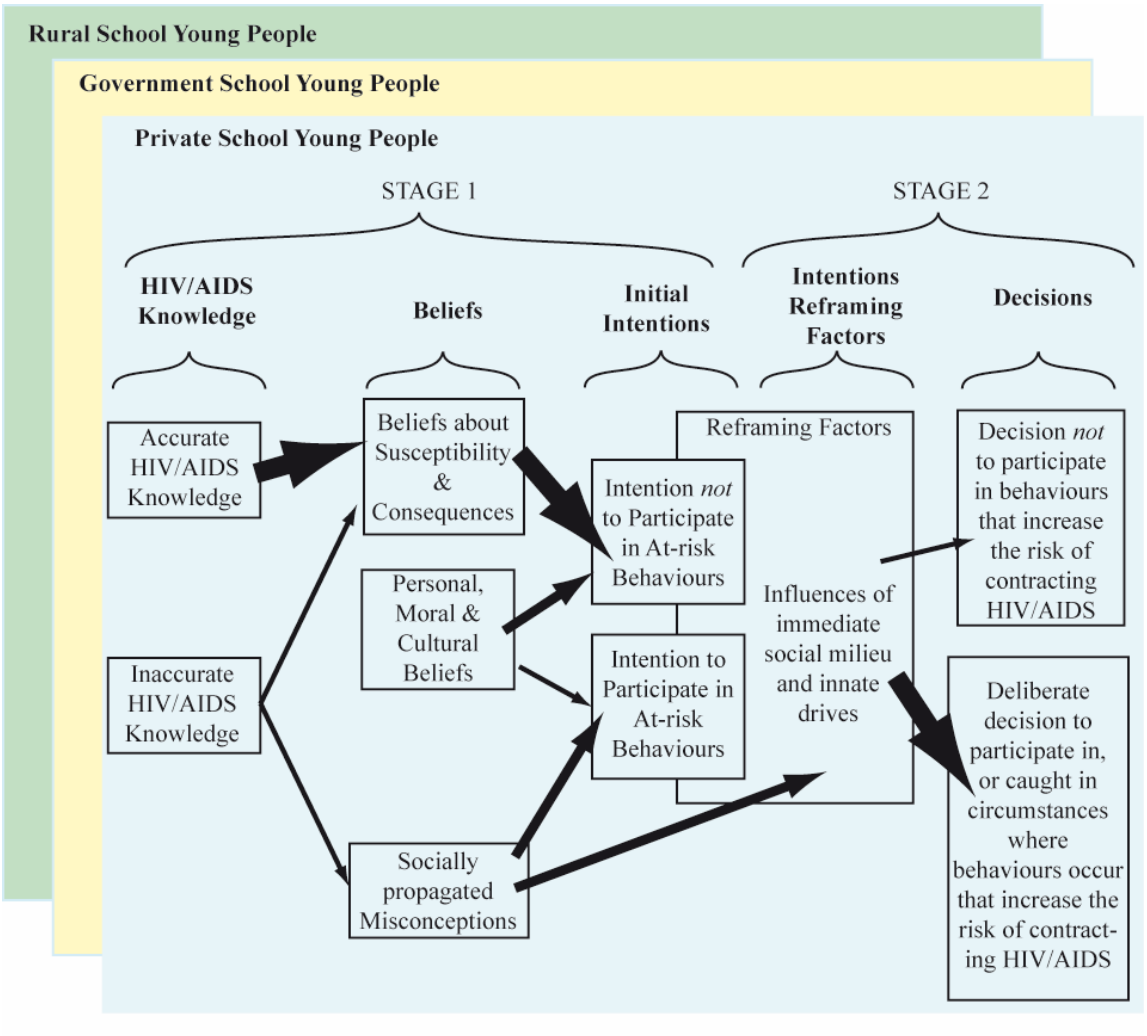


Figure 5.1. Risk behaviours: The decision-making model

Stage 2 of the model describes that critical juncture where young Batswana adolescents who have chosen to avoid risk behaviours or protect themselves against contracting the disease (HIV and AIDS) encounter a mix of contextual factors and socially propagated misconceptions that challenge their initial resolutions. The contextual factors involve the social milieu that brings to the fore peer and certain cultural pressures, the use of alcohol and the opportunity to explore the pleasures of sex, and so sate the adolescents' own natural drives. Many adolescents get caught in the moment and are swept into behaviour that they had initially intended to avoid. Some young women are tempted by offers of gifts from older men and others may feel culturally obligated to men of power. Others

accept socially propagated misinformation about sexual activity and the ineffectiveness of condoms. These influences can cause adolescents to reframe or even override their initial intentions to avoid risk behaviours.

Figure 5.1 depicts this two-stage decision-making process involving adolescent choice in relation to behaviours that have the potential to put them at risk of contracting HIV and AIDS. In this figure the arrows outline the decision-making paths that lead to engagement or non-engagement in risk behaviours. Stage 1 represents the effects of knowledge, family, religion and positive peer association that create those beliefs that reinforce intentions to avoid participation in risk behaviours. For many Gaborone adolescents Stage 2 (the reframing stage) is the point at which the effects of the immediate social context and misinformation can conspire to reverse the initial good intentions. The result is that many adolescents who would otherwise not engage in risk behaviours succumb to the temptations of the moment.

Although the first stage (the initial framing stage) of the model shown in Figure 5.1 allows for both alternative intentions (to take or not take preventative measures), the following discussions will centre on an initial intention to avoid the effects of at-risk behaviours or protect against them. The reason for this is that the model is meant to explain why young Gaborone adolescents, who know so much of HIV and AIDS, ultimately put themselves in situations of great risk.

The three layers within Figure 5.1 illustrate the participants' perceptions that the level of risk was greater for the government secondary school students and even greater for those attending government secondary schools in rural areas than it was for those students attending city private secondary schools. Despite this and for most adolescents, it

appears that the elements of the decision-making process remained constant and were independent of the backgrounds represented in the figure and hence they are shown only once. Certain antecedents relating to personal, moral and cultural beliefs are not shown in Figure 5.1, because they are not the focus of the study.

The following sections examines participants' statements that support the decision-making model and then uses the model as a framework to develop an understanding of the participants' perceptions of those factors that they believe to have influenced the behaviours of Gaborone adolescents that increase their potential to contract HIV and AIDS.

5.5.3 The first stage of the decision-making process

5.5.3.1 Knowledge of HIV and AIDS

With respect to the knowledge component of the first stage of the decision-making model, the data indicates that the participants in the study knew of the existence of HIV and AIDS in Botswana, were aware of its means of transmission and were very aware of the diseases' deadly effects (see sections 5.4 and 5.5). They knew that it was transmitted by bodily fluids and particularly by unprotected sexual intercourse with an infected person. Some of the participants exhibited extensive and detailed knowledge about HIV and AIDS. One wrote the following in a narrative:

> HIV in young people destroys certain cells called CD4 + cells, in the immune system that's the body's disease fighting department. Without these cells a person with HIV can't fight off germs and diseases. In fact loss of these cells in people with HIV is a key predict of the development of AIDS. Because of their weakened immune system, young people with AIDS often develop infections of the lungs, brain eyes and other organs and may suffer dangerous weight loss, diarrhoea, and a type of cancer called Kaposi sarcoma.

Others demonstrated a more general but reasonably accurate knowledge of HIV and AIDS.

> HIV is a blood-borne virus, that means it can spread when the blood or bodily fluids of someone who infected comes in contract with the blood, broken skin, or mucous membrane of an uninfected person.
>
> Some young people who have an HIV positive relative may not know the proper care of taking care of that infected relative. They may come into contact with blood of the infected person without wearing and rubber gloves especially when the person is very ill.

One participant, though complaining about parental discomfort in talking with their children, gave evidence of a broad knowledge related to societal pressures and the potential for HIV infection.

> Young people ages 15 to 24 years in Botswana especially young women face many challenges to their sexual and reproductive health, including high rates of maternal mortality, increased risk of violence and HIV due to widespread alcohol abuse. And . . . there is no formal sex education in school in Botswana and studies show that many parents are uncomfortable talking about sexuality with their children.

In general, participants had a broad and reasonably accurate knowledge about HIV and AIDS.

5.5.3.2 Perceptions concerning consequences of contracting HIV and AIDS

The participants were clear about the ultimate consequences of contracting HIV and AIDS. The virus is one of the main causes of sickness and death in Botswana.

> AIDS is the leading cause of death in Botswana for young people and has drastically affected its citizens.
>
> It is a disease that has taken a lot of people's lives. This is also a sense of condemnation about HIV and AIDS among the young people.
>
> HIV is deadly disease. It is very, very dangerous. If you contract it even if you have ARV's you will still die.
>
> There should be exhibitions on the land of Botswana that help people understand about how serious this matter is and how it has killed the victims.
>
> HIV and AIDS is a kind of a disease which is always ready to break our tiny defenceless bones it does not discriminate rich or poor. In Botswana the pandemic increase day in and day out. It appears young Batswana are keeping a deaf ear.
>
> The government of Botswana is going in throughout the country doing community service programs to teach Batswana that the disease is very dangerous and it can be passed from one person to another within a blink of an eye.

The following statements were made in relation to Thabo, a character in the scenario given as a point of discussion to the focus groups:

> The chances of him [Thabo] succeeding in live will be low because HIV and AIDS will make him not able to do many things, he will be sick at home and he would not be able to achieve the goals that he might have set for himself.
>
> He (Thabo) will die, because the body is not strong enough to endure the sickness. He is still young so he may die young also.
>
> Thabo's life will be shortened. He will die young. He might also decide to deliberately spread it. He will be thinking how other people are thinking about him.
>
> He (Thabo) will die, because the body is not strong enough to endure the sickness. He is still young so he may die young also.

The participants were also aware of consequences of contracting HIV and AIDS that occurred before death. For example, they made a number of references to socially related consequences. These included the negative effects that HIV and AIDS places on adolescents' education and the effect that it has on their social standing within their communities. While the majority of these comments related to school-based problems that an infected adolescent is likely to encounter, there were occasional references to broader social issues that may result from HIV and AIDS infection. Some examples of these comments are given below:

> He [a person with symptoms of AIDS] becomes weak and his career and school may suffer.
>
> His [a person with symptoms of AIDS] education will suffer.
>
> This [HIV and AIDS infection] makes the young people to drop from school and not have a future.
>
> This [HIV and AIDS infection] will affect his school because he will be thinking that he will die of HIV and AIDS. He may spread it to other people.
>
> If she gets AIDS her friends will reject [her] and she might think life is a waste of time. She will not concentrate on her studies. If her parents died and left her money as legacy she may waste it because she will be thinking that life has come to end.
>
> This may disturb her chances of going to school since the education system asks you to go out of school if you get pregnant. When she gets a child she needs a lot of time to take care of the child before she goes back to school. If she decide to go back to school while the child is still young at six months the child growth will be affected.

Other participants indicated an awareness that someone who contracts HIV and AIDS will be likely to suffer serious psychological problems including stress, depression or having suicidal thoughts.

> Thabo will be so stressed when he will know about the fact that he is infected with AIDS.
>
> Matshidiso might try to kill herself. She will be like Thabo she will be depressed and challenged. She will be discriminated since people will not connect with her.
>
> Matshidiso may try to keep it from parents and make her own choices. She may think that there is no life after contracting HIV and AIDS. She may not want to surprise her parents. This is also worsened because as young girls they cannot know their HIV status.
>
> People who have AIDS feel hopeless since they think that I am going to die and nothing good will be good for me.
>
> When people have AIDS they fell helpless and hopeless since they will be thinking that my life is ending now and there is nothing that will come out of me.
>
> She will experience social difficulty and will have a lot of stress.
>
> She might commit suicide because girls are so emotional. She would be more stressed that leads to suicide
>
> Thabo may try to end his life because if the stigma involved with contracting HIV and AIDS. Boys are not able to talk over such things and suicide is one of the alternative.
>
> Life for someone who has HIV AIDS Positive is hard life because he or she will not feel acceptable to society and he may feel suicidal

The data indicates that the participants believed that the consequences of contracting HIV and AIDS were severe and resulted in the loss of quality in life-style and an early death.

5.5.3.3 Perceptions of adolescent susceptibility to HIV and AIDS

The participants perceived that most of their peers were personally highly susceptible to contracting HIV and AIDS as illustrated by the following responses:

> I agree with this idea. I think that this social demographic is prone to HIV infections because they are unaware of the true danger of this epidemic. There is a mentality that it won't/can't happen to me which leads young people to indulge in high-risk situations.

> I think young Batswana people are more prone to catching the virus
>
> Every single one of us, poor or rich young or old is at risk of getting HIV and this is because we don't take care of ourselves.

Many of the responders who noted the significant susceptibility of contracting HIV and AIDS also supplied a reason or a set of reasons as to why this may be so.

> Batswana young people are at high risk of contracting HIV and AIDS because sex is very emphasized in society. A lot of young people therefore indulge in sexual activities probably because of peer pressure or by personal choice.
>
> Young people are at risk of contracting HIV and AIDS because a lot of misbehaviour takes place in the day-to-day lives of many young people. 70-80% of young people in Botswana have been taking part in small [sexual] relationships.
>
> Batswana young people are at risk of contracting HIV and AIDS because most of the young children out there are indulging themselves into alcohol abuse, having sexual intercourse at an early stage without protection to make it worse.

Susceptibility will be further addressed in a later section of this chapter where attention will focus on perceptions of relative susceptibility.

5.5.3.4 Personal moral and cultural belief structures

In most Setswana communities, the situations regarding sex education and sexual activity are complex. On the one hand traditional aspects of family relationships were somewhat convoluted. There was an ancient tradition of keeping young pubescent and post-pubescent adolescent males and females physically separated prior to the age of marriage (the age of initiation in mid-late adolescence). Adolescent boys were kept busy away from the villages caring for flocks while adolescent girls lived with their mothers inside the villages and were occupied with women's work. During this period of development the tribal mores discouraged adolescent sexual relationships. Following initiation family alliances could proceed toward marriage. However, sex was not always restricted to marriage. There were occasions when, in the interest of continuance of the

family line or the tribal future, extra procreative sex was permitted. These elements have been discussed in Chapter 2.

On the other hand the introduction of Christianity and European traditions and business practices profoundly changed African communities. Villages became townships. New convolutions of beliefs and practices arose. Christian beliefs were aligned with the old practices of separation of the sexes. But Christianity and the need for modernisation introduced schools and hence children and youth of both sexes attended schools together and lived in close proximity to each other. Townships, and particularly the city of Gaborone, struggled with an unequal distribution of wealth. Poverty made adolescents, and particularly girls, vulnerable to the desires and practices of older, affluent (and therefore powerful) people (often males) who have the means to gratify their sexual pleasures.

These complexities were reflected in the statements of the participants. Several participants noted the traditional practice of separation and linked it to the Christian belief that sex was reserved to marriage as exemplified by the followings statements:

> To prevent [HIV and AIDS infection] He must follow [more common] traditional customs - such customs involve circumcision and abstinence from having sex and also doing it after marriage.
>
> It [sex outside marriage] is bad because it is against customs values which value kids within marriage.
>
> Culturally also encourages young people to abstain from sex before marriage.

As indicated earlier in this thesis, the *bogwera* and *bojwale* traditions required that adolescents be taught by the tribal leaders about the tribal laws and customs pertaining to appropriate sexual behaviour. In general this pattern of education no longer exists except among the rural elements of a few tribes like the Bakgatla and the Balete. As

times changed, but prior to universal schooling, there were community expectations that parents and immediate family members, especially the uncles and the aunts, would educate the children of the family about moral values in general and appropriate sexual behaviour in particular. Adolescents now live in communities where the role of sex education has been, to a large extent, transferred to teachers and counsellors.

The participants, who derive from this latter setting, perceived that although some parents and elders in the community did contribute to adolescent sex education, they should play a greater role in teaching young people about moral and cultural beliefs pertaining to sex. Participants indicated that the influence of traditional values of confining sex to marriage, and advice that parents and community elders could give about sexual matters, would be important factors in their decision-making process when considering whether to participate or not to participate in risk behaviours.

> Getting advice [about morality and values] from a parents and elders in the community about getting involved in a relationship which is sexually challenging will help.
>
> They should get information at libraries or from parents or relatives about ways of avoiding contracting HIV and AIDS
>
> Young people should also be free to ask their parents about these issues [about morality and values]. They should not shy away from asking because if they do, they would be depriving themselves of such easy access information
>
> Parents should talk to their children about sexual relationships and give advice [morality and values] where necessary.
>
> Parents must find the best way to communicate to their children. Fathers must talk to their sons and mothers talk to their daughters [about morality and values].

A few participants also identified religious and moral beliefs as factors in their decision to participate or not to participate in risk behaviours.

> The young people are curious because of media always promoting factors that spread HIV and AIDS for example sex and drugs (needles). Their minds are contradicting it,

> either they obey their morals or . . . [social pressures] as the top of the social ladder is every young persons dream.
>
> Religion also assists young people to say no to sex and culture advocates that young people should wait for marriage before they have sex.

Such cultural and religious beliefs relating to their decision-making process to participate or not to participate in risk behaviours were, however, not extensively or strongly reported by the participants. Those young persons who expressed these beliefs most often also expressed their intentions not to participate in risk behaviours. The influence of many of the traditional cultural and religious beliefs, according to the participants, is waning as the adolescents are not paying attention to the exponents of such beliefs. The data suggest that the voices presenting these beliefs are being drowned out by the influence of mass media and new social norms, significantly influenced by western culture.

When participants were asked about knowledge of certain cultural beliefs and practices such as Nkadzana, Matshala, Otusira, Xakanaxaamaa or Seantlo (Ntseane, 2004) they appeared to have little or no knowledge of such practices. It is therefore reasonable to conclude that such cultural beliefs and practices do not exert a strong influence on adolescents living in the city of Gaborone. Further research is therefore needed into the influence of such practices on adolescents living elsewhere in Botswana and particularly those living in rural villages.

Overall the data suggest that to a large extent both the health beliefs and the personal moral/cultural beliefs led to the initial intention of adolescents living in Botswana to avoid participation in risk behaviours. The strength of these intentions, however, appeared compromised by the limitations of these beliefs. Of these two belief components, the data suggest that health beliefs and an understanding of the

consequences of contracting AIDS were the greatest factors in determining adolescents' intentions in relation to risk behaviours.

5.5.3.5 Sources of HIV and AIDS knowledge

The participants indicated that their peers received information about HIV and AIDS from a variety of sources. Such sources included schools, parents, the government, and their friends. Most indicated that adolescents knew a lot about HIV and AIDS and, in particular, how one is infected with HIV and AIDS. As described by one of the participants, ". . . the surprising thing is they [the adolescent peers] have information, they know it, yet they act as if they know nothing".

Schools were identified as one of source of knowledge about HIV and AIDS as indicated in the following comments:

> They should listen attentively at school to know more about what the community has in danger for them.
>
> However it depends on the individuals listening to what the teachers are saying.
>
> Abstinence is the best way and if they are not able to hold themselves they must use a condom. They can also approach guidance and counselling teacher and tell them that they are unable to hold themselves.
>
> Young people could also be encouraged to go for [school] counselling to find out more about the disease and its possible effects. This can also be done through reading books, pamphlets and leaflets, which contain information about HIV and AIDS.
>
> Others felt that more could be done in terms of the roles of schools in dispensing information.
>
> Sex education can also be introduced in schools as this could help young people to gain the knowledge they require for them to effectively avoid the HIV and AIDS infection.
>
> They should be taught in school about this disease and they should read hard about this disease as it is curable.
>
> 60% [of the young people will be infected] this is so because most young people do not have courage. To increase the courage for students' arrangements must be made for the school to bring someone who has a personal experience living with HIV. This will encourage students to avoid HIV and AIDS.

Other participants indicated that parents and family members of adolescents should be sources of information about HIV and AIDS. In this context family members include uncles (Malome) and aunties (Rekgadi). The implication is that while the home supplied some information, it could provide greater guidance and advice about HIV and AIDS.

> Thabo must talk to his parents about sex issues often.
>
> They [young people] should get information at libraries or from parents or relatives about ways of avoiding contracting HIV and AIDS
>
> Young people should also be free to ask their parents about these issues. They should not shy away from asking because if they do, they would be depriving themselves of such easy access information.
>
> Parents should talk to their children about sexual relationships and give advice where necessary.
>
> Parents must find the best way to communicate to their children. Fathers must talk to their sons and mothers talk to their daughters.

Participants indicated that not all families were able to provide positive support and accurate knowledge to their young people. Within these family structures information lacked clarity and senior family members, including parents, did not initiate discussions with their children about HIV and AIDS. Comments regarding this lack of family involvement in HIV and AIDS education were as follows:

> Parental guidance is also limited. Limited of actions [appropriate limits to behaviour] aren't explained to young people, so when they go out they feel it is normal.
>
> Parents in our communities and societies see it a norm or taboo to speak to the children about AIDS. But they youth are the ones at great danger of HIV and AIDS all parents need to cooperate and they be open to topics involving AIDS.
>
> Parents should take full responsibilities in the upbringing and guiding of their children because without parents the youth won't get information from nowhere. Children should be brought up in conducive place/environment without abuse or anything which may corrupt their minds.
>
> It starts it home parents must teach their children moral values. Parents must take their time and effort to teach their children.
>
> They [parents] do not have enough information about HIV and AIDS. This is because parents cannot talk to their children about HIV and AIDS and tend to believe that it is a teacher's responsibility, at the same time teachers leave it to the parents and this leave the students hanging without information.

> I also think that is has to do with Batswana parents. They don't educate their children enough about HIV and AIDS. I don't know if they are scared to talk to us about it or what, but that is also impacting in a negative way because 'charity does begin at home'.
>
> Batswana young people are at risk of contracting HIV and AIDS because nowadays young people drink alcohol but long time ago young were not allowed to drink. Some parents even allow their children to drink alcohol and smoke. You can see children dancing in a bar which is not good for their lives.
>
> Lack of knowledge about sex and contraceptives, is one of the things that put young Batswana at the risk of contracting HIV and AIDS. Some parents do not talk to their children about sex, contraception and HIV and AIDS, resulting in an individual not knowing about this virus, resulting in one having a loose life and contracting HIV and AIDS.

Some participants even placed culpability upon the parents for their children's activities.

> Some are influenced by their parents to indulge in sexual activity. The parents would be saying that you are now old enough you can do whatever you wanted.
>
> This is a really shocking but very true parenting are mostly to blame, because very little time is taken to get to know the child, this may lead to rejection between parents and children to children find some other things to fill the lives and end messing with wrongs groups.

It is important to notice that while many participants pointed to the lack of initiative on the part of their parents in providing information about HIV, others indicated that it was the adolescents themselves who disregarded parental advice and/or concealed their risk behaviours from their parents.

> Another contributing factor is the culture of Botswana. I feel that in Botswana relationships are looked down upon and therefore if a teenager is in a relationship they would hide it from their family. This prevents parents from warning their children about the possible dangers of sexual relations and means that no guidance can be provided. Therefore there is a lack of awareness which contribute to this risk.
>
> Young Batswana people are also losing their way. They no longer have morals and values and do not listen to the advice of their elders even though they know that their parents are right since they have passed through the same problems that they are facing.
>
> Basically in general, young people no longer listen to the parents to the parents and young girls have "Sugar daddy's" some jump to every chance in order to have sex so they have lost their way in our culture.
>
> They can contract the virus because of disrespecting their parents. Parents often tell their children to be aware of their surrounding and to try by all means not to contract the virus. But many of them do not listen. For example when a person's friend gets hurt and is bleeding, the friend will rush to her without thinking and one touches the blood of an infected friend.

> For most of the kids it is by choice, you can choose to have sex; you can choose to do drugs, it is out of personal choice because most young people choose to have sex. Your parents can tell you what to do and you may choose to disobey.
>
> It is easy for girls because of how they are raised at home. When they start form one they are told at home to say no to boys by their parents. Some girls do what their parents tell them what they should do.

Some participants recognised that agencies of the Botswana government were potential sources of information about HIV and AIDS as indicated in the following statements:

> If they [young people] find it hard to abstain they should use protection and if they want some others ways of avoid contracting the virus they should find out at the [government] clinic.
>
> She must get advice from the [government] hospital and seek help.
>
> They must go to the [government] clinic and be informed about the disease and they must listen to the radio and TV programs and learn through media. If they have sex they must use a condom. Young people can also abstain from sex.
>
> Young Batswana can also avoid contracting HIV and AIDS infection by taking the information they are issued with to learn more about it and understand it. The information is normally distributed in the form of pamphlets and posters. Learning more from the media, e.g. TV they are usually story lines about HIV and AIDS that teach people and spread the word. Also by listening to the educational programs of radio about HIV and AIDS can help one to be more assertive and careful. Generally by absorbing the information we have we can go to 2016 as a healthy nation.

Beside schoolteachers, parents, the government and media, participants indicated the role of churches, clubs and organisations in providing information about HIV and AIDS. In Botswana, the government and non-government institutions have established youth-based institutions or clubs which aim at creating a forum where adolescents could share knowledge and information about HIV and AIDS. These clubs provide information to adolescents at two levels, namely via knowledge transfer and by providing adolescents with life-skills development such as the confidence and the ability to be able to say "No" to behaviours that place them at risk of contracting HIV and AIDS. Participants commented on the first level of knowledge transfer through clubs as follows:

> Young people can form youth clubs that can educate and teach people on HIV and AIDS and its effects on them.

> Most students do not participate in abstinence club and HIV and AIDS clubs. All other young people just take things for granted.

With respect to the second level of the role of clubs (life-skills development) the participants' responses indicated that the clubs were successful in enabling decision-making in the context of HIV and AIDS.

> They [the government] can create clubs that encourage young people to abstain and refrain from any sexual activities. This will benefit the community in a very positive way.

> Clubs that are there somehow are assisting the young people to be busy and keep themselves from risk behaviour.

> If one can join clubs, activity and reading club us a way of preventing HIV and AIDS by occupying your mind is some activities.

Informal peer-to-peer information transfer was also mentioned as yet another source of HIV and AIDS information. As one of the participants said:

> Young people receive some information about sexuality and HIV prevention both informally from friends and acquaintances and through Botswana HIV prevention programs.

Following further questioning about this, there was an acknowledgement that adolescents do get significant information from their peers – perhaps even more than from other sources.

> Young people should avoid peer pressure. Our age mates can influence us to do things that may lead to contraction to HIV/AIDS. They can influence us to have sexual intercourse without protection. They can give them false information that having unprotected sexual intercourse standing up will not contract the disease.

> Young people tend to be influenced by their friends or peers, who themselves are also indulging in sex.

> The other thing that the government should do is to help young people is to introduce peer educators in different schools so that they can educate youth and help them abstain from sex. These peer educators will be able to distribute a lot of information on HIV/AIDS

> If your friends had experience and they tell you that they had it you also feel like you have to do it.

> If they have friends and the friends will be saying let's do this and you know it's bad and the friends say that you must do it over and over again then you end up doing it since they will be influencing you to do it. Where they are influencing to go to parties or getting into drugs or sexual activity then they can get HIV/AIDS or STD's

In summary the participants perceived that for adolescents living in Botswana the information about HIV and AIDS comes from schools, government, clubs, parents and their peers. Although participants appeared to be well-informed about HIV, they did not indicate that any one source was a superior fount of information. In particular, there appeared to be an implied disappointment on the part of participants that parents were not more forthright on this issue. It is important to note that there was no hierarchy of sources in terms of the quality or authenticity of the information given by these sources.

The terms *information* and *knowledge* seem to be used interchangeably. Further, the context often suggested that these terms sometimes referred to: facts about HIV and AIDS; advice relating to values and morals; advice relating to behaviour and life-skills; and a combination of all these components. Often the participants appeared not to be seeing the differences between these components.

5.5.3.6 Stage 1 initial intention

The participants gave evidence of having a sound knowledge of HIV and AIDS and that they were acutely aware of the consequences of contracting HIV and developing the symptoms of AIDS. They also were well aware of the those behaviours that put themselves at risk. The Health Belief Model links all three elements of personal knowledge to modes of behaviour that are considered by the individual to inhibit infection or that provide effective protection against infection. Further, the individual must believe that he or she can implement or perform these modes of behaviour. Whereas earlier studies set out to follow intentions, this study aims at examining participants' descriptions of the behaviours of their peers. Hence participants were not asked about their own intentions, nor were they asked questions about the intentions of

their peers. However, the intentions of others could be inferred from the statements made by the participants. For example, the participants said that their peers "should be diligent" and "should listen attentively at school". In particular they should listen "to what the teachers are saying". They should "obey their parents" and they should "make right decisions" and their "personal choices" should cause them to avoid risky behaviours. Participants also implied that young people should avoid a "loose life" and "abstain from sex before marriage". The *loose life* included activities such as the social consumption of drugs, the use of alcohol, and attendance at "night parties" and "pool parties" where various sexual activities took place and coercion was not unknown.

Participants acknowledged that some adolescents would be involved in sexual activity and "if they [young adolescents] find it hard to abstain they should use protection". In other words, protective activity was a part of the initial intention to avoid at-risk behaviours. The use of condoms was the most frequently mentioned protective behaviour.

Clearly, the participants indicated that their peers initially intended or should have intended to avoid infection with the HIV.

5.5.4 Second stage of the decision-making process – Factors that reframe intentions

The data presented indicate that the participants perceived that their peers (Gaborone youth) had appreciable knowledge about HIV and AIDS and the effects or consequences of infection. Further, they understood that certain modes of behaviour made them susceptible to infection. The model shown in Figure 5.1 indicates that their initial beliefs culminated in intentions to take preventative action. Yet, the participants in the study

indicated that many young adolescents still participated in behaviours that placed themselves at the significant risk of contracting HIV and AIDS.

The data clearly point to another process that follows this personal decision to avoid participation in those behaviours that inherently provide risk. The decision-making model (Figure 5.1) proposed that the initial intentions were reframed by an array of immediate social contexts that provided opportunities for desired sensual experiences including sexual activity. The reframing process involves an interaction combining internal cognitions and natural drives with an array of such external pressures as: peer pressures and the desire for social acceptance; socially communicated misinformation; differences in partner power; economic pressures; media influence; and to a lesser extent, long-term relationships with a peer-partner. These influences are further mediated by a range of activities that include: the consumption of alcohol; the attendance at parties; the viewing of pornographic material; and the seeking or acceptance of monies, gifts or rewards for sexual favours. The data suggest that this array of compulsions, pressures and contexts hijack and reframe the initial intentions. This reframing process is represented in Figure 5.2.

5.5.4.1 Internally generated pressures

The internally generated pressures are of two forms. The first form arises from the participants' perceptions of internal sex drives. The second form is inferred from statements that relate to perceptions of relative susceptibility. These statements imply that others rather than the self are more susceptible to the HIV and hence suggest a process of minimisation of personal risk.

5.5.4.1.1 Perceptions about hormonally driven sex drives

A limited number of participants directly mentioned that adolescents' natural sexual drives were important in shaping behaviour. Of course the developmental literature (see Chapter 2) makes the point that adolescent sexual behaviour is strongly influenced by the surge of hormones that shape the adult human body. The participants not only indicated an awareness of natural sex drives, but also suggested that boys were more vulnerable to these inner drives than were girls. Below are some of the participants' statements.

> It is easy for girls to say no to sex because girls react slowly when exposed to a sexual situation and take time to think than boys. Boys can just look at a naked woman or touch their breast then their hormones drive them into sexual activities. This happens when a boy looks at a naked woman on TV or pornographic material.

> Men are more at risk because most men sleep around than girls. Although there are more women in population men are the ones who love to sleep around than women. This is because men cannot control their hormones than women.

> Youth initiates sexual activity at earlier ages than in the past decades. Youth are a highly sexually active group due to their age [due to their natural sexual drive at this age].

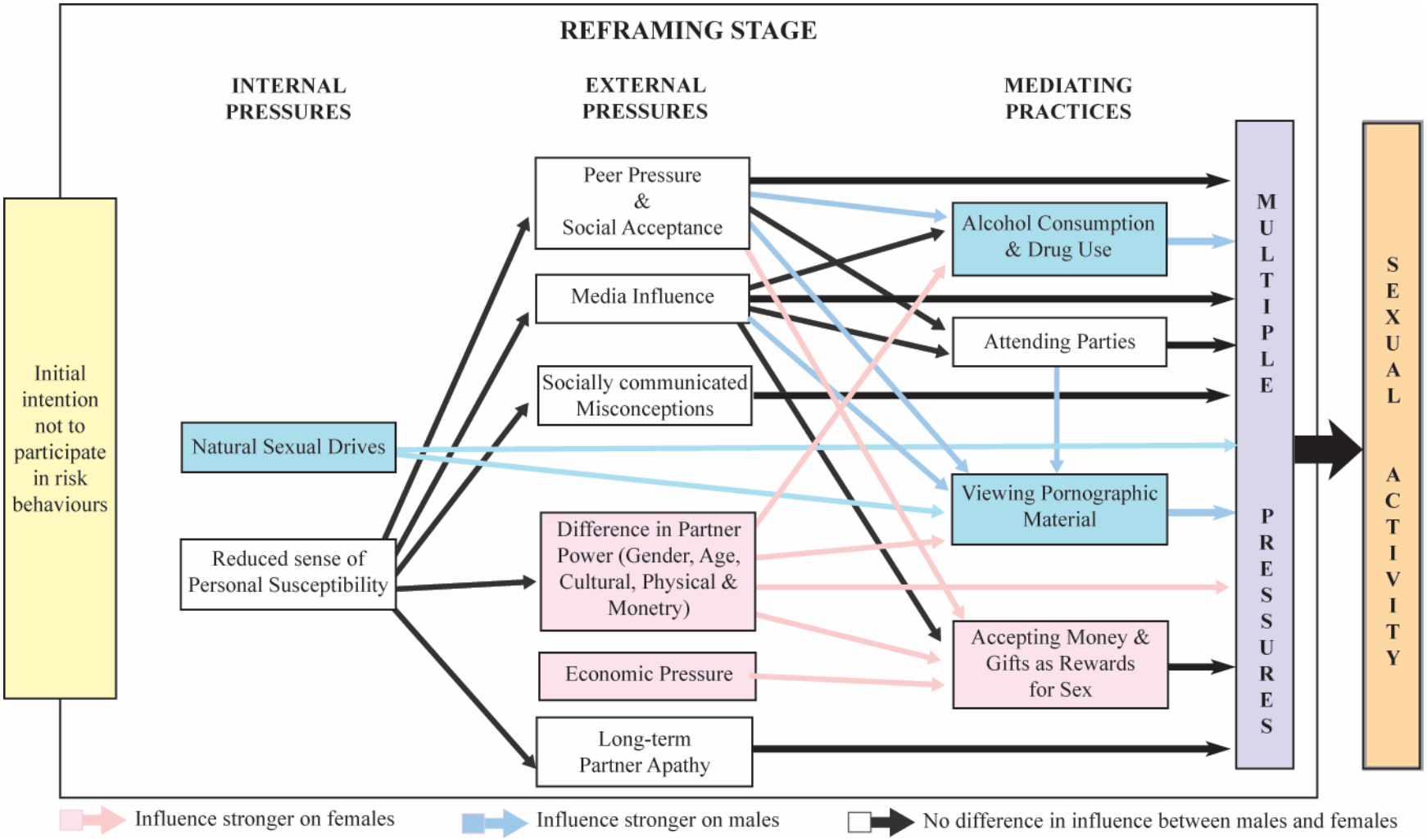


Figure 5.2. Pressures that reframe the initial intention

Other participants appeared to be more indirect in the manner in which they alluded to natural inner drives. For example, one participant said, "Boys are more at risk because they want to experiment [with] sex most of the time". A second said, "Some [young people] find it hard to abstain" and a third made the point that "boys like sex". There were others who used the term *fun* to describe the pleasure of casual sex where no deeper relationship was expected or sought with the other person. One participant stated that, "some young people get infected because they try sex for fun." Another said, "Boys and girls find sex to be part of the fun." This idea of sex for fun is illustrated in a party context as is shown in the comment below:

> Ok sometimes there is a hard guy and you are single and you want to have fun and you do not want to have something serious you suggest having some "friends with benefits". Friends with benefits worked very nicely. What happen is that friends with benefits happens when you are at a party you set the rules that you say that this is not a relationship and there are no emotions involved its just fun we can just have fun and have sex. Girls have relationship but also have a friend with benefits. In the end friends with benefits can fire up because if you have sex with someone you like feeling develop and then you fall in love with such a person.

The researcher found these statements somewhat surprising as he expected participants would emphasize the cognitive aspects of the decision-making process, particularly because the various community HIV and AIDS campaigns centred on such elements as intention and decision-making rather than acknowledging natural sexual drives. Few if any of the campaigns in Botswana address the manner in which young people could handle natural sexual drives. For example the Abstain, Be faithful and Condomise campaign model focuses on cognitive decision making and excludes any direct reference to natural sexual drives.

5.5.4.1.2 Perceptions of relative susceptibility

There were considerable differences of opinion about whether Gaborone adolescent females or males were more susceptible to contracting HIV and AIDS. Females

perceived boys to be more susceptible than were girls. Males perceived girls to be at greater risk. Both females and males argued that students in government schools were at greater risk than students in private schools. Finally the participants, all of whom were students in Gaborone, perceived rural youth to be more susceptible than urban/city youth. These differences are exemplified in the selected transcripts that follow.

One focus group question in relation to the scenario involving Thabo and Matshidiso asked the participants to consider the situation of the characters if they became infected with HIV by age 24 years. One of the follow-up questions frequently asked was "Which gender is more susceptible to contracting HIV and AIDS by this age?" The following are typical of the responses recorded from *female only* participants' focus groups:

> 65% [of] boys are more at risk because they want to experiment sex most of the time. Boys like sex.
>
> 90% [of boys] because a lot of boys are sexually active which put them at risk and exposure to HIV and AIDS
>
> 75% of the boys will get infected because boys travel a lot and they do sex all over the places.
>
> The use of drugs puts boys at risk. The use of drugs in common in government schools because students come from families with social status than in private schools.
>
> The boys may be at risk because of the choices he make like when he is under the influence of alcohol or drugs he will be influence to be involved in some behaviours that will put him at risk since when you are drunk your judgment in impairs and you make wrong decisions.
>
> Thabo [the boy] might be more at risk because at government schools we are more packed. When teachers are teaching government school students are packed in the class so as the teacher is teaching about HIV and AIDS the students would not want to listen and know more about the disease.
>
> There are many students in a government and more boys in government schools are more rebellious, when boys are taught that they should not have sex they do not listen. In private schools when students are being taught that are not many so they listen. However it depends on the individuals listening to what the teachers are saying.

> Peer pressure, like boys get into groups and his friends in the group may influence him into sexual activity and for him the feel he is part of the group he might end up getting involved and in the process contract HIV and AIDS. To be in that group he might have to get a girlfriend and then get into bed with that girl and get HIV and AIDS. Peer pressure affect most rural people because they are passive and would like to copy what their friends are doing in the group they get involve
>
> Boys are very bias about the use of condom no matter what. Boys do not want to use it and even if they use they may not use properly. Most boys want to have sex quick and fast. Most of the boys want to do it quick and fast and they do not focus whether the condom is expired or what. Sometimes they do not know how to use a condom because he want to do quick and fast. As long he get what he wants he might not use the condom and they get HIV and AIDS
>
> Rebellious child especially boys like experimenting and they like alcohol abuse and having relationships which place them at risk of contracting HIV and AIDS.
>
> I think they are risk, the peers may influence you to do bad things like making you have sex for you to fit in their group or you will not be their friends. The boy is therefore at a higher risk
>
> Boys are at a higher risk than girls because they are naughty and they influence each other through peer pressure. Boys can have many sexual partners so that places young boys more at risk than girls.
>
> Thabo [boy] is at higher risk of contracting HIV and AIDS than Matshidiso [girl] because of lack of information, how it get transmitted and also there are much pressure in the city. He may be pressured by peers into drugs/alcohol and having sex.

The views held by most female participants in focus group discussion, that male adolescents were more at risk, were also the views held by female participants in one-to-one interviews.

> It is easy for girls to say no to sex because girls react slowly when exposed to a sexual situation and take time to think than boys. Boys can just look at a naked woman or touch their breast then their hormones drive them into sexual activities. This happens when a boy looks at a naked woman on TV or pornographic material.
>
> Men are more at risk because most men sleep around than girls. Although there are more women in population men are the ones who love to sleep around than women. This is because men cannot control their hormones than women.
>
> It is equal but more in men are at risk because men have dirty minds and they have multiple partners than women.
>
> Men are affected more because they are the ones who are doing bad things they rape people they have sex. Unprotected sex is the one which is bad.
>
> It is more easier for girls to say no to sex because girls think more carefully about the outcome if what they do while boys do not care much.
>
> It more easy for girls to say no to sex than it is for boys.

It is interesting to notice that the focus groups composed of *male only* participants were more likely to argue that female adolescents were more at risk of contracting HIV and AIDS than were male adolescents.

> Women are emotional attached to guys and they can just accept to have sex. For example, when a young girl drinks alcohol she starts becoming drunk and her body becomes weak. Her vision starts fading away and her memory does not work properly. She may not be aware of what is happening where ever she is and a boy starts raping her. She becomes unconscious. This is really a huge risk of an infection of HIV and AIDS.
>
> Batswana young people are at risk of contracting HIV and AIDS because of the activities they indulge in. Young people [girls] from the ages of as early as 12 years are already sexually active. This may be due to the fact that they are getting involved with or dating older people, whether that older person is male or female. We see this more in the cases of girls. To a lot young girls, dating an older guy is okay and good because they never have to use public transport because they can be driven anywhere they want to go. Their phones always have airtime. They too are never without money.
>
> 80% of girls are at risk of contracting HIV and AIDS
>
> 70% for girls because girls start dating at an earlier age and the guys he may be dating may not be faithful. Some girls may be raped. Getting involved in dating at a young age places them at risk of contracting HIV and AIDS.
>
> 100% of girls are at risk because girls get involved while they are young and they get involved with older people and this places them at risk of contracting HIV and AIDS.
>
> Girls are more at risk of contracting HIV and AIDS because they like money. The girls are having sex with older people.
>
> 75% of girls are at risk because most girls are raped.

Similarly, male participants in the one-to-one interviews also suggested that female adolescents were more at risk than male adolescents.

> Women are more infected because if you go a nightclub you see that its women who are selling their bodies for sex. You do not see men selling their bodies for sex. While men are the buyers these women sleep with many men which puts women at a higher risk than men.
>
> More girls are infected because boys cheat. They cheat girls they do not tell them their HIV status and then sleep with the girls and then more girls are infected.
>
> Money buys them perfumes and some soap to use for bathing or clothing to wear and other things that they desire. With such offers the girl cannot say no to sex because she would not know where else to get money. Boys may use a condom but they may not use it. If it is the influence of an older person the young person may not be able to say no. They may not use condom for prevention.

> Females are infected more because men are not raped, men are strong and that girls are weaker and are always attacked get raped more. A man can attack 20 girls so more girls are at risk. Boys are more naughty than girls. Boys take advantage [of] girls
>
> It is easier for boys to say no for sex than girls. Girls cannot stay alone for a long time. Boys play in groups and they like fighting but girls just criticize each other and then girls end up going out with a boys. Boys can also rape one girl by taking turns
>
> Girls are commonly asked by older men since they are given money, the man then say I always give you money and in trade for money we must have sex. Sugar daddies ask girls for sex. They offer rides in the car to the girls who like fancy cars like a Benz and he gives her money and then in trade of that money he demands sex.
>
> Mostly girls will be infected because I do not think boys can go for older women looking for money but girls are having sex with older men for money.

So, while male and female participants argued that the opposite gender was the more susceptible, both argued that, because of a lack of knowledge, rural youth were more susceptible than urban youth. In the participants' words, they [rural youth] "don't know that condoms exist" and "people in rural areas usually consider it a taboo to talk about these issues". Nevertheless when they (rural youth) "come to the urban area, they may attend parties in the night and get involved in sexual activity".

Further, some participants held the belief that the level of the risk was greater for students who were attending government secondary schools compared to those students who attended private secondary schools. As one participant said, "In government secondary school young people are more at risk than the private secondary school because in government secondary schools we are more packed and there are more pregnancies than in private secondary schools." A second participant argued that government schools were "different from private school[s]" and another said that students at government schools were "exposed to different things like drinking and smoking".

So, the participants accepted the severity of the consequences of contracting HIV and AIDS. They acknowledged the gravity of the risk faced by Gaborone youth. Yet various groups among them held divergent views about the susceptibility of others to the HIV. Each group perceived another group to be more susceptible to HIV infection than themselves. There is a suggestion here that participants in the study were transferring the sense of greater susceptibility to others rather than fully acknowledging their own risk. In the words of one of the participants ". . . it [infection with HIV] can never happen to me it will happen to others but it will not happen to me!" Perhaps this is an example of an adolescent sense of invulnerability (Healey, 2003; Macintyre, Rutenberg, Brown, & Karim, 2004; Pat-Horenczyk, Peled, Miron, Brom, & et al., 2007).

The consequences of such thinking among these adolescents, as suggested by the Health Belief Model, reduces the sense of personal susceptibility, weakens the initial intention not to participate in risk behaviour and lessens the strength of the adolescents' resolve to avoid risk behaviours. It could well be a factor in the reframing process.

5.5.4.2 External pressures

5.5.4.2.1 Peer pressure and the desire for social acceptance

Participants acknowledged that the influence of peers induced many adolescents to indulge in sexual intercourse. Peer pressure was the most frequently referred to external influence acting during this reframing stage. The language of the participants' comments suggests that this pressure was, at times, almost

overwhelming. The following quotations illustrate how widespread and influential this kind of pressure was:

> Sometimes a friend may come to you and say that you should have sex with such a girl and if you say no the friend will say go, go, go, and they will tell you that you are not a man, you are a just a boy if you do not have sex.
>
> Batswana young people are at risk of contracting HIV and AIDS because of peer pressure, the influence from their friends. These friends will be encouraging their friends to indulge in sex saying that it is cool to do that when actually it is not. It is generally increasing the chance of one to contract this deadly disease of HIV and AIDS.
>
> Young people tend to be influenced by their friends or peers, who themselves are also indulging in sex. Most of these sexually active young people do not actually know their partners HIV status. Therefore this puts them at a higher risk of contracting the virus.
>
> Pressurizing is the most of them that put young ones in the risk of contracting HIV and AIDS because one will want to join a group and will get that force to enter and that will basically be drinking alcohol sleeping with someone, illegal drugs which this people get in a group.
>
> People are very self-centred one way or another. They go beyond their limits they allow themselves to be blindly pressured [by peers]. If I were one who was pressured I would try by all means to get my normal life back and may be consult a therapist. Young people should abstain.
>
> The youth of our country do not believe is themselves they think they are who they are because of their friends to the extent that they end up being pressurized into peer pressure. They end up having sex just because of their friends are doing it and they want to fit in. Believing yourself is the best way that the youth can help decrease their chances of contracting HIV and AIDS.
>
> Teenagers are easily pressured nowadays. Some friends are not good for you because instead of encouraging their friends to do good things they do it vice versa e.g. Sleeping around.

Participants indicated that peer pressure was coupled with an expectation that amounted to a set of social norms. That is, many adolescents became involved in sexual activity, alcohol, drug abuse, and partying, because “everybody does it”. Social expectation created strong pressures on adolescents as they desired to be a part of the youth community in which they functioned. The participants indicated that the worst thing for adolescents (and themselves) was to be left out of their social groups or to be seen as different from others or to lose relationships with their friends. As a result,

adolescents living in Gaborone often perceived that they had to involve themselves in the same activities as their friends in order to be seen to be normal and a part of their social groups. This often meant being as sexually active as their peers. The fact that adolescents often exaggerated reports of their sexual conquests did not lessen the impact that their claims had on other members of their social group.

> Your friends will be telling to engage in sex or you will be out of the group.
>
> Because of the influence of your peers you are forced to have sex. They will tell you that if you love someone you must have sex with them or you are considered silly.
>
> Girls feel that if they say no to the man [who is in love with them] the guy will go and get it somewhere else. The woman therefore feels to just give sex to the man [to keep the relationship].
>
> This is where by friends pressure you into having sex because it will be a sign of being cool and smart.
>
> They really want to be popular and do not want to be left out of the group. Young Batswana are basically people who get involved in sorts of things which leaves us with no choice.
>
> Sex had become a normal life style. If your friends had experience and they tell you that they had it you also feel like you have to do it.
>
> Like boys get into groups and his friends in the group may influence him into sexual activity and for him to feel he is part of the group he might end up getting involved and in the process contract HIV and AIDS. To be in that group he might have to get a girlfriend and then get into bed with that girl and get HIV and AIDS.

5.5.4.2.2 Media influence on behaviour

The participants also perceived that sections of the media have a strong influence in forming social expectations and shaping adolescent behaviour in Botswana. The majority of the participants mentioned that many adolescents living in Gaborone indulge in unprotected sex because of the implications flowing from film and television story-lines. The actors featured in these materials are considered as heroes by the adolescents who wish to emulate the activities portrayed in the movies. Participants mentioned that such media sources as movies, TV, the internet (accessed through their cell-phones) and magazines are sources of these influences.

> Young people can also be influenced by the media, e.g. magazines, television, etc. These usually make it seem as though sex is the way to success or something. They tend to believe that 'sex sells', which if course is not true. Young people are also exposed to other forms of media such as internet.
>
> Nowadays young people are at the risk of getting in contact with HIV and AIDS through following the mass media. What the youth of today see on the television and the internet even magazine can influence them to want to do what they see in the same things. Even the role models influence the youth. Bad role models do things that are bad like sex and the people who look up to them may think it's the right thing and do the same thing which may lead them to getting in contact with HIV and AIDS.
>
> Botswana is a developing country/state and most of its population comprises of the youth. The media is also a major factor leading to the youth contracting the virus. Since the youth tend to copy/follow activities from the media such as TV, face book and Internet.
>
> City girls may be more at risk because girls think they know it all. Some of them are influenced by the media and they try to impersonate the characters on TV.
>
> Through the influence of the media like the TV and videos. Through TV programs sex is promoted and young people are influenced to have sex. Most of the time young people are getting involved at the age of 12 years of age.

The media also advertises the use of alcohol. Film and television stories portray adolescent parties and under-age use of alcohol as a kind of "rite of passage". These media-depicted activities influence adolescent behaviour.

5.5.4.2.3 Socially transmitted misconceptions

The participants believed that while a majority of the adolescents living in Gaborone had a reasonable knowledge about HIV and AIDS, there were those who lacked detailed knowledge or held seriously misconceived beliefs in relation to the disease that held implications for the reframing process and that potentially put them or their sexual partners at risk of contracting the disease.

One such misconception identified by some participants as a myth, perpetuated within the townships and held by some of their peers suggested that having sexual intercourse while standing did not transmit HIV.

> There are untrue stories/things that people say are true but they are not that mislead young people to do such things. They say, for example [that] having sex standing does not transmit the virus so young people are going to do this and end up contracting the virus.
>
> Some young people are not even interested in sex education they think that they already know everything and as a result they end up doing what is wrong like some people say that one cannot get HIV and AIDS if he/she have sex standing.
>
> Our age mates can influence us to do things that may lead to contraction to HIV and AIDS. They can influence us to have sexual intercourse without protection. They can give us false information that having unprotected sexual intercourse standing up will not contract the disease.

Another misconception identified by the participants was that some of their peers believed that they could identify a person who was infected with the HIV by their physical appearance. This belief often determined their use or non-use of condoms.

> Sometimes a teenager start having sex they think that it can never happen to me it will happen to others but it will not happen to me. They have the mentality that, "I can see that this girl does not have HIV and AIDS and I can have sex with them".

Participants' statements also indicated that some of their peers believed that having sexual intercourse with a virgin cleansed an infected person of the HIV or healed the individual showing the symptoms of AIDS.

> Some people believe that when one has sex with a virgin he/she will be cured with HIV and AIDS.
>
> Some boys believe that if they sleep (have sex) with virgins or with a lot of people they will get healed of HIV and AIDS or feel better. These believes are common among older people and some of them do so as a prescription from a traditional healer
>
> Yes this is where people who are HIV positive approach virgins to cleanse themselves with HIV by having sex with them.
>
> There was a myths long time ago that old men who are HIV positive sleep with teenagers to cleans their reproductive system or to heal themselves for HIV and AIDS in a way of reducing the virus. This is just a myth.

Yet another misconception was that prepubescent children cannot contract HIV and AIDS.

> Because the girl has reached puberty she is at high risk. Those who have not reached puberty cannot contract HIV and AIDS.

One participant implied that a misconception about anti-retroviral drugs could see them being used by an uninfected person in the belief that use of the drug will prevent HIV infection.

> I think there are ARV's commonly known as Anti-viruses used to slow down the HIV cells to react actively in the body. So this can also help [protect] for young people who do not know about the [the ARV treatment] program.

5.6.4.2.4 Partner power: The effect of age, strength and cultural position

The traditional view of respect for significant others in the cultural setting have the potential to be a noteworthy factor in the decision-making process at the reframing stage. Participants identified that significant others were usually powerful older men, including 'uncles', as defined in the Setswana cultural sense. Participants indicated that in these situations, it was often difficult for the girls to say "no" to a request for sex or negotiate condom use in such situations.

> Elders can ask for sex from young people and they don't have to [can't] refuse because culture says that they should respect elders.

> Sugar daddy – there are some who are in relationships with their age mates and they are involved in sex activities. But the sugar daddy's one is a difficult one because for you, it is not an easy thing to say to someone the age of your father, we should do things differently, like using a condom. But with one's age mate it could be easier.

> Sometimes your uncle can sexually abuse you because you are [a] girl. Girls are sexually abused by adults/uncles at home. The uncle would be touching you on the private parts. Sometimes this happens often because of drug/alcohol abuse. When they are under the influence of drugs they don't think.

In other situations, it was not just coercion, but outright force that was mentioned in connection with sexual activities involving young women.

> Young people are also very vulnerable to "scavengers" (usually older men who take every opportunity to break the law). The young people especially improperly unformed young people. Improperly informed young people are young people who do not get enough information to make them avoid these scavengers who rape and influence spreading of HIV and AIDS unlike older people who are comfortably informed.

> So basically young people should be careful of certain stuff for example when they get to parties and go to clubs because at those areas you might get people like sugar

> daddy's and rapists that might give AIDS to you, so young people should not sleep with anyone.
>
> Lots of criminals (rapists) . . . there are lots of rapists in the country so young girls are at risk of contracting HIV and AIDS.
>
> Most youths belong to certain groups in the society which they are loyal to and most of the times they are forced to do things which are against their will just because they don't want to get expelled from such groups e.g. member of gang may be forced to attack and rape a stranger in a party.
>
> Some girls are at risk because of rape. Some girls are raped against their will by older men.

5.5.4.2.5 Poverty, the power of relative wealth and the desire for objects

Another external influence identified in the decision-making process was the social economic pressure. Participants categorized social economic pressures at two levels. The first level involves the social economic status of the family and the second involves rewards for sex for the young people themselves.

The socio-economic status (SES) of the young person's family was identified as an external influence operating in the decision-making process. Participants indicated that adolescents who came from poor families were more likely to be involved in behaviours that placed them at greater risk in comparison with those who came from higher SES families. Most participants indicated that girls were more at risk in this regard than boys.

> Girls are infected more because they are easily influenced to become prostitutes to make money.
>
> Money buys them perfumes and some soap to use for bathing or clothing to wear and other things that they desire. With such offers the girl cannot say no to sex because she would not know where else to get money. Boys may use a condom but they may not use it. If it is the influence of an older person the young person may not be able to say no. They may not use condoms for prevention.
>
> Young and unsuccessful [poor] Batswana women are the ones who are always at the risk of getting infected with the virus/diseases.

> Some poor people can't manage to get a job easily. Mostly women get into prostitution to earn money. And with this continuation they contact HIV and AIDS

The participants also indicated that there were adolescents from a range of family backgrounds that were involved in sex for the rewards. Participants indicated that because of the rewards for sex some adolescents permitted themselves to be enticed into unprotected sex. Reward for sex can be regarded as being different from that of prostitution in that the activity is less frequent. Reward for sex mostly involved interactions between adolescent girls and older men. These girls placed themselves at a high risk of contracting HIV and AIDS, because, most often these older men would have multiple sexual partners.

> Girls are commonly asked by older men since they are given money, the man then say I always give you money and in trade for money we must have sex. Sugar daddies ask girls for sex. They offer rides in the car to the girls who like fancy cars like a Benz and he gives her money and then in trade of that money he demands sex.

> Batswana young people are at risk of contracting HIV and AIDS because of the activities they indulge in. Young people from the ages of as early as 12 years are already sexually active. This may be due to the fact that they are getting involved with or dating older people, whether that older person is male or female. We see this more in the cases of girls. To a lot young girls, dating an older guy is okay and good because they never have to use public transport because they can be driven anywhere they want to go. Their phones always have airtime. They too are never without money.

> Batswana young people are at risk of contracting HIV and AIDS because nowadays since generations have change the 21st generation does not live like our parents and grandparents generations. Nowadays yow will find a 15 years girl in a relationship with a 40 years old man. The man will buy the girl things "fancy ones" that the parents probably cannot afford and in return he will want to have sex with her. This puts the young girls in danger because after the man is done with her he will go look for another one and this creates a long chain of people who lives are put in danger of one person may be infected, everyone else is going to be infected if they do not use protection.

> Some girls are having relations with older people because they are looking for money. In some situation the family is poor and these girls are looking for money to support the families. These girls would use the money for clothes and fancy phone. It is cool thing to have a fancy phone to show off. The girl will come with the cell phones to school and pressurize other girls to have relationship with older people so that they too must have cell phones

> Girls under the influence of beer they also get involved in sex because they are offer money and when they are offered money they cannot say no. Money buys them perfumes and some soap to use for bathing or clothing to wear and other things that

> they desire. With such offers the girl cannot say no to sex because she would not know where else to get money. Boys may use a condom but they may not use it. If it is the influence of an older person the young person may not be able to say no. They may not use condom for prevention.

5.5.4.2.6 Long-term relationships and sexual activity

Participants also stated that adolescents who were in peer-to-peer relationships for an extended time tended to have unprotected sex with their partner because they believed that they were less likely to contract HIV and AIDS.

> The relationship should be survived more than six months to have [unprotected] sex.

> If she does not want it [unprotected sex], if she does not like the idea she should say no. If she believes it was not worthy it. If she not 100% sure she should not do it. You must be sure about it 100% not 99% it must 100%. She has trust him [her long-term partner] completely to have [unprotected] sex with him.

> Tell her to wait. Does she like the guy a lot does she have trust. How long has they been in the relationship. If the relationship is long time then it [unprotected sex] is fine. How long is long at least one year. After the year then you know that the guy loves me.

> [In terms of unprotected sex] Young Batswana in my opinion tend to be too trusting of their sexual partners and in some scenarios assume that their partner won't be infected. In addition, there are cases in which one of the partners is too afraid of asking the other about their sexual history. This increases the risk.

5.5.4.3 Practices that mediate and promote sexual activity

5.5.4.3.1 Alcohol, drug use and attendance of parties

On the subject of drug use and alcohol consumption, many participants also identified that girls are more at risk of contracting HIV and AIDS because during parties, men or boys sometimes deliberately "spike" a girl's drink (place a drug in a glass used by a girl) or take advantage of girls under the influence of alcohol and rape them, most often without using a condom.

> Girls should learn to say no and enough is enough. Boys know how to take advantage of others and can persuade them into drugging them and then forcing them to sex.

> It also easy for girls to be raped than boys. When they go out some girls are drugged and they get raped under the influence of drugs.

> During weekends young girls go out at night of Friday nights and get drunk and have sex with sugar daddy's and sugar mummy's in that party. Such girls normally tell lies about their age and they drink and dance and they get raped. Some girls are drugged in parties, they get raped.
>
> Alcohol abuse through parties, for both guys and girls puts young people at risk of contracting HIV and AIDS. During the party guys trap the girls into sex. When she is drunk the guy will rape or take advantage of her.
>
> Boys and girls like to go for late night parties and this puts them at risk because they get involved in sex which may lead to contracting HIV and AIDS. At these parties boys from a gang they come into the party and put drugs in the food of the girls and in the process the girls are influenced into sex.
>
> Batswana young people are at risk of contracting HIV and AIDS because most of the young children out there are indulging themselves into alcohol abuse, having sexual intercourse at an early stage without protection to make it worse. For example, when a young girl drinks alcohol she starts becoming drunk and her body becomes weak. Her vision starts fading away and her memory does not work properly. She may not be aware of what is happening wherever she is and a boy starts raping her. She becomes unconscious. This is really a huge risk of an infection of HIV and AIDS.
>
> Another point is that when boys are on "heat" he will do anything to impress a girl even when it means stealing or bulling. He will invite her to parties and sessions. Even if he/she brings condoms they will be drunk and won't understand what they are doing.
>
> They are also at risk of contracting HIV and AIDS because they are practicing unsafe sex and there will be diseases such as sexually transmitted diseases such as gonorrhoea, syphilis, thrush etc. they also indulge in activities such as drinking alcohol which can be one of the factors of contracting HIV and AIDS because when they drink too much this can lead them to having unprotected sex.
>
> There are many people who have it and currently passing it on especially at parties people get extremely drunk and they do stupid things. They don't really know what they are doing.
>
> When they drink alcohol they abuse it and end up addicted to alcohol. Mostly these things are caused by peer pressure then end up in bed with an infected person then use unprotected sex this lead to diseases which cannot be cured. Eventually this young people are nor scared to do something that is illegal and this lead to consequences.
>
> They are at risk of contracting HIV and AIDS through reckless behaviour. In Botswana, alcohol consumption is rife among young people. They get drunk and then engage in unprotected sex, sometimes with strangers.

Participants suggested that some adolescents were often involved in unsupervised parties because that "was what the group did". These parties inevitably included consumption of alcohol and drug use. When adolescents are under the influence of alcohol and drugs, however, their judgment is impaired and they often end up

involved in unprotected sex, putting them at risk of contracting HIV and AIDS. As one participant said, "Alcohol drinking and drugs affect the young people's judgment and they end up having sex, putting young people at risk of contracting HIV and AIDS".

To these participants alcohol use was a significant reframing factor. However, girls can be forced into non-consensual sex (raped) in circumstances where alcohol or drugs are not involved. Participants mentioned that in most of such rape cases the perpetrator rarely uses a condom.

> Some girls can get infected not by choice through being raped by somebody having HIV/AIDS. If the guy has the virus he may not use condom during rape and then infect the girl. During rape situation the guy is a hurry to have sex and he may never use the condom. The girl therefore may not have person choice in that instance.

> If a girl is coming from school and loses her money an older man may offer to help with money and in return the older man will ask the girl to have sex with her but if she refuses the older men can force the girl to have sex through rape.

Participants highlighted a number of different types of parties in which adolescents living in Botswana are involved. One such party was commonly known by adolescents as a "Session". This type of night party happens without adult supervision at a swimming pool resort or at the home or one of the party organizers where there was a swimming pool. During these parties, drug consumption and frequently sex become major activities. Participants explained session parties as follows

> Sessions where there are few people to have a party and then engage in sexual activity. This provides an opportunity for young people who are sexually active to look for opportunity.

> Young people are also exposed to situations whereby it is easy for them to indulge in sexual activities. For example sessions or parties, where by there a little or no adult supervision.

> Another point is that when boys are on "heat" he will do anything to impress a girl even when it means stealing or bulling. He will invite her to parties and sessions. Even if he/she brings condoms they will be drunk and won't understand what they are doing.

Mzwane is another type of party. Mzwane is a night party that happens in a van or mini bus, commonly known as a "combi" in Botswana. In this type of party adolescents contribute money to buy alcohol or drugs and hire the combi that will be driven from one point to another during the course of the night. These parties involve invitees in order to ensure equal numbers of boys and girls. While the combi is being driven the occupants consume alcohol and drugs and often engage in sex (most often unprotected sex). Participants explained how a Mzwane party is organised:

> Mzwane is a practice where boys take their girlfriends and hire a combi to a desired destination. The combi driver is paid around P800. This money comes from the students who contribute P 150 each. They get this money from their parents. They would lie to their parents. They normally get the money through fake stories. They would tell their parents that they are visiting cousins. Mzwane also includes alcohol and drugs. Alcohol drinking and drugs affect the young peoples judgment and they end up having sex, putting young people at risk of contracting HIV/AIDS. Mostly these teenager are in relationships. In the process you get pressured and if you are not involved you get frustrated and end up getting involved.
>
> Young people have something like Mzwane and this put them at risk of contracting HIV/AIDS. Mzwane is where young people contribute money and hire a combi that takes them around at night to parties, they get drunk and also get involved in sex. Each person contribute P100 amounting to P1,400 and some money is used to buy beer.
>
> Mzwane and parties are situations that put them at risk of contracting HIV/AIDS. In these parties drugs are available so people do things under the influence of such drugs.

Another type of party activity mentioned by the participants is called "Spin a bottle". This is an activity that takes place mostly in a night party and requires players to form a circle about a bottle lying on its side on a smooth surface. The periphery of the circle is alternately composed of males and females. A leader is chosen to spin the bottle and determine the activities to be engaged in by the pair indicated by either end of the bottle. These activities include a range of behaviours such as: dancing naked, indulging in sex, having sex without a condom or any other activity that comes to mind at the time. Participants explained how this game is played as follows:

> Another situation is a game called spin the bottle. This is a sexual game whereby a bottle is spanned while all the participants form a circle around it. Whoever the bottle points at is ordered by the leader of the game to have sex with any person in the group. After the sex activity if the bottle points at him again he is told to have sex with another person in the group.
> A game called Spin a bottle places young people at risk of contracting HIV/AIDS

5.5.4.3.2 Viewing pornography

Pornographic materials received special mention. These materials are easily found in magazines, downloaded from the net or handed around on disks or transferred from phone to phone. Much of these pornographic materials depict unprotected sex.

> There are some pornographic videos that have been made that young people watch and end up trying to copy what was done in them not using protection.

> The internet has a lot of pornographic sites which might encourage young people to try out what they see on these sites.

> Some just want to experiment resulting in one contracting HIV and AIDS. They might try to imitate what happens in pornography films and end up sleeping with an infected person.

> What happens is that the guy will invite the girl to his home and may be they would start watching pornographic material and them because of the aroused feeling, the guy would say since we are at my home in my bedroom lets have sex. The girl will therefore not refuse because the guy would [be] at his house and he would tell the girl that I have done this [before] and that for you we are at my home we are in the bedroom. The girl will also agree because she would say I love you.

> Most young people watch pornography and then they try to do what they watch.

> They watch such pornographic material at home or at school. Most young people have pornographic material on their phones and they bring such material at school and watch them. At home they buy DVD and watch them with their friends.

5.5.5 Parental supervision and adolescent sexual behaviour

Before drawing the section dealing with factors influencing at-risk behaviours to a close, mention should be made of an influence that participants suggested to be largely missing. It is a factor that has already been mentioned and is something, that if present, could well impact the behavioural choices made by adolescents. This factor has to do with the importance of parental advice and adult supervision of adolescent

children. A number of participants made the point that many parents were not adequately fulfilling the parental role. In this sense, the vacuum that should be filled by parental supervision becomes, because of its absence, a reframing influence.

> Parents should take full responsibilities in the upbringing and guiding of their children because without parents the youth won't get information from nowhere. Children should be brought up in conducive place/environment without abuse or anything which may corrupt their minds.
>
> Young people are also exposed to situations whereby it is easy for them to indulge in sexual activities. For example sessions or parties, where by there a little or no adult supervision.
>
> Relationships have long since become a way or passage for sexual immorality. From the ages of 12 – 19 years old, "dating" has become a big factor of the contraction of HIV and AIDS of young Batswana. These relationships are mainly caused by peer pressure and lack of stronger guidance. Children have long since lost respect for rules, law, elder ad life itself.
>
> This is a really shocking but very true parenting are mostly to blame, because very little time is taken to get to know the child, this may lead to rejection between parents and children to children find some other things to fill the lives and end messing with wrongs groups.
>
> They do not have enough information about HIV and AIDS. This is because parents cannot talk to their children about HIV and AIDS and tend to believe that it is a teacher's responsibility, at the same time teachers leave it to the parents and this leave the students hanging without information
>
> The major problem is that there is not enough being done in my school. We don't get enough lessons on sex, STD's etc. I also think that is has to do with Batswana parents. They don't educate their children enough about HIV and Aids. I don't know if they are scared to talk to us about is or what, but that is also impacting in a negative way because "Charity does begin at home".
>
> Parents in our communities and societies see it a norm or taboo to speak to the children about AIDS. But they youth are the ones at great danger of HIV and AIDS o parents need to cooperate and they be open to topics involving AIDS.
>
> Parents are afraid to tell their children that they are HIV positive therefore young people can infect others without knowing that they are HIV positive.
>
> Some parents do not talk to their children about sex, contraception and HIV and AIDS, resulting in an individual not knowing about this virus, resulting in one having a loose life and contracting HIV and AIDS.

5.5.6 Pressures that lead to the non-use of condoms

It is clear that many of the participants were well-aware that the use of condoms provided protection against HIV. Further, they indicated that the potential protective

value of condoms was also widely known within the adolescent community of Gaborone. However, a range of pressures that surround these persons mitigate against their use. These pressures are summarised in Figure 5.3 and expanded below.

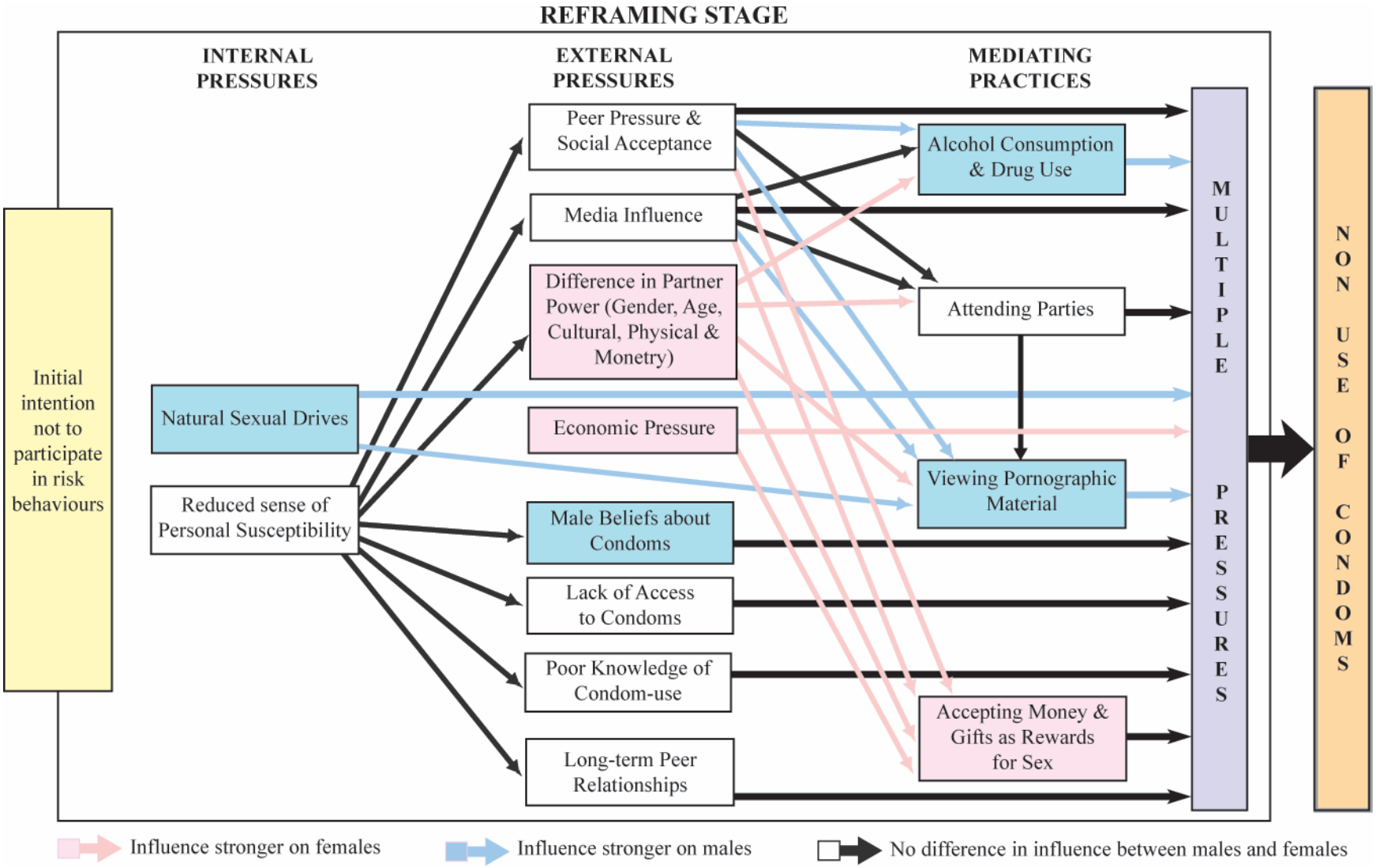


Figure 5.3. Pressures that cause the non-use of condoms

5.5.6.1 Social Norms, peer pressure, social acceptance and condom-use

Participants indicated that a mix of social norms, peer pressure and desires for social acceptance mitigated against condom use. The participants were of the opinion that this mix made it difficult for individuals to stand against the accepted opinions and behaviours of their peers.

For example, it appeared to be an accepted norm that the male rather than the female had the responsibility of carrying condoms and initiating their use. In fact, it appeared to be culturally unacceptable for girls to either carry condoms around with them or even offer them to a male for use during sex. Girls were considered either to be too shy to carry condoms or, ironically, to be morally loose if they carried them or offered them during a sexual encounter. So, while a girl may have an initial intention to use a condom, this gender-related pressure may reframe such an intention, the consequence of which is often sex without a condom.

> It is not easy for girls to provide a condom in a relationship because it's hard to do. Girls are shy than boys. Boys are not as shy like girls. Boys take advantage of the situation. It is easy for boys to have the condoms in their pockets. Boys are the ones who sleep around with many girls.
>
> Girls expect boys to walk around with a condom while it is an embarrassment for girls to move around with a condom.
>
> It is easy for guys to bring protection into a sexual activity because it's fine for them. For girls to bring condoms it's like you will be asking for it [sex]. Most of them it will be guys who keep the condoms. I believe guys should bring protection.
>
> It's easy for boys not girls, because girls do not want to be stereotyped and be like that, because guys carry protection. It is much easy for the guys to do it than girls.

In addition, participants indicated that some adolescents were careless risk-takers. Within this context, these careless risk-takers were more likely to be male.

> Carelessness may arise if people just choose and think it does not matter if they use a condom or not.

> Batswana young people indulge in undesirable activities such as practicing unprotected sex. This is where they have sex without protecting themselves and this could lead them to end up being at risk of contracting HIV and AIDS.

5.5.6.2 Male attitudes and beliefs in relation to condom-use

Participants reported a number of common beliefs and attitudes among males that meant that, in many circumstances, condoms were not or would not be used. Some believe that it is just not "cool" to have sex using a condom.

> Young people also do not want to use the condom, they think it not cool to use a condom. It's like eating a sweet with the wrapper on.

A number of these statements allude to a male belief that sexual pleasure is diminished by the use of condoms. Hence, girls can be pressurized by their male partners to indulge in unprotected sex.

> If the guy gives the girl money for sex he will say to the girl that I can't have a sweet with its wrapper on so they demand sex without condoms.

Many Setswana cultures, equate risk-taking with manhood. For many adolescent males living in Botswana indulging in unprotected sex was perceived as a symbol of manhood.

> Men [Batswana young men] are most of the time who deny [condom use] because sometimes women would suggest the use of a condom and a man would not want to use thinking that he will not be man enough in using the condom

> Young people are also very careless. As boys are concerned mainly if you have sex with a girl especially when you are a teenager, to be considered man enough you also do not have to use a condom.

> Most boys want to have sex quick and fast. Most of the boys want to do it quick and fast and they do not focus whether the condom is expired or what.

Some participants suggested that their fellow adolescents thought that condoms were not well designed for adolescents. They were either too tight or too loose to use and as a result these young people did not use them at all.

> Some young people think that the condom is too small for them.

> Young people don't use condoms because they say they get a bit loose and they fall off. The bigger condoms sometimes do not help because they stay in the inside of the girls vagina.

5.5.6.3 The effects of differences in wealth and partner-power on condom-use

Unequal partner-power means that the dominant partner determines whether or not condoms will be used. The inequality can arise from the offer of money or gifts or a disparity in social or cultural status or a difference in age. Under these circumstances some adolescents, particularly girls, find themselves in situations where they are unable to negotiate the use of condoms as for example, when girls become involved with older men who financially reward them for sex. Often these men demand sex without the use of condoms.

> It also becomes a problem when the family is poor because the girl may not have all her needs or wants so she decides to go out with older men (mostly white or rich men).

> But the sugar daddy's one is a difficult one because for you, it is not an easy thing to say to someone the age of your father, we should do things differently, like using a condom.

> Most girls are involved with older men and most older men are the ones who have a bigger say about the use of a condom.

> Some young people do not use condoms. Some do sex because they want money those who sell their bodies. They can have sex without condoms and HIV AIDS is spread that way.

> [Some] young people that come from poor families end up deciding to make money by prostitution to help support other family members. By so doing she will end up getting infected if she is not using protection or maybe getting involved in a relationship with an elder, and that person might be infected, in saying that he/she will give him money if they have sex [without a condom].

In some circumstances it is simply physical strength that prevails and girls are raped. There were many references to rape. The following are just a sample.

> 80% of girls are at risk. This is so because girls get raped. Boys are not raped like girls.

> Men are . . . the ones who are doing bad things - they rape people they have sex [by force]. Unprotected [forced] sex is the one which is bad.

> Some girls may be raped.

> 75% of girls are at risk because most girls are raped.

> Females are infected more because men are not raped, men are strong and that girls are weaker and are always attacked get raped more.
>
> Boys can also rape one girl by taking turns.
>
> Young people [girls] are also very vulnerable to "scavengers" . . . who rape.

5.5.6.4 Inability to access condoms

There was a strong perception that adolescents experienced difficulty in adopting a protective strategy against HIV and AIDS because of a social stigma associated with obtaining condoms. The participants indicated that adolescents often found it is difficult to buy condoms even though they were readily available in most shops in Gaborone because the community considered it to be improper for adolescents to buy them. As a result, adolescents experienced embarrassment when they attempted to do so.

> Most young people find it hard to buy condoms since it is considered embarrassing to buy them at a shop.
>
> Sex without using protection: This is so because it is not easy for a young person to walk in a store and buy a condom at the age of 16 and below.
>
> They do not have access to contraceptives because they are ashamed of getting into the shops to buy them.

5.5.6.5 Media, the influence of pornography and condom-use

Section 5.6.4.2.2 has already discussed the influence of the media on sexual activity. While it is true that the media can advertise the availability and use of condoms, pornographic material via DVD disks, clips downloaded from the net and images circulated on phones provide examples of unprotected intercourse. As one participant said, "Young people watch and end up trying to copy what was done [in the clip]" and as a result they wind up "not using protection".

5.5.6.6 Poor knowledge in relation to condom-use

While non-use of condoms has been identified by several participants as a risk factor for contracting HIV and AIDS among adolescents living in Botswana, there were diverse reasons for the non-use of condoms. According to the participants one group of reasons for significant non-use of condoms was that young adolescents did not know how to use them or that some adolescents thought that condoms were not always effective as a protection measure. In fact some adolescents may have condoms but not use them or use them incorrectly.

> Young people do not know how to use contraceptive. They are still young. They may know about condoms they do not know how to use condoms correctly. Mostly young people from rural background do not know how to use them correctly. Young people from rural areas are not taught about the virus.
>
> (In) the villages there is also not much of education on protection. Rural young people see condoms as just a plastic than is not for them. Using of the condom takes a while to be acceptable
>
> Boys do not want to use it and even if they use they may not used properly. Most boys want to have sex quick and fast. Most of the boys want to do it quick and fast and they do not focus whether the condom is expired or what. Sometimes they do not know how to use a condom because he want to do quick and fast. As long he get what he wants he might not use the condom and they get HIV and AIDS.
>
> Young Batswana these days see condoms as a waste of time and money and some of the young people don't know how to prevent this disease and how to use condoms. Young Batswana people at the village contract HIV and AIDS mainly because they don't know that condoms exist and they are not taught how to use condoms
>
> Young people who sell their bodies to tourists mostly in the tourists sector. In the urban villages there are the ones who are infected because they don't follow the procedures that are used when having sex.
>
> Some people avoid the steps and instruction done when having sex thinking that it will take a lot of time, so they become eager or curious then they have unprotected sex not thinking of the consequences/ or for the future but only on having fun.
>
> Some boys do not know how to use the condom.

A further example of either poor knowledge or poor judgement relates to the expiry date on condoms. It seems that adolescent users do not pay attention to this detail and hence they can use merchandise that is beyond its expiry-date and therefore at risk of failure.

> One may also buy a condom and has used it without looking at the expiry date.

> Most of the boys want to do it [have sex] quick and fast and they do not focus whether the condom is expired or what.

5.5.6.7 Use of alcohol, drugs, attendance of parties and condom-use

The influence of alcohol consumption and drug use was also identified as the reason for non-use of condoms. Participants mentioned that when adolescents are under the influence of alcohol or drugs, their judgment may be impaired and render them unable to properly use the condom. Some of the comments in this regard were as follows.

> They abuse drugs and alcohol thus resulting their minds not to process clearly which can end them up having unprotected sex with anyone which put them at risk of contracting STI's and HIV and AIDS.

> Drinking and smoking: When you are drunk you don't think straight therefore may be involved in unprotected sex even with a person you don't really know. If you have a girlfriend. If you are drunk and through unprotected sex you get infected.

> The youth tend to have a negative attitude when it comes to relationships and sex. They also engage in activities such as alcohol and drug abuse and this activities end up manipulating their thoughts and as a result some of them end up having unprotected sex and contracting the virus.

Participants linked partying to alcohol consumption and reckless sexual adventures. Although condoms are not directly mentioned, the implication is that these parties will often involve unprotected sexual activity.

> Alcohol abuse through parties, for both guys and girls puts young people at risk of contracting HIV and AIDS. During the party guys trap the girls into sex. When she is drunk the guy will rape or take advantage of her.

> Boys and girls like to go for late night parties and this puts them at risk because they get involved in sex which may lead to contracting HIV and AIDS. At these parties boys from a gang they come into the party and put drugs in the food of the girls and in the process the girls are influenced into sex.

> He will invite her to parties and sessions. Even if he/she brings condoms they will be drunk and won't understand what they are doing.

5.5.7 Pressures that lead to sex with multiple partners

Participants also clearly stated that in their view the risk of contracting HIV and AIDS among adolescents living in Botswana was greatly exacerbated by the practice of having

multiple sexual partnerships. A number of the participants' statements are to be found below.

> This [behaviour] increase the risk of young people contracting HIV and AIDS, if the person may have multiple partners before. Carelessness may arise of people just choose and think it does not matter if they use a condom or not.
>
> Young people are at risk of contracting HIV and AIDS because whenever places they go it has to be a new partner that will sleep with and this result in immature disease that will spread the whole country because they have multiple partners.
>
> Young people have a much freer attitude towards sex and tend to want to experiment with different sexual partners.
>
> Young people have not settled down yet, therefore their partners that they might have might not be their only one.
>
> Some young Batswana have this tendency of having more than one partner even though if they know that "one partner, one life". They will just spread this virus of HIV and AIDS, it is increasing, later all people will suffer from the diseases.
>
> Yes I think that Batswana Young people are at the risk of contracting HIV and AIDS because: Some young people cannot abstain from sexual activities because they are curious and cannot refrain themselves from behaviour and end up having sexual intercourse at a young age with many sexual partners and those sexual partners which put their lives at the risk of contracting HIV and AIDS.

Participants indicated that the general pattern of pressures and mediating practices that led their fellow adolescents to initiate sexual activities were very similar to those that caused them to continue on to involvement with multiple partners (see Figure 5:4). Participants' statements indicated that, although adolescents of both genders experienced innate sexual drives and both genders sublimated the perceptions of personal risk in similar manners, some circumstances and some pressures on girls differed from those on boys. This will become apparent in the sections that follow.

5.5.7.1 Peer pressure, partying, alcohol consumption and multiple partners

Participants indicated that the desire to "fit in" to "be cool" leads young people to attend parties, many of which are unsupervised. Here the consumption of alcohol and drugs leads to unsafe situations. Both males and females can be "influenced by their . . . peers"

to experiment with sex. In the words of the participants, “They end up having sex because their friends are doing it.” Coercion and “bullying” may occur and young people, particularly girls, can be socially forced to “engage in sex or be out of the group.” Some engage “because they want to fit in.”

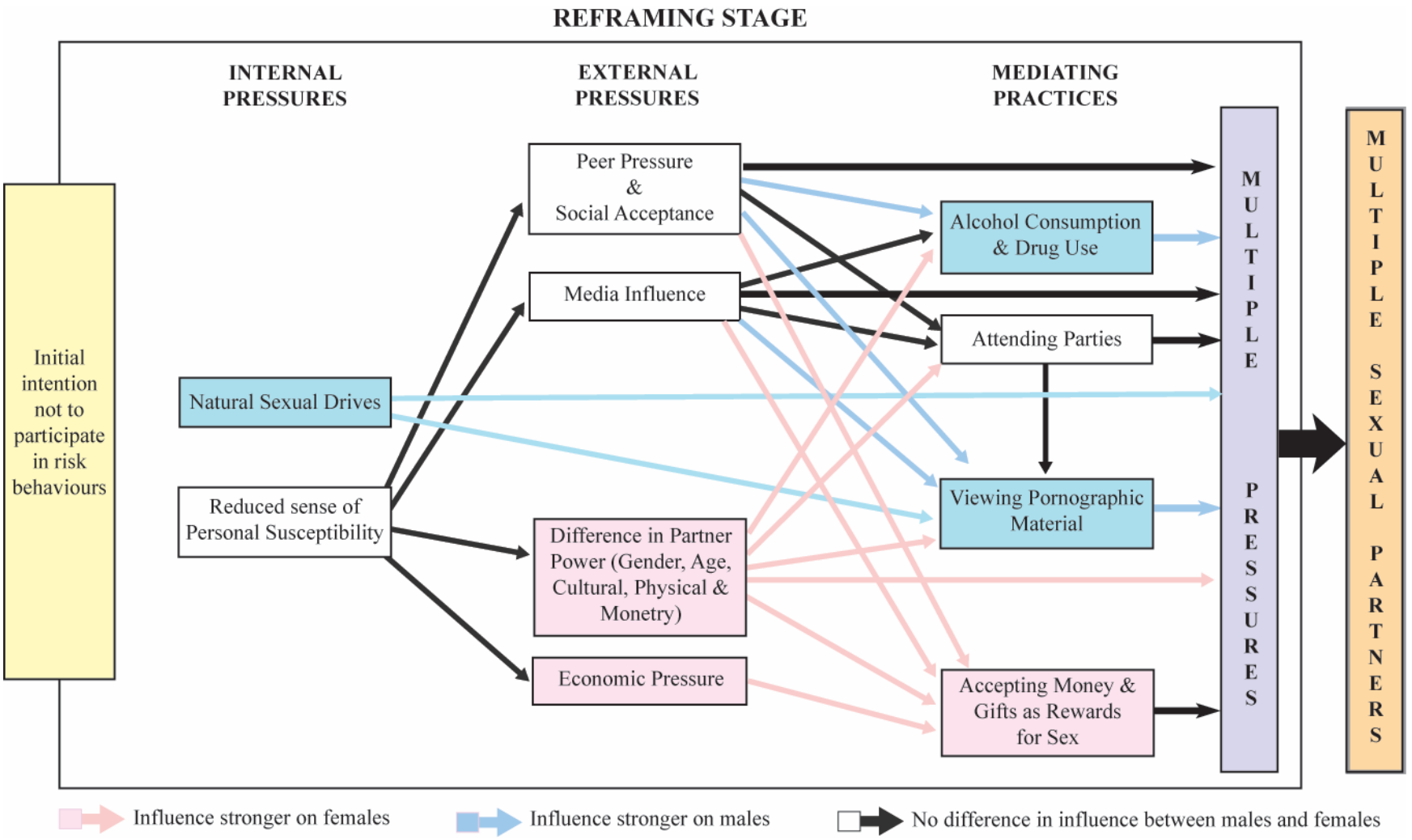


Figure 5.4. Factors influencing multiple sexual partners

Often these unsupervised parties have very few boundaries. The young attendees may play such sex games as spin the bottle. This game randomly selects partners who can be required to perform some sex-related act. Some parties, such as 'sessions' (pool parties) and Mzwane parties are arranged for the purpose of indulging in sex. At these parties attendees can "get drunk and then engage in unprotected sex, sometimes with strangers." Unscrupulous "guys" can ply girls with alcohol or drugs in order to "trap the girls into sex" or even "rape" them. Participants implied that incidents of forced sex were far from uncommon.

The point is that group pressure, coupled with alcohol consumption and partying, can lead Gaborone adolescents, over a period of time, to have either consensual or forced sex with a number of different partners or with partners who have themselves had multiple sexual partners.

5.5.7.2 Media, pornography and multiple partners

Participants indicated that the media – particularly pornographic videos or clips – have the potential to shape aspects of sexual behaviour among some Gaborone adolescents. As one of the participant said, "We watch pornographic videos . . . and end up trying to copy what was done." Another said "they try to imitate what happens in pornographic films." Yet another said that "young people have pornographic material on their phones" suggesting that social media may be a means of distributing clips and images. Group sex is portrayed on many pornographic sites and hence pornography has the potential to elicit risk behaviour involving multiple sexual partners.

5.5.7.3 Partner power: Direct and indirect multiple partners

Older men, who because of positions of cultural influence or wealth, can command or purchase sexual favours from vulnerable young women. Participants called these men "Scavengers" and "Sugar Daddies". The point is that these men are unlikely to target just one young woman. Men who commit rape, who demand, coerce or pay for sex or who believe the urban myth about the cleansing nature of sex with virgins, are likely to have had previous sexual partners before the present incident and therefore will indirectly involve the victim in a wider circle of sexual contact. Participants stated that these incidents often involved older men and young girls. Participants also implied that girls who accepted gifts or money for sex were likely, over time, to be involved with a number of different partners.

5.6 PARTICIPANTS' PERCEPTIONS ABOUT PREVENTATIVE STRATEGIES.

While the previous sections of the study described the participants' perceptions of the risks of contracting HIV and AIDS and their views of those factors that affect decision-making, this section of the study explores the fourth broad research question:

> *What are the participants' perceptions of strategies that would contribute to a reduction in the likelihood of contracting HIV and AIDS among adolescents living in Botswana?*

The prevention strategies suggested by participants in this study can be placed in four distinct categories. The role that they think the government should play; the role that parents should play; the role of the community; and the role that adolescents themselves need to play in preventing HIV and AIDS infection.

5.6.1 The role of government in preventative strategies

5.6.1.1 Give more age-appropriate information

Participants perceived that the government, particularly because of its authority, has a responsibility in promoting prevention strategies for HIV and AIDS infection. Some implied that the provision of information should be clear, age-sensitive, age-relevant and at the same time culturally appropriate.

> The government should keep on raising awareness. I think people are aware but they do not know what AIDS is. The government should also give more information to teenagers [using teenage language] about the disease. There must be campaign, coming together and then people discuss it. I think it's very important that teenagers must understand what is going on and I also think teenagers are more vulnerable to it, so the government should zero in on teenagers.
>
> Government should form a group of people and teach people [secondary school students] about the dangers of HIV and AIDS. For example they can go around village making a "Phuthego" so that the people [secondary school students] that do not have the knowledge of how to protect themselves against AIDS.
>
> Government can teach people [students] about the dangers of contracting with the virus and they have to know the precautions [when administering] first aid.
>
> Government should teach young people about ways of protecting themselves against HIV and AIDS.
>
> The media can teach people [students] about HIV and AIDS testing, where and how to get contraceptives such as condoms and how HIV infection occurs. Having knowledge will result in some people [students] not contracting HIV and AIDS.
>
> [The Government needs] to remind young people [students] to abstain permanently before marriage.
>
> The government should educate the people [students] about HIV and AIDS and abstaining from sex.
>
> The government should also make [AIDS information] functions more appealing and attractive [to secondary school student]; Functions that will actually encourage the youth to participate and educate themselves. They should also make these more frequent, not only when it is *Month of Youth Against AIDS*. This would help because the more you hear about something, the more it sticks to your head.
>
> Government should give schools some guidance teachers.
>
> In my own perspective I think that the government should introduce more educational programs about the disease HIV and AIDS, how it can affect young people. These programs should dwell more on how disease can be transmitted and what are the

> preventive methods of this disease. This may help young people out there on how to abstain from sexual activities.

The participants suggested that the government needs to use many methods to distribute information relating to HIV and AIDS prevention strategies that include education and a range of media such as television, radio and print. They also mentioned the use of discussion groups (Phuthego) run within communities. They suggested that such information should focus on "the dangers of" and "the vulnerability to" contracting HIV and AIDS. These phrases strongly suggest that the participants felt that there is a need to heighten the awareness of their peers' knowledge of the severity of HIV and AIDS and adolescent susceptibility to the virus. The participants implied that the government prevention and information programs were of little value in that they were presented in a manner that seldom attracts the attention of adolescents. Further, the few discussion groups that had taken place often excluded or limited adolescent involvement. The participants also expressed their feelings that the government should not only stress condom-use but should also promote abstinence among young adolescents as an HIV and AIDS preventative strategy, and faithfulness to partners after commitment to them.

5.6.1.2 Strengthen school-based education programs

Participants also recommended that the Government should support school-based educational programs as a strategy to prevent HIV and AIDS infection among adolescent living in Botswana:

> The government can help the young people by teaching them in schools; the kids can read the newspapers and watching TV's.

> The Botswana government can introduce methods of teaching about sex and HIV and AIDS, [so it can be] further be talked about in schools.

> [In schools] HIV and AIDS education is not given attention it needs. For example, there are some clubs [in schools] which try to teach us about HIV and AIDS but they fail because the teachers do not pay attention to them.
>
> The government should teach the dangers of HIV in schools. They must call meetings at school and teach them [students] how they can avoid HIV and AIDS and also tell them not get involved in relationships because they [students] have a life ahead of them.
>
> The other thing that the government should do is to help young people is to introduce peer educators in different schools so that they can educate youth and help them abstain from sex. These peer educators will be able to distribute a lot of information on HIV and AIDS

The participants saw a great need for more school time to be set aside within the formal school curriculum during which HIV and AIDS information can be conveyed and where students can be given opportunity to discuss a range of sexual matters. Participants also perceived that significant amounts of time in these programs should be used to "help them abstain from sex" or as another student stated, "Help young people out there on how to abstain from sexual activities". That is, it appears that the adolescents were also asking for more 'information' on how to enhance their life skills, particularly their negotiation skills.

5.6.1.3 Government to establish more community based clubs and organizations

Another preventative strategy suggested by the participants was that government should strengthen the established community-based clubs and organizations that encourage adolescents to meet, discuss and learn about HIV and AIDS in general and about life skills in particular.

> They can create clubs that encourage young people to abstain and refrain from any sexual activities. This will benefit the community in a very positive way.
>
> The state should start a lot of organizations/groups to help young people deal with the problem in their day to day lives, because their problems are the very root of their bad behaviour.

> The government should create PACT [The Peer Approach Counselling for Teens] clubs and clubs that advocate abstinence from sex for teenagers. Such abstinence clubs should discourage young people from going to night clubs, drug abuse and teenage pregnancies.

Participants said that such clubs, particularly those that include peer-to-peer education, can enhance their ability to "abstain and refrain from any sexual activities", and can "help adolescents deal with the problem[s] (dealing with at-risk behaviours) in their day-to-day lives". Once again it seems the adolescents were calling for systems that enable them to enhance their life skills relating to problem-solving and decision-making, and which support self-efficacy development as an HIV and AIDS infection preventative strategy.

5.6.1.4 Make counselling and clinics more adolescent user-friendly

With regard to current clinics, counselling and HIV testing centres, the participants acknowledged and appreciated the services that government bodies already provided. The participants in this study, however, recommended that the current counselling services and clinics needed to be more user-friendly for adolescents.

> The Botswana Government should try and not be too harsh so that young people are not afraid to seek the help they need if they need it. As at the moment there are cases where young people are scared of other people's reactions that they end up not seeking the guidance they need. So the government should advertise more and have 'gather-around' for the young people to come and meet and see that there is guidance if they need it. Also in a way they need to make them (young people) realize that if infected it's not the end of the world, they can get help medically.

> Organizations like Tebelopele should be set up in all regions/areas in Botswana for HIV testing and educate people on preventive methods of HIV and AIDS and also provide treatment medication like ARV.

> The government should involve a lot of youths in a lot of counselling. It must talk about sex and HIV and AIDS in details.

The participants advocated an increase in numbers of counselling and testing centres, where they can access information about HIV prevention and discover their HIV

status. They perceived that adolescents would be better able to access these centres if the staff were non-judgmental about adolescent life styles.

5.6.1.5 Government should make condoms more accessible to young people

Participants acknowledged that condom-use can be an effective way to prevent HIV and AIDS infection. However, the participants indicated that although there are several outlets for condoms, the government should make them more accessible to adolescents. Some participants suggested that condoms should be distributed free in places that adolescents frequent.

> They (government) should also teach [about abstinence] but make it easy for the youth to get "condom"/protection because not everyone is going to listen and not take part in sexual immorality.
>
> The Batswana youth should use condoms and the government could supply and not deny them because they will rebel and do it even more.
>
> Provision of condoms in public toilets should be one of the methods, provision of ARV's (medication) which may help people live for a longer time whilst their body is not fully invaded with the virus.
>
> Government should acknowledge that students are having sex and they should provide condoms in schools because students are having sex in schools. Young people at the age of 14, 15 and 16 are having sex. So the government should provide condoms.
>
> Government should give people condoms in their homes.

Contrary to the recommendation of making condoms readily accessible to adolescents as an HIV and AIDS preventive strategy, a few participants had the opposite idea – that if government restricted condom access to adolescents, this may assist in reducing sexual activity amongst these adolescents.

> No condoms should be sold or given to young people who are under age. If more children are given condoms, then there is a higher risk of our young people being infected with the disease. If this happens then it will be a tragic loss to our economy. Children should teach themselves to abstain from sexual activities.
>
> More money should not be spent on drugs and alcohol abuse and even the sponsor of condoms should be limited and be sponsored with the gospel of Jesus Christ.

> The condoms give false protection to young people so condoms must not be given to children.

However, the suggestion that a restriction in access would reduce sexual activity has not been well thought through. For it appears that adolescents already experience difficulty in accessing condoms and those that are obtained are not necessarily used. Yet sexual activity is still widespread. Therefore, restricting access is not a viable solution.

There was also a suggestion that even the Anti-Retroviral drugs (ARVs) that the government makes available to those who are HIV infected be withheld so that people who are not yet infected can see the full extent of the consequences of HIV and AIDS infection. In this case the full realisation of the consequences of AIDS and the resulting fear of HIV infection becomes an aspect of prevention.

> There are no consequences for those who contract HIV and AIDS. People who receive ARV's live a normal life and they do not care in the process. If I was in power I will make knowing HIV status compulsory and then those who are contracting AIDS then they will have no supplies of ARV's or provide them with condoms because giving people condoms encourage them to contract HIV and AIDS.

Restricting access to condoms and withholding ARV treatment was very much a minority view among the participants.

The vast majority of participants advocated increased availability and use of condoms as the most effective HIV and AIDS infection preventative strategy. Many recommended that the government should provide condoms free of charge and place dispensers in quiet, even private locations so as to minimize the social stigma associated with the purchase of condoms.

5.6.1.6 Government to set more rules and regulations

Participants also recommended that the government should set or strengthen rules that regulate usage of alcohol and drugs among adolescents as an HIV and AIDS preventative strategy. According to the participants, alcohol-use among adolescents increases sexual activity. The participants perceived that when adolescents were under the influence of alcohol they were more likely to be involved in sex and often without protection. They perceived that if alcohol outlets were more vigorously policed and the accessibility of illicit drugs was limited among adolescents, there could be a reduction of alcohol and drug usage and thus reduced sexual activity and as a consequence reduced HIV and AIDS infection among adolescents.

> The government should enforce stronger, powerful laws to help reduce youth taking alcohol and drugs because it also has an impact on the virus. Condoms should also be put everywhere, in schools, public toilets and so on.
>
> Alcohol should be very hard to access for ages 14-17 years because nowadays alcohol has become the normal thing in high school in Botswana. The same should go for smoking and abuse of drugs.
>
> Government to set rules for bars and restaurants to stop selling alcohol to teens (years 13- 17 especially).

Along with an increase in the regulation and policing of alcohol and illicit drug usage, the participants also recommended that the government should increase the age of sexual consent as a preventative strategy against HIV and AIDS infection among adolescents. As one participant said, the age for consensual sex should be "twenty". It was further suggested that those people who have sex with children need to be punished.

> The government should set laws about having sex at an early stage. The laws would include children are not allowed to have sex under the age of twenty (20).
>
> The other law that I think the government should set is "No sex before marriage".
>
> Government should send the older people who ask sexual favours from girls to prison. Young people should report these people to the police and they must be put in prison.

5.6.1.7 Summary of participants' suggestions to government

In conclusion the participants in this study were generally convinced that HIV and AIDS preventative strategies for adolescents should be to a large extent government initiated and enforced. According to the participants, the government HIV and AIDS preventative strategies should include the requirement that schools set aside more time for formal HIV and AIDS education in classes, facilitate the running of community clubs, and provide more counselling and testing clinics. There was also a widespread view among the participants that alcohol and drugs fuel risk behaviours among adolescents and hence the government should restrict the sale of these commodities. They perceived that restricting access to alcohol and drug would lessen the temptation for adolescents to always include alcohol and drugs in their social activities. The final action these adolescents suggested the government should adopt as an HIV and AIDS preventive measure was to provide 12-18 year-old adolescents with condoms in an accessible and discreet manner. There were some who felt that the strong condom campaigns were masking the abstain message.

Implied in the participants' responses was the suggestion that the government should include in their suite of HIV and AIDS prevention strategies various programs aimed at developing life skills self-efficacy. Though they did not use the term, they implied that greater self-efficacy and an expanded set of life skills would enable adolescents to better resist those pressures they face day-to-day that lead to participation in risk behaviours.

5.6.2 The role of parents

Participants pointed out that parents had an important role in facilitating HIV and AIDS preventive strategies by assisting and guiding adolescents in making choices to refrain from sexual risk behaviours. This role included giving advice on handling relationships with the opposite sex, teaching and developing values, being appropriate examples and role-models, providing advice on alcohol-use and supervision of parties.

5.6.2.1 Parents to give guidance on relationships and values

The participants in this study felt that one of the effective HIV and AIDS preventative strategies was more parental guidance in handling relationships with the opposite sex and reinforcing those moral and ethical value associated with these relationships. The participants perceived that their parents found it difficult to communicate with their children in general and more particularly to communicate on matters about opposite sex relationships. According to the participants this reluctance was exacerbated in that open and free discussions about sexual matters by parents with their children, is just not part of most Setswana cultures.

> [Discussion about opposite sex relationships] It starts at home, parents must teach their children moral values. Parents must take their time and effort to teach their children
>
> Parents must find the best way to communicate [about relationships with the opposite sex] to their children. Fathers must talk to their sons and mothers talk to their daughters.
>
> Parents must have open relationships with their teen/young children. The inevitable fact is that the youth (from 13 years & up) are going to be in [opposite sex] relationships. If they are discouraged the youth won't feel like they can approach their parent about sexual issues. This generally leads to misinformation and unempowered youth. If the youth are not informed/empowered they will keep making reckless decisions!!!

> [Opposite sex] relationships have long since become a way or passage for sexual immorality. From the ages of 12 – 19 years old, "dating" has become a big factor of the contraction of HIV and AIDS of young Batswana. These relationships [and associated risk behaviours] are mainly caused by peer pressure and lack of stronger guidance [including parents]. Children have long since lost respect for rules, law, elders and life itself.
>
> Another contributing factor is the culture of Botswana. I feel that in Botswana relationships are looked down upon and therefore if a teenager is in a [opposite sex] relationship they would hide it from their family. This prevents parents from warning their children about the possible dangers of sexual relations and means that no guidance can be provided. Therefore there is a lack of awareness which contribute to this risk.
>
> Parents should take full responsibilities in the upbringing and guiding [moral values] of their children because without parents the youth won't get information from nowhere.

These participants suggested that the reduction of HIV and AIDS infection must begin with open discussions between parents and their children about appropriate behaviours toward and relationships with the opposite sex that are related to age, culture and morality.

5.6.2.2 Parents to model appropriate behaviour

Participants also made statements about the need for parents to be exemplary role models for their children. These participants indicated that having a good role model in one's life has the potential to assist adolescents to refrain from behaviours that place them at the risk of contracting HIV and AIDS.As one participant expressed it:

> It also depends how the children socialize. If the child has bad morals through copying from what their parents are doing. If the children socialize morally and are taught good things at a young age that he not supposed to [use] drug[s] and have sex at a young age or before marriage then they will be confident enough to express themselves. If the parents drink [alcohol] the children also do like their parents and be at higher risk of contracting HIV and AIDS. Some people come from poor families and their parents do not teach them good morals then they would do likewise. If the child knows that at home I have been taught well by parents then he will choose doing the right things. He will choose good friends and those good friends will not pressure him to do bad things. If there are no morals taught [and modelled] at home then the child will also have HIV and AIDS but if he was taught well then the chances of contracting HIV and AIDS are less.

The participants implied that parents need to take the initiative and empower their children with the will and the skills to be able to handle situations where sex is on offer. They can do this through open discussions and through the demonstration of ethical and moral practices in their own lives.

5.6.2.3 Parental guidance and supervision

Participants expressed the need for parental presence and supervision, especially when adolescents are having parties. They felt that adolescents were often left to do as they pleased, go where they wanted and come home at any time.

> Young people are also exposed to situations whereby it is easy for them to indulge in sexual activities. For example sessions or parties, whereby there is a little or no adult supervision.
>
> Girls are involved in risky behaviour because parents are giving their children too much freedom to do as they please.
>
> Parents must put in place a curfew where by children are expected to be at home at that time.

While many participants stated that the government should provide opportunities for adolescents to develop life skills and self-efficacy, and should regulate access to alcohol and enforce drug prohibition as HIV and AIDS preventative strategies, a number recognized the role parents should play in providing their children with guidance and supervision. These participants believed that those parents who regulated the home environment also reduced their children's risk of contracting HIV and AIDS.

5.6.3 The role of significant others

Besides parental guidance, participants also recognized the role that potentially could be played by teachers, elders and significant others in the community. These senior persons could guide adolescents by providing values education, being role models, engaging in open and frank discussions on sexual matters, and providing management and supervision of adolescents' activities.

> Teachers and parents should help government by giving their children guidance and guide their children

> Parents and elders should also cooperate with the youth and try and understand that times have changed and moved on. For example even if they are many condom machines, young people will be afraid to take some as in case they get seen by elders or parents. So parents and elders need not be too strict about sex issues.

> Teachers should discuss about sexual relations, alcohol and drugs openly with students.

With regard to the broader society, the participants noted that there could well be a reduction in HIV and AIDS infection if the number of inappropriate role models within their communities was reduced.

> Yes, the youth of Botswana are at risk of contracting HIV and AIDS because of the bad role models in our communities. The elders is of our community (men) do not show that they are our elders, they have a tendency of asking for sex from young people even if they see students from school they can ask to involve with them in sexual relationships, they do know that this is illegal but they just do it, this could increase the risk of young people contracting AIDS.

5.6.4 Responsibilities of adolescents

Besides receiving assistance from government, parents and significant others; participants noted that adolescents themselves have a greater role to play in implementing many of the accepted prevention strategies of HIV and AIDS infection. They perceived that adolescents need to take some responsibility for their own actions.

5.6.4.1 Abstinence

While most participants did not deny that most adolescents living in Botswana are involved in sexual activities, they still identified abstinence from sex before marriage as the most effective way of avoiding HIV infection.

> Batswana young people should avoid the spread of HIV and AIDS in this country by abstaining. When they start abstaining less numbers of young of people will be infected or less affected by the degrading situation. They should wait until they are mature enough to handle the consequences of having sex. They should wait until they know that they can handle themselves like adults. In a religious point of view some may wait until after they are married. If all of us would do this it would highly decrease the numbers of people getting infected.

> Abstaining from sex or delaying sex is probably the safest method of prevention, as you are not exposed to these diseases.

> [Accept traditional] culture which also encourages young people to abstain from sex before marriage

> Abstain from sex and sexual intercourse until you get married. And you should stay away from bad things like having sex when you are still young.

The participants perceived that marriage provides a safer environment for sexual expression and that HIV and AIDS infection would be reduced if adolescents waited until marriage to be involved in sexual activity. They also mentioned that those who were married need to remain faithful to each other and confident about each other's HIV status.

> They should also continue to abstain from sex until they are old enough and married. Even after marriage, they should make sure that before they engage in sexual activity, they know their partners status.

> So basically the two best ways I can give as advice to the Batswana young people is to wait and abstain and thereafter getting married remain faithful to you wife and husband. The lovemaking will be safe and special and HIV Free.

5.6.4.2 Use condoms

The participants stated that adolescents who were sexually active need to take responsibility and commit to the use of condoms to reduce their own and their

partner's risk of HIV and AIDS infection.

> Young people should also be encouraged and allowed to use condoms and allowed. If there is that allowance they should make clever choice and use the condom instead of indulging in [unprotected] sexual activities with their partners.
>
> Young people should practice safe sex. When they indulge in safe sex, it means that they should be careful and use a condom to protect them from HIV and AIDS. Condomizing is advisable as it is protecting them from HIV and AIDS, even though it is not 100% proven.
>
> Some people are embarrassed to go into a local market and buy contraception from local stores. And ask for instructions on how to use then but not doing this may increase chances and so… the youth should not be shy to use contraception as these will help decrease the chances of infection
>
> They should use condoms during sex because if you don't use condoms you will get sexual transmitted disease and you should avoid HIV and AIDS.
>
> Girls could use female condoms although they are not easy to access. Such condoms are distributed in clinics and boys cannot access them.
>
> Most people do not control themselves so they should just carry condoms where ever they go.

According to the participants, if there is to be a reduction in HIV and AIDS infection then condom-use among adolescents needs to take place, even in situations where there is pressure to do otherwise. As one participant said, "Young people should avoid peer pressure. Our age mates can influence us to do things that may lead to contraction to HIV and AIDS. They can influence us to have sexual intercourse without protection".

5.6.4.3 Attendance at church and the practice of religion

A minority of participants suggested that belonging to a church or practising religion provided a prevention strategy. These participants argued that the social connections provided by the practice of religion and the attendance of churches can help to reduce the pressure to be involved in risk behaviours.

> Fornication a DO NOT in the Bible (Part/1 of the commandment) The Bible and religion generally i.e. Christianity are another way the young people can be able to hinder themselves from getting infected. The laws and rules in this religion are a guideline to an HIV Free you! Sex is an act that is considered sacred and performed by only those that have been bound together in holy matrimony. These two people are then to remain faithful to each other, so obviously there is no risk there of getting infected.
>
> Young people can follow the rules of Christians by abstaining until they get married.
>
> Christianity and Religion helps to reduce the spread of HIV and AIDS since it advocates sex only within marriage.

Although Botswana is considered a Christian nation and while it is most likely that the majority of the participants were in some way connected to a Christian church community, the number of participants who alluded to accessing support from their Christian community as a strategy of reducing participation in risk behaviours was minimal. This may reflect the adolescents' perception that the church and Christian faith is not always relevant to this aspect of their lives.

5.7 PHASE TWO ORIENTATION

The following chapter will describe phase two of this study (the quantitative elements). Phase two is directed toward the same four research questions as phase one. However, it will employ a survey instrument with some 600 respondents. Phase two seeks to employ quantitative measures in examining the impact of a range of demographic measures on the respondents' perceptions and understandings pertaining to the findings in chapter five. It will also employ inferential statistical methods to examine any relationships that may lie within and between these perceptions and understandings.

Phase one of the study suggests that the questionnaire include a demographic section and elements that seek information related to the ten components listed below.

1. The respondents' view of personal risk and their perception of the extent of personal risk among other young people of various demographic origins.
2. Respondents' perceptions of those personal behaviours that place adolescents at risk of contracting HIV and AIDS and their estimation of the extent of at-risk behaviours among their peers.
3. The extent and acceptance of common myths and misconceptions (as identified in this chapter) among the respondents' peers.
4. The respondents' knowledge of the various sources of information pertaining to HIV and AIDS and their perceptions of the adequacy of this information.
5. The respondents' perceptions of the social consequences of contracting HIV and AIDS.
6. Respondents' knowledge of selected traditional cultural practices and values and their estimation of the potential impact of these practices on the behaviours of other adolescents.
7. The respondents' estimation of the pressures placed on adolescent females living in Botswana with respect to participation in risk behaviours.
8. The respondents' attitudes to condom use and their rating of adolescent access to condoms.
9. The respondents' estimation of peer pressure they feel in relation to participation in certain risk behaviours and their ratings of the nature and extent of this peer pressure in relation to these risk behaviours?
10. The respondents' perceptions about the extent to which alcohol and drugs are consumed and their estimation of the influence that this consumption has on adolescent behaviours.

Chapter Six will describe the questionnaire and present the results of its analyses.

Chapter Seven will provide a summary and synthesis of both phase one and two results and discuss their implications.

CHAPTER 6

RESULTS: QUANTITATIVE COMPONENT

6.0 INTRODUCTION

This research study employed an exploratory two-phase mixed method design where the nature of the Phase Two quantitative component was based on the outcomes determined by the analysis of the Phase One (qualitative) data. This second phase used a survey instrument, specifically constructed to further test and explore the adolescent respondents' understandings and beliefs that arose in Phase One analysis. In particular, the survey instrument was aimed at addressing the ten conceptual areas that were detailed at the end of chapter five. Further, the second phase also aimed to explore the influences of the participants' gender, age, maturity level, nationality, exposure to traditional cultural practices, and family socio-economic status and family educational level, on their understandings of the nature of adolescent risk of acquiring the HIV.

6.1 DATA COLLECTION

6.1.1 Introduction to the survey instrument

The Beanland team (Beanland et al., 1999) state that quantitative approaches to research utilise the results of the analyses of numerical data to document frequencies and explore relationships between events, observations and behaviours. Phase Two of this study used a quantitative method in the form of statistical analyses of data arising from the use of a self-administered questionnaire. A total of 593 junior and senior secondary school students in both government and private schools provided usable information. While all efforts were made to have an equal ratio of boys and girls

complete the self-administered questionnaire, the actual composition of the participants was determined by those students within in the participating schools who completed and returned signed consent forms from their parents.

6.1.2 The survey instrument

For the quantitative phase of this study, the construction of the survey questions was determined by the researcher's perceptions of the Phase One (the qualitative phase) participants' responses to the questions asked in written, interview and focus group sessions. The intention in constructing the questionnaire was to maintain the focus on the four general research questions.

The validity of a survey questionnaire is determined by the extent to which the questions truly measure what they were intended to measure. Two procedures were employed to ensure that the language of the survey instrument was appropriate and that participants would form a consistent understanding of the questions. Firstly, a group of survey assistants analysed the words and terms used. The survey was then piloted using a sample of junior and secondary students who were asked to comment on their understanding of its wording. As a result certain terms and words were modified.

An instrument is said to be reliable if it displays both repeatability and internal consistency. In this study, the administration of the research instrument was systematic and followed a set of written protocols. The intentions of some questions

were repeated within the survey instrument to check internal reliability and reliability coefficients were calculated for their respective scales.

The survey instrument consisting of 64 questions was divided into two sections. Part A asked 13 questions (Questions 1-13) relating to the participants' demographic details. These questions explored the possible influence that the participants' gender, age, maturity level, nationality, exposure to traditional cultural practices, family socio-economic status and family educational level might have on their (the participants') perceptions of adolescent levels of risk of contracting HIV and AIDS and upon their (the participants') perceptions of approaches aimed at reducing infection among adolescents living in Botswana.

Part B of the questionnaire consisted of a range of 51 attitudinal items (Questions 14-64). These were all framed as either positive or negative statements relating to HIV and AIDS in the Batswana context and all were set against a four-point Likert scale ranging from 'strongly agree' to 'strongly disagree'. Each item sought to address one of the elements of the *ten conceptual areas* identified in chapter five as needing further exploration. These 51 items were employed in order to quantify aspects of the adolescent decision-making processes in terms of participating or not participating in HIV and AIDS risk behaviours.

Within the survey instrument, these 51 items were not presented as conceptual clusters, rather they were scrambled in an effort to ensure that the participants considered each item as a separate entity rather than as a member of a group of items. The following presents the ten conceptual clusters as outlined at the end of chapter

five and the corresponding items from Section B of the survey instrument. The survey instrument is to be found in Appendix 11.

6.1.2.1 Conceptual Cluster One: Risk Level

Items 14, 20, 25, 43, 46, 48, 56 and 61 explored the questions: How did the adolescents living in Gaborone view the level of risk of contracting HIV? How widespread were these views? Were there differences in perceptions of risk level for differing subgroups within the participants' community? Were there differences in the participants' views depending upon their demographic origins?

6.1.2.2 Conceptual Cluster Two: Risk behaviour

Item 64 was added to the survey instrument to further explore the validity and extent of the perception that it was the adolescents' own behaviour that places them at risk of contracting HIV and AIDS.

6.1.2.3 Conceptual Cluster Three: Misconception cluster

Items 18, 27, 29 and 35 were added to the survey instrument to determine how widespread were the so-called 'common misconceptions' as identified in chapter five. Further, these items were also to determine whether these misconceptions were held by the population as a whole or by some identifiable subgroup.

6.1.2.4 Conceptual Cluster Four: Adequacy of sources of HIV and AIDS information

Items 32, 34, 39, 40, 57 and 63 were added to the survey instrument to explore the adolescents' perceptions of the adequacy of the various sources of HIV and AIDS information.

6.1.2.5 Conceptual Cluster Five: Perception of the broader social consequences of contracting HIV and AIDS

Items 15, 42 and 49 were added to the survey instrument to examine the nature of adolescent perceptions about the broader social consequences of contracting HIV and AIDS.

6.1.2.6 Conceptual Cluster Six: Influence of selected cultural practice and values

Items 26, 33, 36 and 50 were added to the survey instrument to explore any possible relationship between selected traditional cultural practices and values and adolescent behaviours.

6.1.2.7 Conceptual Cluster Seven: Additional pressures for adolescent females

Items 23, 30, 41, 45, 47, and 60 were added to the survey instrument to examine the unique pressures placed on adolescent females living in Gaborone with respect to participation in risk behaviours.

6.1.2.8 Conceptual Cluster Eight: Attitude to condom use as a protection strategies

Items 21, 24 and 28 were added to the survey instrument to explore the extent of adolescents' attitudes to condom use.

6.1.2.9 Conceptual Cluster Nine: Social and peer pressures

Items 31, 37, 38, 52 and 55 were added to the survey instrument to examine the nature and extent of the peer pressures felt by the adolescents to participate in risk behaviours.

6.1.2.10 Conceptual Cluster Ten: Alcohol and drug use

Items 16, 17, and 51 were added to the survey instrument to examine the extent of the adolescents' perceptions about the consumption of alcohol and drugs and the influence that this consumption may have on their behaviours.

6.2 OVERVIEW OF THE QUANTITATIVE ANALYSIS

The responses from the questionnaires were coded into the statistical software package SPSS 18.0 (SPSS Inc., 2009). Descriptive statistics calculated each question in Section A and each item in Section B. Independent groups t, chi square tests and one-way, between groups Analysis of Variance (ANOVAs) with post-hoc comparisons were run to locate any area of significant difference (set at the 0.05 level) between the respective adolescents' community demographic subgroups. These included: gender, age, type of care taker, nationality, exposure to traditional cultural

practices, length of stay in Gaborone, school category, family socio-economic status and family education.

Confirmatory factor analysis was used to determine the cohesion of the contributing items to their respective scales. All potential items for scales were set against the same Likert scale weightings. Scale scores were the mean values for the Likert weightings of the component scale items. The reliabilities of the scales were calculated using Cronbach's Alpha. Linear regression analysis was used to establish relationships between a range of factors (independent variables) that may or may not impinge upon the respondents' perceptions of adolescent risk levels. Ultimate membership of the regression equations was determined by the 95% level of confidence.

6.3 RESPONDENTS OF THE SURVEY

A total of 923 students from three private secondary schools and three government secondary schools in the city of Gaborone, Botswana were given survey participation consent forms and a total of 615 students returned the consent forms and participated in the survey. Of these 615 participants, 593 completed usable surveys. This resulted in a 64% return rate.

Tables 6.1, 6.2 and 6.3 provide an overview of the 593 respondents whose data is analysed in this chapter. It can be immediately noticed that there is some missing data and hence the descriptions below are shown in percentages.

Table 6.1 Respondents by nationality, age and gender

	Age in Years												
	13 and under		14		15		16		17		18 and over		
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Total
Motswana	16	32	45	62	32	68	26	52	24	40	28	41	470
Non-Motswana	7	8	10	10	17	12	13	14	4	8	7	3	109
Total	23	40	55	72	49	80	39	66	28	48	35	44	579
Grand Total	63		127		129		105		76		79		579

Table 6.2 Respondents by maturity (junior students attend a form 1-3 school; senior students attend a form 4-5 school), age and gender

	Age in Years												
	13 and under		14		15		16		17		18 and over		
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Total
Junior Students	22	40	48	57	33	51	26	37	4	7	0	2	327
Senior Students	1	0	8	15	17	27	13	27	25	39	35	41	248
Total	23	40	56	72	50	78	39	64	29	46	35	43	575
Grand Total	63		128		128		103		75		78		575

Table 6.3 Respondents by private or Government school, form and gender

	Form 1		Form 2		Form 3		Form 4		Form 5		
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
Private School	12	18	16	12	22	24	34	40	25	32	235
Government School	35	41	15	24	33	75	0	0	40	77	340
Total	47	59	31	36	55	99	34	40	65	109	
Grand Total	106		67		154		74		174		575

6.3.1 Gender distribution

The sample consisted of 60 % females and 40% males.

6.3.2 Age distribution

The age distribution of the sample was as follows: 13 years and under 11%, 14 years old 22%, 15 years old 22%, 16 years old 18%, 17 years old 14%, 18 years and over 14%.

6.3.3 Maturity level distribution

The secondary school students had ages ranging from 12 to 19 years. These students were placed in the low maturity group or the high maturity group depending on where they were either attending junior secondary school (Form 1-3) or attending senior secondary school (Form 4 and 5). Of these secondary school students 57% were in the low maturity category and 43% in the high maturity category.

6.3.4 Caretaker distribution

The sample consisted of the following caretaker distributions:

Staying with both father and mother	62%
Staying with single parent (mother only)	19%
Staying with single parent (father only)	3%
Staying with relatives or relatives	12%
Other	3%

6.3.5 Nationality distribution

The survey instrument invited respondents to indicate their nationality. The participating students were categorised into Batswana and non-Batswana students. The sample had 81% Batswana students and 19% non-Batswana students.

6.3.6 Exposure to traditional cultural practices distribution

The respondents were asked to indicate how often they visited their home village. The study assumed that visiting the village provided the students closer exposure to Setswana traditional cultural practices, values and beliefs that may have a positive or negative influence on perceptions about contracting HIV and AIDS and preventing infection. The sample had the following distribution.

Visited the village once a year	33%
Twice a year	14%
More than twice a year	45%
Never visited	9%

6.3.7 Length of stay in Gaborone distribution

The respondents were also asked to indicate the number of years they have lived in Gaborone city and the responses show the following distribution.

Lived in Gaborone since birth	42%
Lived less than 5 years	22%
Lived 6-10 Years	14%
Lived more than 10 Years	18%
Do not live in Gaborone	4%

6.3.8 School category distribution

The sample population for this study came from three randomly selected private secondary schools and three randomly selected government secondary schools. The findings show the following school category distribution:

Students attending private school	42%
Students attending Government schools	58%

6.3.9 Family Socio-economic status distribution

The survey used the participants' fathers' occupation as a proxy measure for the socio-economic status (SES) of the family. The respondents were required to indicate their fathers' occupation in three subcategories as follows:

> Unemployed and stays at home, Labourer, Cleaner, Watchman, Driver (Low SES)
> Carpenter, Builder, Motor mechanic, Computer programmer, Nurse, teacher, Owner of a small company or business (Middle SES)
> Middle manager, Lecturer, Doctor, Owner of a big company (High SES).

The findings show the following family socio-economic status distribution of the sample:

Low occupation SES	14%
Middle occupation SES	48%
High occupation SES	38%

The smaller proportion of students from low SES homes may well indicate that students from low SES homes are not progressing into secondary school at the same rate as those from middle and upper SES homes.

6.3.10 Family educational level distribution

On the basis of his own experience, the researcher assumes that in most African societies the mother exerts greater influence in the home than the father. The study therefore assumes the level of the mother's education to be more influential in the student's perception than the father's education. So, although the study invited the participants to indicate the educational level of both their father and mother emphasis will be placed on the mother's education. The survey has six levels of mother's education. These were grouped into two categories: up to secondary school and post-

secondary school categories. The findings show the following mother's educational level distribution.

Mothers education up to secondary school level	21%
Mothers education post-secondary school	42%
Missing data or Mothers education not known to the participant	37%

6.3.11 Family size distribution

The study also asked the participants to indicate the number of family members living with the participants, seeking to explore if the size of family in the home has some influence on participants' perceptions and views. The participants had the following family size distribution:

Living alone at home	0%
Family of fewer than 5 people	57%
Family of five people	22%
Family of six people	10%
Family of seven or more people	11%

6.4 QUANTITATIVE RESULTS THE CONCEPTUAL CLUSTERS

This section individually examines the questions in each conceptual cluster. It provides the mean and standard deviation of the responses and tested for differences in response patterns for different demographic characteristics. Results from these analyses were then used to address the questions raised in each cluster from the phase one analysis.

6.4.1 Conceptual cluster one: Risk level

From the phase one data analysis, the study participants indicated that the level of risk of contracting HIV and AIDS for adolescents living in Gaborone was high. To gain a greater understanding of this perception, questions 14, 20, 25, 43, 46, 48, 56 and 61

were included in the survey. These questions were set against a four point Likert scale running from 'Strongly Disagree' (Likert weighting of 1) to 'Strongly Agree' (Likert weighting of 4).

> Question 14 Most young people of my age are at risk of contracting HIV and AIDS.
> Question 43 Most of my friends feel that they could contract HIV and AIDS.
> Question 46 Teenagers living in the villages are at higher risk of contracting HIV and AIDS than those living in the city.
> Question 48 Students enrolled in private school are at less risk of contracting HIV and AIDS than those going to government schools.
> Question 20 Boys are more at risk of contracting HIV and AIDS than are girls.
> Question 56 Girls are more at risk of contracting HIV and AIDS than boys.
> Question 25 Boys are more likely than girls to have multiple sexual partners.
> Question 61 More Girls have multiple sexual partners than boys.

Question14 ("Most young people of my age are at risk of contracting HIV and AIDS") is a key variable in that it will become the dependent variable for the regression analysis to follow. For this reason it will receive more detailed attention here. Firstly, 84.5% of the participants either agreed or strongly agreed with the statement and only 15.5% of the participants disagreed or strongly disagreed (See Figure 6.1 below).

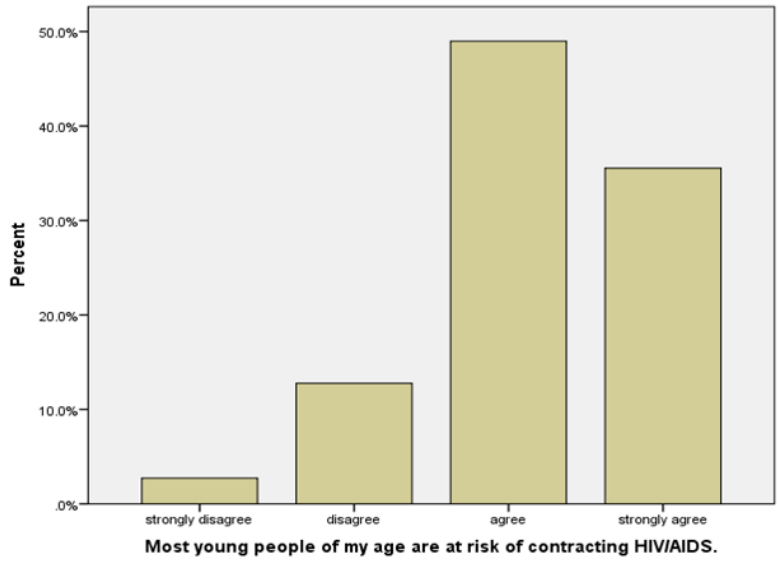


Figure 6.1 Distribution of responses to Question 14: 'Most young people of my age are at risk of contracting HIV and AIDS'

When analysed across gender, maturity level and school category; the female respondents (Male M=3.02; Female M= 3.24) [t(580) = -3.871, p<0.001], the senior (Senior M=3.39; Junior M=3.01) [t(574) = -6.114, p<0.001] and the government school students (Government M=3.24; Private M=3.01) [t(586) = -2.520, p<0.05], reported significantly higher percentages of agreement with the idea that most young people in Gaborone were at risk of contracting HIV and AIDS. Cross-tabulations provided a more detailed perspective on the male-female comparison of responses and upon the junior-senior comparison of responses (see Figures 6.2 and 6.3). Again the differences are significant at the 0.05 level (χ^2 = 15.50; p<0.001 and χ^2 = 36.87; p<0.001 respectively).

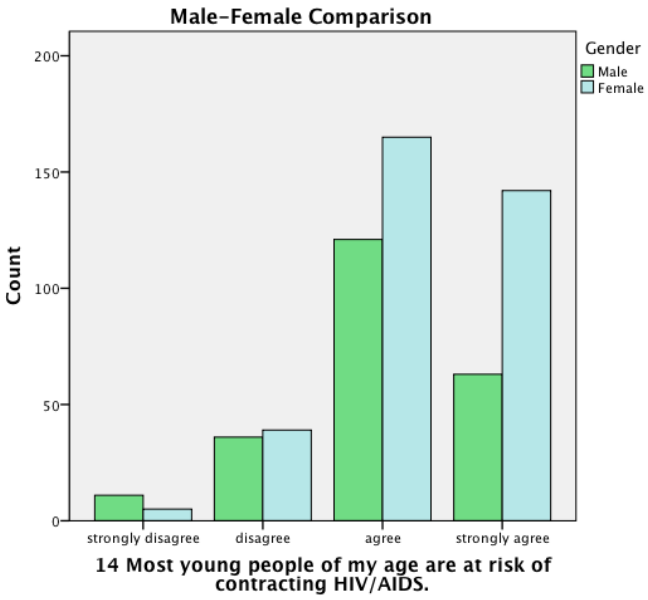


Figure 6.2 The respective male and female responses to Question 14

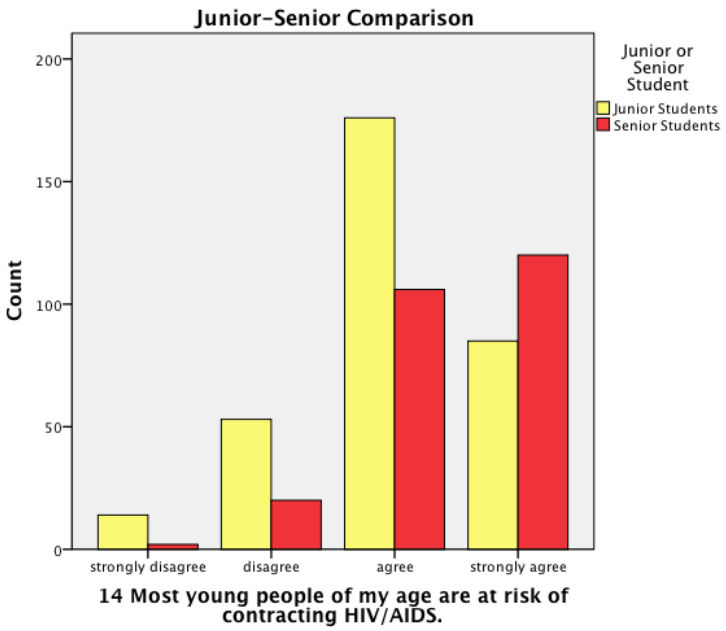


Figure 6.3 The respective junior and senior responses to Question 14

These results strongly supported the phase one conclusion that the majority of adolescents living in Gaborone perceived that their peers were at real risk of contracting HIV and AIDS. The reason for female and senior students reporting a higher percentage of agreement with the idea that most adolescents living in Gaborone were at risk of contracting HIV and AIDS, could possibly be due to a better ability to evaluate risk. Maturity could well play a part in this evaluation of risk. Older and government students could simply be more exposed to the impact of HIV and AIDS.

The qualitative data also suggested that the participants in Phase One of the study were more willing to label generic others as having a high risk of contracting HIV and AIDS, but too often excluded themselves from the high risk category. This was expressed in terms of the males perceiving the females at a greater risk than themselves, the private secondary school students seeing the government secondary

school students at greater risk than themselves and the city adolescents seeing the rural adolescents more at risk than themselves. To explore the respondents' perceptions of the personal risk of their close friends (and by inference their own risk) the generic question relating to all the young people was tightened to the survey question "Most of my friends feel that they could contract HIV and AIDS". In response to this question, only 23.4% of the participants either agreed or strongly agreed that my friends (and by implication themselves) could contract HIV and AIDS and 76.6% of the participants disagreed or strongly disagreed (See Figure 6.4 below). This view was held by all the different demographic subgroups. On the surface these responses appear to contradict the responses to question 14 ('Most young people of my age are at risk of contracting HIV and AIDS'). However, these results simply could be an extension of the tendency to see the nebulous 'others' as being at greater risk than the self or the friends of the self.

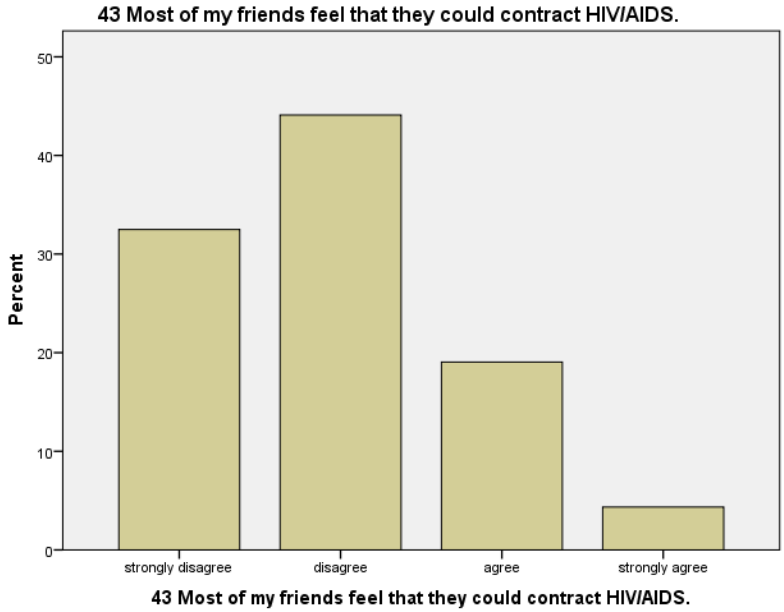


Figure 6.4 Distribution of responses to Question 43, "Most of my friends feel that they could contract HIV and AIDS".

The distribution of the responses to the level of perceived risk of contracting HIV and AIDS, comparing village versus city students and private versus government school students (Questions 46 & Question 48) are shown in Figure 6.5a and Figure 6.5b.

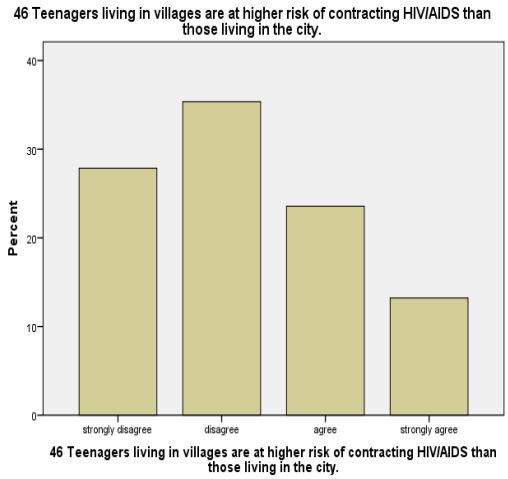


Figure 6.5a: Distribution of the response to Question 46: 'Teenagers living in villages are at higher risk of contracting HIV/AIDS than those living in the city'.

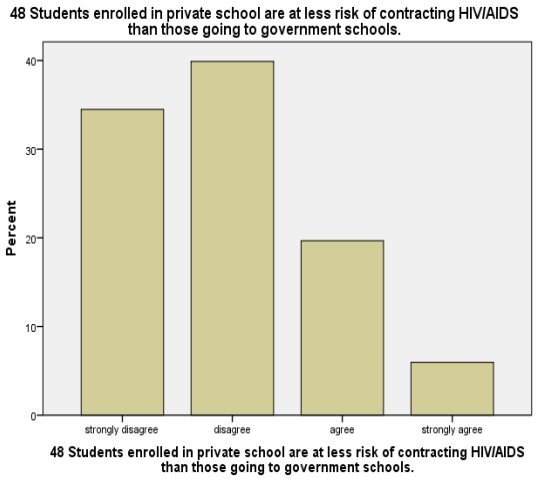


Figure 6.5b Distribution of responses to Question 48: 'Students enrolled in private schools are at less risk of contracting HIV/AIDS than those going to government schools'.

With regard to Question 46 ('Teenagers living in the villages are at higher risk of contracting HIV and AIDS than those living in the city') 63.3% either disagreed or strongly disagreed and 36.7% either strongly agreed or agreed with the view that teenagers living in the village were more likely than the city teenagers of contracting HIV and AIDS. When analysing across maturity level, nationality and school categories, the junior students (Juniors M=2.03; Seniors M=2.46) [$t(549) = -5.182$, $p<0.001$] Batswana students (Batswana M=2.16; Non-Batswana M=2.54) [$t(550) = -3.473$, $p=0.001$] and the government school students (Private M=2.53; Government M=2.01) [$t(558) = 6.259$, $p<0.001$] reported significantly higher percentages of disagreement with the statement that teenagers living in villages were at higher risk of contracting HIV and AIDS than those living in cities. Senior students enrolled in

private schools did not support the suggestion that adolescents living in the villages were at a higher risk of contracting HIV and AIDS, but neither did they strongly reject this view.

A total 74.4% either disagreed or strongly disagreed with this statement that students enrolled in private secondary schools were at less risk than government secondary students of contracting HIV and AIDS (Question 48). Analysis across gender, nationality, school categories, and socio-economic status of participants' families, revealed that female students (Male M=2.17; Females M=1.84) [$t(546) = 4.363$, $p<0.001$] Batswana students (Batswana M=1.88; Non-Batswana M=2.41) [$t(544) = -5.413$, $p=0.001$], government school students (Private M=2.25; Government M=1.78) [$t(552) = 6.226$, $p<0.001$] and those students from low and middle socio-economic status (Low SES M=1.99; Middle SES M=1.92; High SES M=2.15), [$F(2,459) = 3.626$, $p=0.027$] reported higher percentages of disagreement with the statement.

Furthermore, the qualitative data suggested that the male participants perceived that the female participants were more at risk of infection than themselves and in contrast the females perceived that the males were more at risk than themselves. A series of four questions were included in the survey to further explore these perceptions. The first two questions directly asked the respondents the male versus female risk level question. These questions were: Question 20, "Boys are more at risk of contracting HIV and AIDS than girls"; and Question 56, "Girls are more at risk of contracting HIV and AIDS than boys". The second set of two questions were Question 25, "Boys are more likely than girls to have multiple sexual partners"; and Question 61, "More girls have multiple sexual partners than boys" asked about the girl verses boy

involvement in multiple sexual partners and by inference an exploration of gender differences in risk level.

The distribution of responses for the two direct gender risk questions (questions 20 & 56) are shown in Figure 6.6.

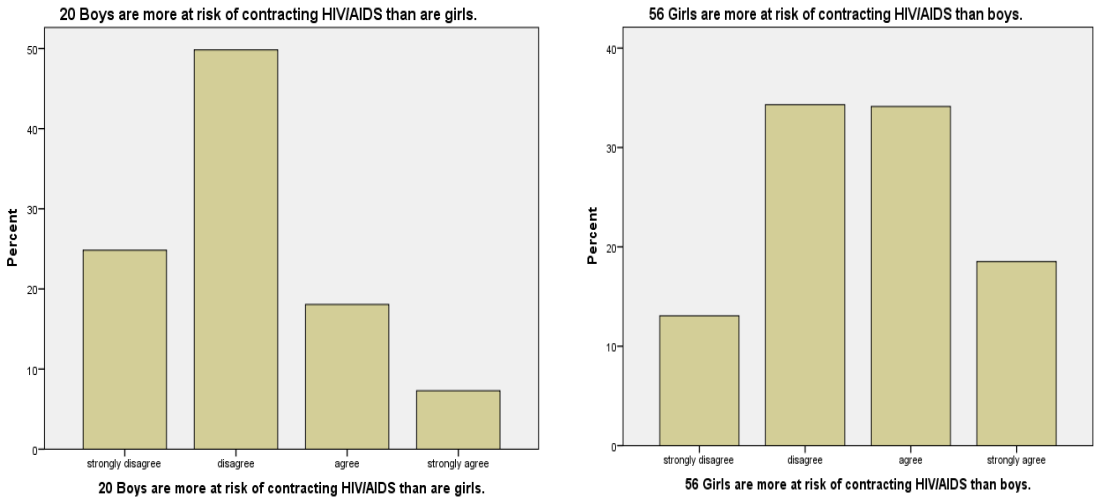


Figure 6.6 Distribution of responses to Question 20 'Boys are more at risk of contracting HIV and AIDS than are girls' and Question 56, 'Girls are more at risk of contracting HIV and AIDS than boys'.

Question 20, led with the statement, "Boys are more at risk . . .". Analysis indicated that 25.4% of the participants perceived that the males were more at risk of contracting HIV and AIDS than the females. When the question was reversed and the question led with "Girls are more at risk . . ." (Question 56) 47.4% of the participants perceived that the males were more at risk of contracting HIV and AIDS than the females. The dissonance between the two percentages (25.4% and 47.4% for males) suggests that the question of relative risk is perceived differently when framed in either male or female terms. The qualitative data analysis suggested that when the adolescents think about risk for adolescent females they could well think in terms of two separate situations that place females at risk: sexual relations with their peers and sexual relations with older men. As noted in the qualitative data, one of the

respondents commenting on the sexual activity of adolescents observed: “Nowadays you will find a 15 year old girl in a relationship with a 40 year old man”. In terms of thinking about risk for the boys the data suggests that adolescents think mostly about sexual relationships with peer. If this is so, then the contention of dual risk for girls could explain this anomaly.

When Question 20 (‘Boys are more at risk of contracting HIV and AIDS than are girls’) was analysed across gender, it showed that the males perceived that even a greater percentage (76.3%) of the girls were more likely to be at risk than the boys. Responses to both questions (Question 20 & 56) indicate that the majority of adolescents living in Gaborone perceived that the female adolescents were more at risk of contracting HIV and AIDS than were male adolescents.

In an attempt to test the reliability of the survey two similar questions were included. The first was, Question 44 (‘Girls are more likely than boys to have sexual partners’) and the second, Question 61 (‘More girls have multiple sexual partners than boys’). The distributions of the responses to these questions are shown in Figure 6.7.

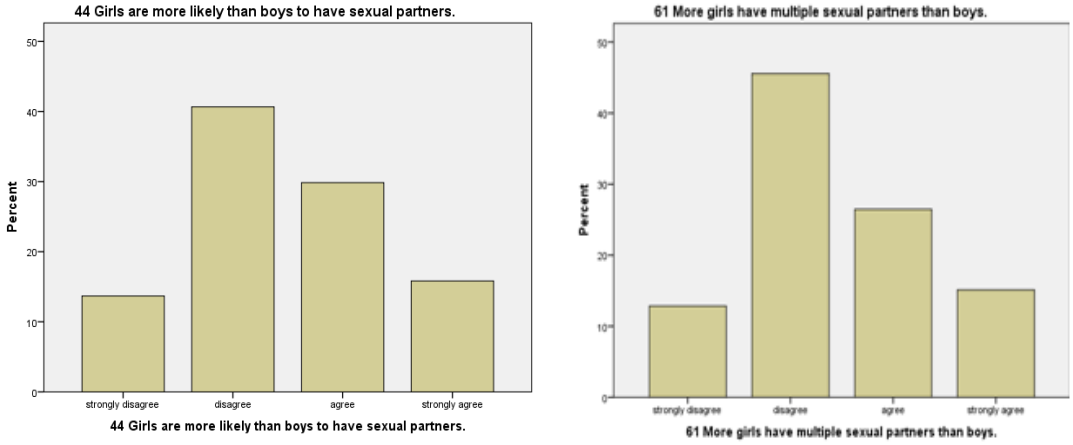


Figure 6.7 Distribution of responses to Question 44:‘Girls are more likely than boys to have sexual partners’ and Question 61 :‘More girls have multiple sexual partners than boys’.

Responses to both questions were very similar, in that a small majority of participants

in both questions either strongly disagreed or disagreed with the statements (58.4% for question 44; 54.3% for question 61). The demographic difference analysis across gender and school category for both questions reported similar results with the male and government students registering significantly higher percentage disagreement to the two questions. These strikingly similar results support the reliability of this section of the questionnaire.

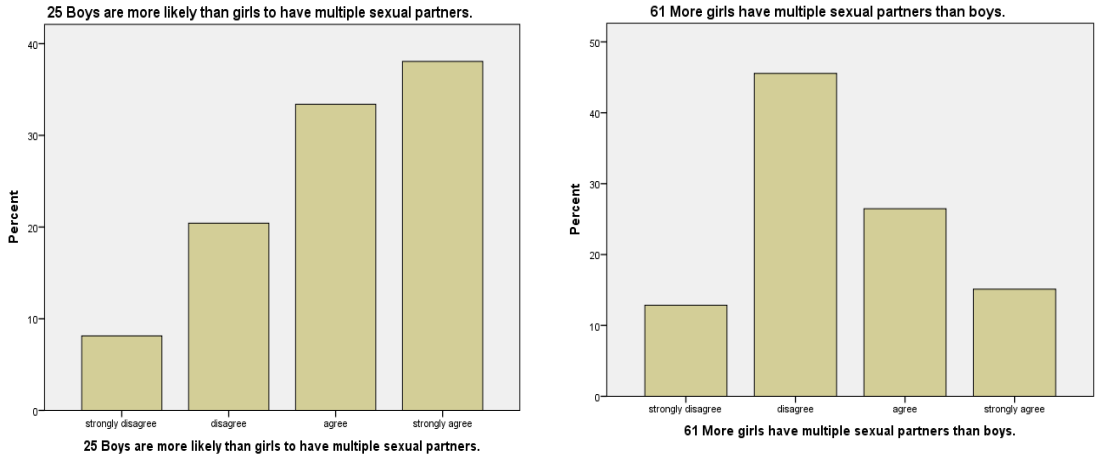


Figure 6.8 Distribution of responses to Question 25 'Boys are more likely than girls to have multiple sexual partners' and Question 61 'More girls have multiple sexual partners than boys'.

Results to the two questions relating to multiple sexual partners for boys and girls (Q25 'Boys are more likely than girls to have multiple sexual partners' and Q61 'More girls have multiple sexual partners than boys') are to found in Figure 6.8. Responses to both questions indicate that adolescents living in Gaborone generally perceived that the boys were more likely to have multiple sexual partners than the girls (71.5% for Q25 and 53.9% for Q61).

Analysis across gender revealed that females reported an even higher percentage of agreement (73.3%) with the statement that boys are more likely to have multiple partners than girls (Male M=2.92; Females M=3.08) [$t(570) = -2.063$, $p<0.040$]. On

the other hand 46.1% of females perceived that girls are more likely to have multiple sexual partners than the boys (Question 61 - 'More girls have multiple sexual partners than boys').

It is apparent from this data that the adolescents did not always equate the number of sexual partners with the level of risk. For example, boys were generally perceived to have the greatest number of sexual partners but also perceived to have the lower risk of contracting HIV and AIDS infection (Question 14).

6.4.1.1 Enquiry conclusion

In terms of the adolescents' view of the level of risk of contracting HIV and AIDS for adolescents living in Gaborone, these findings indicate that this level is perceived to be very high and this view was widespread among the respondents to the questionnaire. This conclusion supports the conclusion from Phase One of the study (the qualitative analysis). The quantitative data suggest that maturity levels play a part in the perception of risk. The data also suggest that females are more acutely aware of the level of risk than are their male counterparts. That is, mature adolescents and females are more likely to perceive that their peers are at higher levels of risk of contracting HIV. Furthermore the findings of Phase One of the study suggest that the participants perceive that male's exposure to HIV and AIDS is mainly through multiple sexual partners while female's exposure to HIV risk is due to relationships with older men.

Quantitative data analysis suggested that the participants perceived that the rural students were no more at risk of contracting HIV and AIDS than those living in the

cities and students attending government secondary schools were no more at risk than those attending private secondary schools. This result places a strong qualification upon the Phase One findings. On further exploration of qualitative data there is evidence to suggest that when the participants were discussing the risk of subgroups, it was often in the context of the knowledge differences perceived to be held by these various subgroups. There appeared to be a general perception that the relative lack of knowledge (facts about HIV and AIDS) by the village school students and the government school students would lead to greater risk. On the other hand when the participants were responding to the survey questions 48 ('Students enrolled in private schools are at less risk of contracting HIV/AIDS than those going to government schools') and 46 ('Teenagers living in villages are at higher risk of contracting HIV/AIDS than those living in the city') they were possibly evaluating risk in terms of the frequencies of risky behaviours observed within the sub-groups. If there were little differences in the perception of the frequencies of behaviours then there would be little difference in the estimates of risk levels for rural, city, government school and private school students.

However, it became apparent from the survey data that the adolescents tended to exclude themselves and their closer friends from the highest level of risk category. For these adolescents, the generic 'everybody' has a high level risk of contracting HIV and AIDS except for themselves and their close friends.

6.4.2 Conceptual cluster two: Choice

One of the significant findings from the phase one analysis was that participants perceived that the reason for the high level of risk of contracting HIV and AIDS

among adolescents living in Gaborone was that adolescents knowingly became involved in risk behaviours. To explore the validity of this conclusion and extent of this view, Question 64, "Most young people know how to prevent an HIV and AIDS infection but they choose not to take precautions", was included in the survey. In response to this question, 78.1% of the participants either agreed or strongly agreed with the statement and only 21.9% of the participants either disagreed or strongly disagreed. When analysing across maturity levels, it is seen that the senior students (junior students M=2.92; senior students M=3.19) [$t(536) = -3.702$, $p<0.001$] reported even higher percentages of agreement with the view that adolescents' own behaviours was a significant factor in putting them at greater risk of contracting HIV and AIDS.

6.4.2.1 Enquiry conclusion.

This result strongly supports the phase one (qualitative data) conclusion that the majority of adolescents living in Gaborone perceived that the reason for this risk was the adolescents' own behaviours, even though they understood the potential risk of such behaviours and initially must have intended not to participate in these behaviours. In this regard, once again the more mature these adolescents are the more they evaluate reasons from cause to effect that it is adolescents' own behaviour that places them at greater risk of contracting HIV and AIDS.

6.4.3. Conceptual cluster three: Misconceptions

Phase one data analysis suggested that adolescents living in Gaborone have access to a wide range of information relating to HIV and AIDS facts. There was, however, a suggestion that there were still a number of misconceptions about HIV and AIDS circulating among these adolescents living in Gaborone. To test how widespread these misconceptions are and which subgroups hold these misconceptions, four questions

(18, 27, 29 and 35) with specific misconceptions identified in the qualitative analysis as their focus, were added to the questionnaire:

> Question 18. Young people who come into contact with blood while fighting or helping an injured person are likely to contract HIV and AIDS.
> Question 27. Taking ARV's when you are HIV negative can prevent you from contracting an HIV infection.
> Question 29. If two people trust each other and have been in a relationship for some time, it is OK to have sex without protection.
> Question 35. Most HIV infection among young people happens through mother-to-child transmission not through sexual activity.

Each of these questions above were also analysed to determine if there were different responses for different demographic subgroups.

The qualitative data had suggested that some adolescents living in Gaborone seemed to emphasise the potential of contracting AIDS through contact with blood as much as through sexual activity. So Question 18 ('Young people who come into contact with blood while fighting or helping an injured person are likely to contract HIV and AIDS') was added to the survey to explore the beliefs relating to blood contact and HIV infection. The quantitative data analysis showed that the majority of the respondents (78.7%) either agreed or strongly agreed with the idea that fighting or helping an injured person renders the participants at a great risk of contracting HIV and AIDS and only 21.3% disagreed or strongly disagreed to this idea. When analysing across nationality, school categories, and family level of education, it showed that Batswana students (Batswana students M=3.07; non-Batswana students M=2.80) [$t(577) = 3.201$, $p=0.001$], government students (Government school students M=3.11; Private school students M=2.90) [$t(585) = -3.177$, $p=0.002$] and the students whose mothers have a post-secondary qualification (Up to Secondary Education M=3.29; Post-Secondary Education M=3.13;) [$t(570) = -2.569$, $p=0.010$] reported higher percentages of agreement with the statement, that young people who

came into contact with blood while fighting or helping injured person are likely to contract an HIV infection. Interestingly, there were no significant differences across the respective age groups in terms of response to this question. Indeed, there were no other statistically significant differences across the other demographic categories. Further analysis of the qualitative data seems to indicate that some respondents often did not distinguish between the frequency of blood contact and the potential of HIV transfer through blood in their discussions, whereas the older students more often separated the two in their discussions. While it was known that there is a possibility that HIV and AIDS can be transferred through blood contact under certain conditions, these findings indicate that many adolescents living in Gaborone held the misconception that one has a greater risk of contracting HIV infection through contact with contaminated blood than through sexual activity (Healey, 2003; Moore, Herrera, Nyamongo, Lackritz, & et al., 2001). This may be partly due to the very effective media campaigns warning of the danger of contact with blood.

In terms of the idea that taking ARVs when one is HIV negative can prevent HIV infection, 89.3% majority of the respondents either disagreed or strong disagreed and only 10.7% strongly agreed or agreed with this idea. Analysis across maturity level indicated that senior students (Junior students M=1.69; Senior M=1.42) [$t(557) = 4.034$, $p<0.001$] reported higher percentages of disagreement with the idea that taking ARVs when you are HIV negative can prevent you from contracting HIV infection. Although this misconception was identified in the qualitative analysis, the quantitative data reveals that it was not held by many adolescents living in Gaborone and as such would have little influence on risk behaviour.

With respect to Question 29, "If two people trust each other and have been in a relationship for some time, it is OK to have sex without protection", 85.9% strongly disagreed or disagreed and only 14.1% strongly agreed or agreed with the statement. Analysis across gender, nationality and school categories indicated that female students (Males M=1.87; Females M=1.48) [$t(573) = 5.646$, $p<0.001$], Batswana students (Batswana students M=1.57; Senior M=1.91) [$t(572) = -3.842$ $p<0.001$] and the government students (Government students M=1.54; Private students M=1.75) [$t(579) = 3.043$, $p=0.002$] reported higher percentages of disagreement with the idea that if two people trust each other and have been in a relationship for some time, it was OK to have sex without protection. There were no other statistically significant differences across the other demographic categories. Once again this misconception was identified in the qualitative analysis. However the quantitative data indicated that it was not widely held and as such would have little influence on risk behaviour.

Finally in terms of Question 35, "Most HIV infection among young people happens through mother-to-child transmission, not through sexual activity", 63.6% either strongly disagreed or disagreed and 36.4% strongly agreed or agreed with the statement. Analysis across maturity level and family level of education indicated that senior students (Junior students M=2.40; Senior students M=2.06) [$t(556) = 4.528$, $p<0.001$] and students whose mothers have post-secondary qualification (Up to Secondary qualification M=2.34; Post-Secondary qualification M=2.14) [$t(551) = 2.554$, $p<0.011$] reported higher percentages of disagreement with the idea that most HIV infection among young people happens through mother-to-child transmission, not through sexual activity. Although the majority of the participants did not hold this misconception, approximately one third of the respondents held the idea that most

HIV infections originate from mother-to-child transmission. For these students such ideas may reduce their perception that they are most often personally responsible for avoiding HIV infection through their own actions.

6.4.3.1 Enquiry conclusion.

Only the idea that contact with blood constituted a greater potential for HIV infection than sexual activity was widely held by the respondents to the survey. While a majority of the respondents disagreed with the proposition that most HIV transmission occurred through mother-to-child transfer rather than through sexual activity, one third of them agreed. The other misconceptions (taking of ARVs will prevent HIV and AIDS infection; unprotected sex within a trusting relationship is okay) were not held by many of the questionnaire respondents. As such these latter two misconceptions would be unlikely to have an impact on the risk behaviour patterns of the adolescents under study.

The misconception relating to blood contact and HIV infection may be partly due to the very effective media programs warning of the danger of contact with blood.

Further it was noted that maturity level and gender (senior students and females), as well as the type of school attended by the respondents (private schools or government schools), appeared as factors that influenced the extent to which some of these misconceptions were held. The female students were less likely than the male students, the senior students were less likely than the junior students and the private school students were less likely than the government school students to hold one or more of the above misconceptions.

6.4.4 Conceptual cluster four: Adequacy of sources of HIV and AIDS information

The qualitative data indicated that adolescents living in Gaborone perceived that there were several sources of information about HIV and AIDS, and that most often these sources were expressed in terms of the respective organisations, or authority figures within their society. The information provided influenced both the respondents' initial decisions and their thinking during the reframing process. These sources included their teachers, their parents, their religion/church, their peers and also outlets, initiatives and campaigns that the government established in Botswana. As mentioned earlier in Chapter 5, when these adolescents used the term *information* about HIV and AIDS, most of them did not make a distinction between facts about HIV and AIDS, and values or morals and life skills relating to helping them to avoid HIV and AIDS infection. However, in the qualitative analysis the context of the participants' discussions relating to information often enabled the researcher to determine when the participants were emphasizing facts or when they implied values and life skills. The following six questions were added to the questionnaire to explore adolescents' perceptions of the adequacy of each source of information. Question 39 concentrated on information from all sources, Questions 32, 34 and 63 focused on specific sources of information that respectively related to facts, values and life skills. Questions 40 and 57 focused more on information relating to facts.

> Question 39. Young people are getting enough information to enable them to make right decisions to avoid risky behaviours that may lead to an HIV and AIDS infection.
> Question 32. Teachers at school are giving enough information to young people about HIV and AIDS.
> Question 34. Parents give adequate guidance to their teenage children on how to avoid contracting HIV and AIDS.
> Question 40. The government is doing enough to assist teenagers to avoid infection.

> Question 57. The ABC message (Abstain, Be faithful, Condomise) is effective in assisting young people to avoid infection.
> Question 63. The Botswana Government has established enough clubs and organisations that help young people to avoid contracting HIV and AIDS.

Firstly, Question 39 ('Young people are getting enough information to enable them to make right decisions to avoid risky behaviours that may lead to an HIV and AIDS infection') was included in the questionnaire to enquire if young people perceived that the broad scope of information provided, regardless of its source, was sufficient for them to make decisions to avoid HIV and AIDS infection. Data analysis of this question indicated that 76 % either strongly agreed or agreed and 34% strongly disagreed or disagreed with the statement. Analysis across nationality, school category, family socio-economic status indicated that Batswana students (Batswana students M=2.88; Non-Batswana Students M=2.59) [$t(569) = 3.081$, $p=0.002$], government school students (Government school students M=2.98; Private school students Senior 2.61) [$t(577) = -4.915$, $p<0.001$] and students who come from low socio-economic status (Low SES M=3.10; Middle SES M=2.75; High M=2.72)] [$F(2,459) = 4.884$, $p=0.008$] reported higher percentages of agreement with the idea that adolescents received sufficient information to enable them to make right decisions in order to avoid risky behaviours that may lead to an HIV and AIDS infection. This analysis confirmed the qualitative data analysis that suggested that adolescents living in Gaborone perceived that they have significant knowledge relating to HIV and AIDS and how to avoid its infection.

It was interesting to note that Batswana students who attended government schools and came from homes of low socio-economic status were more likely to perceive that they had sufficient information about HIV and AIDS. Government schools run a

formal curriculum that focuses upon the disease. On the other hand private schools are not compelled to follow the same curriculum. It is possible that students from government schools learn more detail about the disease than their private school counterparts.

One could also *conjecture* that there could be another factor at play. Adolescents from homes of high socio-economic status who attend private fee-paying schools would be more likely to live in the more exclusive areas of town. In this environment one could imagine that they could be somewhat insulated from the realities of life with AIDS. On the other hand Batswana adolescents from homes of low socio-economic status who attend government schools are more likely to live in the crowded less affluent suburbs of Gaborone and townships surrounding Gaborone. Here they could be in daily contact with people who are HIV positive or who show symptoms of AIDS. Hence it is those adolescents who have greater exposure to people living with HIV and AIDS that feel that they have sufficient knowledge of the disease.

With regard to teachers as a source of information about HIV and AIDS, Question 32 ('Teachers at school are giving enough information to young people about HIV and AIDS') was included in the questionnaire. In response to this item 60.6 % of the respondents either strongly agreed or agreed and 31.4% strongly disagreed or disagreed with the statement. Analysis across level of maturity, nationality, school category, family socio-economic status and family level of education indicated that junior students (Junior students M=3.20; Senior students M=2.64) [$t(570) = 6.895$, $p<0.001$], Batswana students, (Batswana students M=3.04; Non-Batswana students M=2.55) [$t(574) = 4.712$, $p<0.001$], government school students (Government school

students M=3.24; Private school students M=2.55) [t(581) = -8.890, p<0.001] and students who came from low socio-economic status (Low SES M=3.33; Middle SES M=2.91; High SES M=2.76), [F(2,482) = 8.380, p<0.001] and students whose mothers had up to secondary qualification (Up to secondary education M=3.06; Post-secondary education M=2.75) [t(565) = 3500, p=0.001] reported higher percentages of agreement with the idea that teachers at school provided enough information to adolescents living in Gaborone about HIV and AIDS. In most secondary schools in Botswana, especially government schools, guidance and counselling teachers were employed to teach moral education with HIV and AIDS issues as a priority focus and it was government school students who rated the influence of teachers more highly than did the non-government school students. Senior students, on the other hand, were less likely to view teachers as an adequate source of information about HIV and AIDS. In total, three in every five respondents to the survey rated their teachers as an important knowledge resource about HIV and AIDS for Gaborone adolescents and approximately one-third rated their teachers as being less than adequate.

Another potential source of HIV and AIDS knowledge identified in qualitative data analysis was adolescents' parents or caregivers. However participants in Phase One of the study were of the view that information from parents' was often limited and, even more importantly, that parents generally did not initiate such discussions with their children. To explore such views and to determine if there are differences in views across the participants' respective demographics, Question 34 ('Most parents give adequate guidance to their teenage children on how to avoid contracting HIV and AIDS') was included in the questionnaire. Response to this item 59.2 % of the participants either strongly agreed or agreed and 40.8% strongly disagreed or

disagreed with the statement. Analysis across level of maturity, school category and family socio-economic status indicated that junior students (Junior students M=2.89; Senior students M=2.40) [t(569) = 5.990, p<0.001], government school students (Government school students M=2.75; Private school students M=2.57) [t(579) = -2.180, p<0.030] and students who come from low socio-economic status (Low SES M=2.91; Middle SES M=2.49; High SES M=2.69), [F(2,482) = 10.384, p=0.006] reported higher percentages of agreement with the idea that most parents give adequate guidance to their teenage children on how to avoid contracting HIV and AIDS. In other words, it was the junior school students, government school students and those from low socio-economic status who indicated higher percentages of agreement that parents gave adequate guidance in these matters. In general, while three in every five questionnaire respondents recognised their parents as one of the sources of knowledge about HIV and AIDS, two in every five disagreed.

Question 40 ('The government is doing enough to assist teenagers to avoid infection') was added to the questionnaire to explore the effectiveness of government initiatives to provide HIV and AIDS knowledge to adolescents living in Botswana. In response to this item 58.1% of the participants either strongly agreed or agreed and 41.9% strongly disagreed or disagreed with the statement. Analysis across level of maturity, nationality, school category, family socio-economic status and family level of education indicated that junior students (Junior students M=2.80; Senior students M=2.52) [t(564) = 3.682, p<0.001], Batswana students, (Batswana students M=2.76; Non-Batswana students M=2.24) [t(557) = 5.204, p<0.001], government school students (Government school students M=2.96; Private school students M=2.24) [t(575) = -9.946, p<0.001], students who came from low socio-economic status (Low

SES M=2.86; Middle SES M=2.62; High SES M=2.48), [F(2,479) = 3.582, p=0.015] and students whose mothers had up to secondary qualification (Up to Secondary education M=2.75; Post-Secondary education M=2.53) [t(559) = 2.828, p=0.005] reported higher percentages of agreement with the idea that the government is doing enough to assist teenagers to avoid infection. Participants perceived that the government campaigns and programs that have been established to inform adolescents living in Botswana about HIV and AIDS are to some degree effective. Junior students, students attending government schools and students from homes of low socio-economic status reported higher percentages of agreement to this view. However, two in every five respondents to the questionnaire felt that the government was not doing enough to assist adolescents in avoiding infection.

Question 57 ('The ABC message (Abstain, Be faithful, Condomise) is effective in assisting young people to avoid infection') was added to the questionnaire to explore the effectiveness of one specific Botswana government campaign. This campaign is and was commonly known in Botswana as the 'ABC' and it aims to promote the practice of abstinence, being faithful to one partner and the use of condoms to prevent HIV and AIDS infection. In response to this item 67.9 % of the participants either strongly agreed or agreed and 32.1% strongly disagreed or disagreed with the statement. Analysis across gender, level of maturity, nationality, and school category, indicated that female students (Male students M=2.75; Females students M=2.95) [t(541) = -2.548, p=0.011], junior students (Junior students M=3.05; Senior students M=2.66) [t(537) = 5.152, p<0.001], Batswana students (Batswana students M=2.94; Non-Batswana students M=2.53) [t(539) = 4.136, p<0.001] and government students (Government school students M=3.00; Private school students 2.69) [t(549) = -4.021,

p<0.001] reported higher percentages of agreement with the idea that the ABC message was effective in assisting young people to avoid infection. With regard to this question, two in every three respondents to the questionnaire agreed with the view that the ABC message was effective in informing the adolescents on how to avoid HIV and AIDS infection in Botswana. One in every three disagreed with this proposition.

The qualitative data analysis indicated that participants in Phase One of the study believed that communication through government-established clubs had two roles. The first was to publicise facts related to HIV and AIDS and the second was to develop those life-skills that enabled adolescents to deal with everyday pressures. Question 63 ('The Botswana government has established enough clubs and organisations that help young people to avoid contracting HIV and AIDS') was added to the questionnaire to explore if the questionnaire respondents felt the government has established sufficient forums like clubs and organisations that taught both facts and life skills to help adolescents to make decisions that permitted them to avoid HIV and AIDS infection. In response to this item 62.5% of the participants either strongly agreed or agreed and 37.5% strongly disagreed or disagreed with the statement. Analysis across level of maturity, nationality, school category, family socio-economic status and family level of education indicated that junior students (Junior students M=2.93; Senior students M=2.57) [t(532) = 4.311, p<0.001], Batswana students (Batswana students M=2.87; Non-Batswana students M= 2.35) [t(533) = 4.672, p<0.001], government school students (Government students M=3.07; Private school students M=2.32) [t(540) = -9.571, p<0.001], students who come from low socio-economic status (Low SES M=3.09; Middle SES M=2.81; High SES M=2.61),

[F(2,451) = 7.376, p<0.001] and students whose mothers had up to secondary qualification (Up to secondary qualification M=2.90; Post-secondary qualification M=2.59) [t(529) = 3.736, p<0.001] reported higher percentages of agreement with the idea that the Botswana government had established enough clubs and organisations that helped adolescents to avoid contracting HIV and AIDS. In general, almost three in every five questionnaire respondents agreed that the government has established a sufficient number of clubs and organisations to assist adolescents with HIV and AIDS facts and life skills to enable them to avoid HIV and AIDS infection. However, just over two in every five disagreed with this proposition.

6.4.4.1 Enquiry conclusion

In summary, approximately three-quarters of the questionnaire respondents perceived that they had access to sufficient information about HIV and AIDS. While this could be regarded as a good result it still highlights the need for better means of dispensing information – particularly to adolescents. The results above can be used to comment upon the adequacy of the respective sources of information (facts, values and life skills) relating to avoiding HIV and AIDS from teachers, parents, and the government initiatives. This data suggests that all of the sources had considerable room for improvement. In addition, two in every five respondents to the questionnaire felt that the ABC initiative was less than effective in reducing HIV and AIDS infection. Two in every five felt that the governments' campaign of using clubs to also develop values and life skills fell short of its intended role.

For each aspect of knowledge transmission it was the junior students, the government students and those students from lower socio-economic status families that were most

positive in their evaluation of the knowledge transmission processes. This data suggests that in relation to HIV and AIDS, private schools should address the same syllabi as do the government schools.

Lastly, the link between knowledge and consequences of risk behaviour was explored by including Question 19 ('Most young people do not understand what will happen to them if they contract HIV and AIDS') to the questionnaire. In response to this item 62.5 % either strongly agreed or agreed and 37.5% strongly disagreed or disagreed with the statement. There were no statistically significant differences across any of the demographic categories with this item. This indicated that approximately three in every five respondents believed most adolescents do not understand what will happen to them if they contract the virus. This suggests that a majority of respondents to the questionnaire believed that, in general, adolescents living in Botswana had knowledge about HIV and AIDS but many failed to link such knowledge to personal consequences of contracting HIV and AIDS. This situation is further explored in the next cluster of items.

6.4.5 Conceptual cluster five: Perceptions of broader social consequences

Qualitative data analysis has indicated that the participants in Phase One of the study recognised that contracting HIV and AIDS has many negative physical, educational and financial consequences to their lives or families. In their responses, however, there were emphases on the drastic consequences, extreme illness and death, complete loss of educational opportunities and associated extreme psychological problems, but there were only occasional references to the broader social issues young people may encounter if infected with HIV and AIDS. A set of three questions was added to the questionnaire to further explore adolescents' perception of the impact of HIV and

AIDS in terms of these broader social consequences, and to determine which subgroups perceived which consequences were linked to contracting HIV and AIDS:

> Question 42. People who have HIV and AIDS are living a very normal life because of the treatment the government is giving.
> Question 15. If someone is infected by HIV and AIDS he or she will lose many friends.
> Question 49. When a person is infected by HIV and AIDS, society thinks she/he is a disgrace to the family.

In response to Question 42 ('People who have HIV and AIDS are living a very normal life because of the treatment the government is giving') 76.1% strongly agreed or agreed and 23.9% either strongly disagreed or disagreed. Analysis across gender, nationality, and school category indicated that female students (Male students M=2.75; Female Students M=3.07) [$t(561) = -4.475$, $p<0.001$], Batswana students (Batswana students M=3.04; Non-Batswana students M=2.57) [$t(560) = 5.644$, $p<0.001$], and government school students (Government school students M=3.08; Private school students M=2.751) [$t(567) = -4.735$, $p<0.001$] reported higher percentages of agreement with the statement that people who have HIV and AIDS are living a very normal life because of the treatment the government is giving. It appears that the adolescents living in Gaborone observe that many of those living with HIV show very few external signs of HIV and AIDS and they may often be perceived as healthy.

With regard to Question 15 ('If someone is infected by HIV and AIDS he/she will lose many friends') 57.1% strongly disagreed or disagreed with this statement and 42.9% either strongly agreed or agreed. Analysis across gender, maturity level, nationality, school category and family level of education indicated that female students (Female students M=2.20; Male students M=2.36) [$t(577) = 2.162$, $p<0.031$],

junior students (Junior students M=2.12; Senior students M=2.44) [t(571) = -4.398, p<0.001], Batswana students (Batswana students M=2.22; Non-Batswana students M=2.50) [t(575) = -3.068, p<0.002], government school students (Government school students M=2.13; Private school students M=2.45) [t(583) = 4.405, p<0.001] and students whose mothers have up to secondary qualification (Up to secondary qualification M=2.17; Post-secondary qualification M=2.40) [t(567) = -3.801, p=0.003] reported higher percentages of disagreement with the statement that if someone is infected by HIV and AIDS he/she will lose many friends. There were no other statistically significant differences across the other demographic categories. In other words, toward three in every five respondents completing the questionnaire believed that an individual who was HIV positive or who had AIDS would not necessarily lose friends over the issue. On the other hand a large minority (two in every five respondents) indicated that a person who was known to be infected or showing symptoms of AIDS would lose friends. It is important to note that for adolescents, friendships usually imply social connections among peers.

In terms of question 49 (‘When a person is infected by HIV and AIDS, society thinks she/he is a disgrace to the family’) 62.8% strongly agreed or agreed with this statement and 37.2% either strongly disagreed or disagreed. Analysis across maturity level, nationality, school category and family level of education indicated that senior students (Junior students M=2.59; Senior students M=2.82) [t(552) = -3.122, p=0.002], non-Batswana students (Batswana students M=2.63; Non-Batswana students M=2.98) [t(554) = -3.527, p<0.001], private school students (Government school students M=2.55; Private school students M=2.90) [t(562) = 4.712, p<0.001], and students whose mothers have a post-secondary qualification (up to secondary

qualification M=2.61; Post-secondary school students M=2.83) [t(549) = -2.971, p=0.003] reported higher percentages of agreement with the contention that within society at large there would be those who think that infection with HIV would bring disgrace to the family and may respond accordingly. Approximately just over one third of the respondents to the questionnaire disagreed with this contention.

6.4.5.1 Enquiry conclusion

The data resulting from these items paint a complex picture. Firstly, three in every four respondents to the questionnaire indicated that they believed that most people with HIV or AIDS lived a relatively normal life. Further, a slight majority (56%) disagreed with the proposition that a person who is either HIV positive or who has AIDS would necessarily lose friends. Yet, two in every three respondents thought that there would be broad social consequences in the form of disgrace to the family.

Now, this thesis argues that adolescent think of friends in terms of their peers. Hence a small majority of respondents would perceive that a young person who had contracted HIV and AIDS would not necessarily lose friends among their peers. However a large minority (42%) disagreed. The implication is that there will be some repercussions in social relationships among the peers of an adolescent with HIV/AIDS but that the individual would still retain a substantial core of friends for whom life goes on. On the other hand a majority of respondents to the questionnaire indicated that society at large would see that having HIV/AIDS would bring disgrace to the family. But again a substantial minority disagreed. The implication is that within society at large there will be broader social repercussions that may be directed to the individual or the family. However this is unlikely to be universal. So, there will

be some social consequences involving friends, broader society and family but the overall situation is likely to be liveable and not overwhelming. This is consistent with the contention that most people with HIV or AIDS lived a relatively normal life
It is interesting to note that the demographic subgroups that recorded the strongest agreement with the idea that the family will be disgraced if one contracts HIV and AIDS, the senior students, non-Batswana students, private school students and those whose mothers have a high level of education, were also identified as those who indicated a tendency to believe that having the HIV would cause an individual to lose friends among their peers. It could be conjectured that these individuals could have less exposure to those who are HIV positive or who have AIDS. Certainly this is a contention that should be explored in later research.

6.4.6 Conceptual cluster six: Influence of selected traditional cultural practices and values

Findings from Phase One of the study has suggested that adolescents living in Gaborone interact with traditional cultural values and practices in complex and often in contradictory ways. The qualitative data suggested that views stemming from sources have the potential to influence adolescents' decision to either participate or not to participate in behaviours that place them at risk of contracting HIV and AIDS. At the same time there was also a feeling that many of the traditional practices and values were no longer a significant influence on the behaviours of the adolescents surveyed. A set of four questions were added to the questionnaire to explore the complex influences of selected Setswana cultural practices and determine how widespread these influences reached:

Question 26. It is OK for secondary school girls to have a child before marriage
Question 33. It is easy for most young people my age to abstain from sex before marriage.
Question 50. Having more than one wife (polygamy) is a cultural practice in Botswana that places women at risk of contracting HIV and AIDS.
Question 36. Cultural values that guide moral behaviour among teenagers in Botswana are not as strong as they were in earlier years.

As noted in the literature and reinforced in the qualitative data analysis traditional culture placed great value on both postponing child bearing till marriage and then highlighting womanhood by child bearing. These values can, in specified contexts, clash. To explore which of these two cultural values are perceived as more important, question 26 was added to the questionnaire. With regard to Question 26 ('It is OK for secondary school girls to have a child before marriage') an overwhelming majority strongly disagreed or disagreed (94.1%) with this statement and only 5.9% either strongly agreed or agreed. From the comparative analyses it was seen that the Batswana students (Batswana students M=1.21; Non-Batswana students M= 1.44) [t(579) = -3.055, p=0.002] reported higher percentages of disagreement with the statement that it is okay for secondary school girls to bear children before marriage than their non-Batswana counterparts. It was obvious that the cultural value of not having children before marriage was still held, at an intellectual level at least, by the great majority of the Batswana adolescents surveyed. It must be noted that this view could also be in part a result of the Christian perspective that the sanctity of marriage must be upheld. The Phase One (qualitative) data seem to indicate that this cultural norm is also supported by the respondents' perceptions that having a child before marriage would also result in a considerable and unwanted disruption to their education.

Based on the traditional cultural value that sex must be confined to marriage Question 33 ('It is easy for most young people my age to abstain from sex before marriage'), was included in the questionnaire to test the strength of this value within the adolescent community. 52.8% strongly agreed or agreed with this statement and 47.2% either strongly disagreed or disagreed. Analysis across maturity level, school category and family socio-economic level indicated that junior students (Junior students M=2.93; Senior students M=2.38) [$t(566) = 0.085$, $p<0.001$], Government students (Private school students M=2.44; Government school students M=2.84) [$t(576) = -4.371$, $p<0.001$], and students from low socio-economic status (Low SES M=3.01; Middle SES M=2.66; High SES M=2.69), [$F(2,481) = 3.615$, $p=0.029$] reported higher percentages of agreement with the statement that it is easy for most young people my age to abstain from sex before marriage. There were no other statistically significant differences across the other demographic categories. The subgroups reporting higher percentages of agreement, to a larger extent, may well be those who have closer contact with traditional and/or Christian values. Further, junior students may well be less susceptible to the pleasures of sex than were the senior students, who could well understand the pressure surrounding indulgence in sexual activity.

With regard to Question 50 ('Having more than one wife (polygamy) is a cultural practice in Botswana that places women at risk of contracting HIV and AIDS') 80.5% strongly agreed or agreed with this statement and 19.5% either strongly disagreed or disagreed. Analysis across gender indicated that female students (Male students M=3.08; Female Students M=3.29) [$t(556) = -2.634$, $p=0.009$], reported higher percentages in agreement with the statement that polygamy places women at risk of

contracting HIV and AIDS. There were no other statistically significant differences across the other demographic categories. It was of interest that girls were more likely to agree with this view than were boys.

In terms of the influence of traditional cultural values across many practices and values Question 36 ('Cultural values that guide moral behaviour among teenagers in Botswana are not as strong as they were in earlier years') was included in the questionnaire. A total of 82.6% strongly agreed or agreed with this statement and 17.4% either strongly disagreed or disagreed. Analysis across all demographic sub-groups indicated that there were no statistically significant differences across these sub-groups. This data supports the Phase One (qualitative research) conclusion that these adolescents perceive that in general influence of traditional culture over adolescent behaviours was waning.

6.4.6.1 Enquiry conclusion

Overall the respondents to the questionnaire indicated a belief that the influence of traditional cultural practices and traditional values had waned. One matter that did produce strong agreement was that the traditional practice of men taking more than one wife actually placed women at risk of contracting the HIV. Even so the respondents indicated that unmarried high school girls should not become mothers. Behind this belief there could well be a coincidence of traditional values, religious views and straight out practicality, the practical aspect being the fact that pregnancy would interfere with education.

The question of whether it was hard or easy to abstain from sexual activity split the respondents down the middle. It is interesting to note that it was the younger (junior) students who tended to agree that abstinence was easy while the older (senior) students tended to think otherwise.

6.4.7 Conceptual cluster seven: Pressures on adolescent females

The Phase One data indicated that participants in the qualitative process perceived that, while female adolescents were involved in sexual activity with their male peers, many faced a greater risk of contracting HIV and AIDS because they also engaged in sex with older men. Many of these older men were seen as predators whose sexual practices meant that they were more likely to be infected with HIV and AIDS than young male adolescents. The reasons for female adolescents' involvement in sexual activity with older men as suggested by the analysis of qualitative data were two-fold. Firstly, there were the material rewards offered by the older men and secondly there were the traditional pressures placed upon female adolescents to acquiesce to the requests of older men who held positions of power within the family or the community.

Further, many of the participants in Phase One of the study mentioned the prevalence of coerced sex and rape. For those young women who fall victim to forced sex, the risk of contracting HIV could well be exacerbated.

To explore how widespread these views were and what pressures were placed on the girls to be involved in sexual activity with older men, the following seven questions were added into the questionnaire:

Question 30. To be popular at school is very important for most young people my age.
Question 47. Owning material things like cell phones and airtime makes students popular.
Question 23. Most girls are having sexual relationships with men who are older than themselves (Sugar Daddies).
Question 41. Most teenage girls find it difficult to say "no" to sex with older respectable persons, who are like an uncle (Malume).
Question 60. Girls have sex with older men because of the money or gifts they get from them.
Question 45. Young people feel important when a person gives them cell phones or airtime, even if it is in exchange for sex.
Question 22. Many teenage girls are being forced or raped to have sex.

In order to provide an understanding of the general social pressures faced by the adolescents surveyed, Question 30 ('To be popular at school is very important for most young people my age') and Question 47 ('Owning material things like cell phones and airtime makes students popular') were included in the questionnaire. A total of 56.4% strongly agreed or agreed with Question 30 ('To be popular at school is very important for most young people my age') and 43.6% either strongly disagreed or disagreed. Analysis across, maturity level status indicated that senior school students (Junior students M=2.57; Senior students M= 2.79) [t(560) = -2.415, p=0.016] reported higher percentages in agreement with the statement that to be popular at school is very important for most young people my age. There were no other statistically significant differences across the other demographic categories. It is important to note that there were no differences between the responses of male and female participants. Even though more than 50% of the participants agreed that it was important for adolescents to be popular with their peers, this idea was not as strongly subscribed to as the qualitative data seemed to suggest.

The concept of popularity was further explored by asking if things – property might generate popularity. Question 47 ('Owning material things like cell phones and

airtime makes students popular'). A total of 63.2% strongly disagreed or disagreed with this statement and 36.8% either strongly agreed or agreed. Analysis across school category and family socio-economic status indicated that government school students (Government school students M=2.32; Private school students M=2.10) [t(560) = -2.690, p=0.007], participants whose mother's qualification was up to secondary school and students from low socio-economic status (Low SES M=2.57; Middle SES M=2.21; High SES M=2.12), [F(2,464) = 5.618, p=0.017] reported higher percentages of agreement with the statement that owning material things like cell phones and airtime (phone credit recharge voucher) makes students popular. Although owning cell phones and airtime was not seen as a significant factor in determining popularity for most of these adolescents there was a considerable minority who perceived that owning a cell phone and airtime did impact popularity. This minority could well be those adolescents whose economic conditions were rather challenging (low socio-economic status) and who were unlikely to obtain these items through family resources. It is possible that these students might be more likely to seek popularity through ownership of cell phones and airtime, as some of the qualitative data would suggest.

To explore just how widespread among the respondents was the view that adolescent females were often involved in sexual relationships with older men, question 23 ('Most girls are having sexual relationships with men who are older than themselves [Sugar Daddies]') was included in the questionnaire. 87% strongly agreed or agreed with this statement and 13% either strongly disagreed or disagreed. Analysis across gender, nationality, school category and family educational level indicated that female students (Female students M=3.33; Male Students M=3.19) [t(574) = -2.150,

p=0.032] Batswana students (Batswana students M=3.34; Non-Batswana Students M=3.04) [t(572) = 3.677, p<0.001], Government school students (Government school students M=3.42; Private school students M=3.09) [t(580) = -5.221, p<0.001] and students from families whose mother's qualification was up to secondary school (Up to secondary school qualification M=3.34; Post-secondary school qualification M=3.19) [t(563) = 2.251, p=.025] reported higher percentages of agreement with the statement that most girls are having sexual relationships with men who are older than themselves. These results confirm the qualitative conclusions that in the participants' mind, a significant number of female adolescents were involved in intergenerational sex, and this may be part of the reason for the perception that females are more at risk of contracting HIV and AIDS than their male counterparts. It is, however, interesting to notice that female participants themselves had a higher percentage of agreement with the statement than the males. It may be that females were communicating more among themselves about sex with older men than they were communicating about this with their male peers. Indeed the female responses may well be a more accurate reflection of what is actually happening.

Question 41 ('Most teenage girls find it difficult to say "no" to sex with older respectable persons, who are like an uncle (Malume).') was added to the questionnaire to explore if female adolescents were having difficulty saying "No" to sexual requests by older men because of the cultural value of giving respect to the older men in their society. A total of 63.2% strongly agreed or agreed with the statement, "Most teenage girls find it difficult to say 'no' to sex with older respectable person who are like an uncle (Malome)". While 36.8% either strongly disagreed or disagreed with the statement. Analysis across nationality and school category

indicated that Batswana students (Batswana students M=2.79; Non-Batswana students M=2.54) [t(560) = 2.409, p<0.016] and Government school students (Government school students M=2.91; Private school students M=2.52) [t(568) = -4.989, p<0.001] reported significantly higher percentages of agreement with the statement that most teenage girls find it difficult to say "No" to sex with older respectable person who are like an uncle (Malome). These results support the suggestion that one of the reasons that female adolescents were involved in sex with older men was because of the 'respect' that such men commanded in Setswana society making it harder for the female adolescents to refrain from accepting their sexual requests. Once again it was the students from government schools that had the higher percentage of agreement to the statement that most teenage girls find it difficult to say "no" in such circumstances. It is possible that government schools have more Batswana students than do private schools, and it is these Batswana adolescents who have more frequent contact with the traditional value of respect of the 'Malome' figure in society.

Question 60 ('Girls have sex with older men because of the money or gifts they get from them') explored the influence of money and gifts in determining sexual activity with older men. A total of 90.2% strongly agreed or agreed with the statement "Girls have sex with older men because of the money or gifts they get from them" and 9.8% either strongly disagreed or disagreed. Analysis across nationality, school category and family socio-economic status indicated that Batswana students (Batswana students M=3.40; Non-Batswana Students M= 3.14) [t(541) = 3.011, p<0.003], Government school students (Government school students M=3.50; Private school students M=3.15) [t(548) = -5.3794, p<0.001] and students from low family socio-economic status (Low SES M=3.55; Middle SES M=3.38; High SES M=3.28),

[F(2,458) = 3.013, p=0.047] reported higher percentages in agreement with the statement that female adolescents have sex with older men because of the money or gifts they get from them. Once again this result affirmed the findings of Phase One of the study that the quest for money and things that money can buy, placed pressure on female adolescents to be involved in sexual activity. In turn this places those susceptible females at greater risk of contracting HIV and AIDS. A possible reason for Batswana students, Government school students and students form homes of lower socio-economic status reporting higher percentages of agreement with this statement is likely to be due to financial pressure faced by their respective families.

Continuing with this theme, Question 45 ('Young people feel important when a person gives them cell phones or airtime even if it is in exchange for sex') was also included in the questionnaire. A total of 68.2% strongly agreed or agreed with this statement and 31.8% either strongly disagreed or disagreed. Analysis across nationality and school category indicated that Batswana students (Batswana students M=2.91; Non-Batswana Students M=2.44) [t(556) = 4.585, p<0.001] and Government school students (Government school students M=3.01; Private school students M=2.58) [t(564) = -5.4724, p<0.001] reported higher percentages of agreement with the statement that, adolescents feel important when a person gives them cell phones or airtime. When viewed in context with the responses to the preceding items the responses to this item provide a reason why female adolescents in Gaborone could well involve themselves in sexual activity in exchange for gifts. It is, however, important to note that it is simple material things like cell phones and airtime that these females were attracted to in exchange for sex. The pressure of

having such material things appears to outweigh the perception of risk of contracting AIDS.

Finally, data from Phase One of the study suggested that some girls were coerced into sexual activity or were raped, most often by older men. This of course would also have implications for HIV transmission. To explore this view, Question 22 ('Many teenage girls are being forced or raped to have sex') was included in the questionnaire. A total of 72.9% strongly agreed or agreed with this statement and 27.1% either strongly disagreed or disagreed. Analysis across gender, maturity level and nationality indicated that females (Female students M=3.11; Male Students 2.77) [$t(582) = -4.654$, $p<0.001$] Junior students (Junior students M=3.14; Senior students 2.78) [$t(577) = -5.136$, $p<0.001$] , and Batswana students (Batswana students M=3.01; Non-Batswana Students M=2.82) [$t(580) = 2.096$, $p<0.037$] reported higher percentages of agreement with the statement that many female adolescents were being forced to have sex (raped). Whilst the participants agreed that consensual sex was frequent within their community, they also acknowledged that many female adolescents were forced to have sex. The higher ratings recorded by the junior students and females could well indicate heightened awareness of the forced sexual activity within these subgroups.

6.4.7.1 Enquiry conclusion

These findings suggest that respondents to the questionnaire believed that female adolescents were at higher risk of contracting HIV and AIDS than males because they were more likely to be involved in sexual relationships with older men. The data indicated their reasons for this belief. It is difficult for teenage girls to say "No" to

requests for sex by older 'respected' men. Teenage girls were enticement by gifts in exchange for sex. Teenage girls were subjected to forced sex. Phase One data suggests that perpetrators of forced sex were often older men.

Contrary to the predictions arising from the qualitative data, the quantitative data suggested that the drive to be popular or important was not all that strong. The researcher suspects that the two sets of data may indicate that the pressures was more for adolescents to be similar to and not different from their peers than being popular or important with their peers. If so, then the desire among adolescents to own a cell phone or to have airtime could well be related to the need to appear to be just like their peers. After reviewing both sets of data related to girls' sexual involvement with older men, the data suggests that teenage girls from homes of lower socio-economic status who may have greater exposure to traditional practices are the most vulnerable to the approaches and pressures of the older men.

6.4.8 Conceptual cluster eight: Attitude to condom use

Non-use of condoms by adolescents during sex was identified in the Phase One data as a behaviour that placed adolescents living in Gaborone at risk of contracting HIV and AIDS. Phase One data suggested that it was difficult for many of the adolescents to access condoms and that there were many adolescents who did not know how to use condoms correctly. Three questions were included in the questionnaire seeking to understand how widespread these views were, and the nature of adolescent' attitudes about the effectiveness of condoms and their use:

> Question 21. Most young people are involved in unprotected sex.
> Question 24. It is easy for young people to have access to condoms.

Question 28. Most of the condoms are out of date and cannot protect you from HIV infection.

With regard to Question 21 ('Most young people are involved in unprotected sex') 75.1% either strongly agreed or agreed and 24.9% strongly disagreed or disagreed with the statement. Analysis across gender indicated that female students (Male Students M=2.80; Female Students M=3.06) [$t(569) = -3.796$, $p<0.001$] reported higher percentages of agreement with the idea that most young people are involved in unprotected sex. This confirmed the Phase One findings that many sexually active adolescents in Gaborone were placing themselves at risk of contracting HIV and AIDS by non-use of condoms.

The responses to Question 24 ('It is easy for young people to have access to condoms') indicated that 53% either strongly disagreed or disagreed and 47% strongly agreed or agreed with the statement. Analysis across maturity level, nationality, school category and family level of education indicated that junior students (Junior students M=2.28; Senior students M=2.62) [$t(564) = -4.200$, $p<0.001$], Batswana students (Batswana students M=2.36; Non Batswana Students M=2.73) [$t(568) = -3.190$, $p=0.001$], government school students (Government school students M=2.29; Private School students M=2.67) [$t(575) = 4.688$, $p<0.001$] and students whose mothers have up to secondary qualifications (Students whose mother have up to secondary qualification M=2.36; Students whose mother have post-secondary school qualification M=2.59) [$t(560) = -2.689$, $p=0.007$] reported higher percentages of disagreement with the idea that it is easy for young people to have access to condoms. This data indicated that close to a half of the respondents to the questionnaire reported that it is not easy to access condoms. This confirms the Phase

One findings that while there may be many places that condoms can be bought in Gaborone, many adolescents find impediments to accessing them. The Phase One data also suggested that this difficulty may be due to the social stigma associated with those adolescents who attempt to access condoms. There is the implication in the quantitative findings that those who are older and those attending private schools may find it somewhat easier to access condoms than their peers.

One of the views expressed by the participants in Phase One of the study was existence of a belief among Gaborone adolescents that condoms were not always effective in protecting HIV and AIDS infection. To explore this view, Question 28 ('Most of the condoms are out of date and cannot protect you from HIV infection') was included in the questionnaire. A total of 53.4% either strongly disagreed or disagreed and 46.6% strongly agreed or agreed with the statement. Analysis across maturity level of students indicated that senior students (Junior students M=2.58; Senior students M=2.33) [$t(542) = 3.069$, $p=0.002$] reported statistically significantly higher percentages of disagreement with the idea that most of the condoms are out of date and cannot protect you from HIV infection. These results indicate that approximately one half of the respondents to the questionnaire held the view that condoms were not always effective protection from HIV infection. It was the senior students who were more likely to hold the view that condoms are effective in protecting HIV infection.

Four further questions were also included in the questionnaire to find out the attitudes that young people have pertaining to the use and possession of condoms across gender:

Question 53. Most of my friends think that boys are not man enough if they use a condom
Question 62. Most of my friends think that girls are not woman enough if they use a condom
Question 59. It is OK for a boy to walk around with a condom in his pocket in case he might need to use it
Question 58. A girl who walks around with a condom in her bag is morally loose.

The first question explored the view that arose from the Phase One data that some adolescents think that males take the risk of having sex without a condom because it was considered 'manly' or a sign of manhood to have sex without condoms. To explore how widespread this view was, Question 53 ('Most of my friends think that boys are not man enough if they use a condom') was added to the questionnaire. A total of 70.9% either strongly disagreed or disagreed and 29.1% strongly agreed or agreed with the statement. Analysis across gender, and maturity level of students, indicated that male students (Male students M=2.25; Female students M=1.89) [$t(538) = 4.221$, $p<0.001$] and junior students, (Junior students M=2.13; Senior students M=1.91) [$t(536) = 2.592$, $p=0.010$], reported higher percentages of agreement with the idea that 'most of my friends think that boys are not man enough if they use a condom'. These results indicate that while this view that it is manly not to use a condom is held by 29.1% (more than one quarter) of all respondents to the questionnaire, a greater percentage of the male students held this view (36.7%) than the female students (24.2%). The analysis also indicated that it was the students from junior schools who registered higher percentages of agreement with the view that is was manly not to use a condom.

Question 62 ('Most of my friends think that girls are not woman enough if they use a condom') was added to the questionnaire. This is a reverse gender version of question

53. Together the two items explored perceptions about being 'manly/womanly' pertaining to non-use of condoms. A total of 78.6 % either strongly disagreed or disagreed and 21.4% strongly agreed or agreed with the statement. Analysis across gender and level of maturity indicated that male students (Male students M=2.09; Female Students M=1.89) [$t(531) = 3.513$, $p<0.001$] and junior students (Junior students M=2.05; Senior students M=1.76) [$t(526) = 3.787$, $p<0.001$] reported higher percentages of agreement with the idea that most of my friends think that girls are not woman enough if they use a condom. This analysis indicated that the idea that it is manly/womanly not to use a condom is only held by a small component of the adolescents living in Gaborone.

A set of questions was added to the questionnaire to enquire if the views about carrying condoms and bringing them to a sexual encounter were gender sensitive. Firstly, Question 59 ('It is OK for a boy to walk around with a condom in his pocket in case he might need to use it') was added to enquire about the acceptability of males carrying condoms. A total of 60 % either strongly agreed or agreed and 40% strongly disagreed or disagreed with the statement. Analysis across level of maturity indicated that senior students (Junior students M=2.45; Senior students M=2.89) [$t(535) = -5.073$, $p<0.001$] reported higher percentages of agreement (70.9% compared to 52.1% for the junior students) with the idea that it is okay for a boy to carry a condom in his pocket. The majority of adolescents agree that it is appropriate for males to carry condoms with senior students having a higher percentage of agreement with the statement.

Question 58 (‘A girl who walks around with a condom in her bag is morally loose’) attitudes toward girls carrying condoms. A total of 68.6 % either strongly agreed or agreed and 31.4% strongly disagreed or disagreed with the statement. Analysis across level of maturity and family level of education indicated that senior students (Junior students M=2.68; Senior students M=2.99) [t(530) = -3.901, p<0.001 and students whose mothers have up to secondary qualification (Students whose mother have up to secondary school qualification M=2.75 ; Students whose mother have Post-secondary school qualification M=2.93) [t(529) = -2.337, p=0.020] reported higher percentages of agreement with the idea that a girl who walks around with a condom in her bag is morally loose. The majority of the students, especially the senior students, indicated that it was not acceptable for girls to carry condoms around and that those who carry the condoms were considered morally loose. This contributes to the suggestion that within the community of the adolescents living in Botswana it can be considered difficult, in practical terms, for girls to control condom use in sexual encounters.

6.4.8.1 Enquiry conclusion

These findings support the findings of Phase One of the study in that the non-use of condom among adolescents living in Gaborone was indeed widespread. Further, this data also confirm the view that adolescents found it difficult to access condoms, even though a great many shops in Gaborone stock them. This supports Phase One findings that part of the problem of accessing condoms lay in the social stigma associated with this process. The data also suggests that younger adolescents (juniors), Batswana adolescents, and those attending government schools found somewhat more difficulty in accessing condoms. It was also very clear that males found it easier to carry condoms than did females. Responses to the questionnaire also suggested that it may

even be considered culturally unacceptable for females to carry condoms around. Unsurprisingly these views about females carrying condoms were more strongly held by male adolescents than their female counterparts. Overall the findings of both Phase One and Phase Two of the study indicated that condoms were not widely used by sexually active adolescents. This was due in part to the social stigma associated with accessing condoms, the distrust in the quality of condoms and the gendered nature of its use.

6.4.9 Conceptual cluster nine: Social and peer pressures

A sub-set of five questions was added to explore the spread of social and peer pressures and to discover how influential these pressures were on the adolescent decision-making processes. Data from Phase One of the study suggested that adolescents had to contend with both direct and indirect pressures from their peers to follow the accepted or perceived practices of their peers in making decisions to either participate or not participate in behaviours that placed them at risk of contracting HIV and AIDS. To explore how widespread and influential such pressures were the following five questions were added to the questionnaire:

> Question 38. "Peer pressure is a major contributor to young people being involved in sexual activity"
> Question 52. When your friends are involved in sexual activity it is not easy to say "No" to a request for sex.
> Question 31. "Most members of our society are good role models on sexual matters"
> Question 37. The media (TV, Videos, DVD, Radio) are influencing bad behaviour that places young people at risk of contracting HIV and AIDS.
> Question 55. Virginity is not desired by most popular girls in school

With regard to Question 38 ('Peer pressure is a major contributor to young people being involved in sexual activity') 86.7 % either strongly agreed or agreed and only

13.3% strongly disagreed or disagreed with the statement. Analysis across gender and level of maturity, indicated that female students (Male students M=3.19; Females Students M=3.33) [t(573) = -2.116, p=0.035]and junior students (Junior students M=3.30; Senior students M=3.30) [t(569) = 2.080, p=0.038], reported higher percentages of agreement with the idea that "peer pressure is a major contributor to adolescents being involved in sexual activity". This data confirmed the findings of the Phase One portion of the study indicating that peer pressure was a major contributor to adolescents being involved in sexual activity.

Question 52 ('When your friends are involved in sexual activity it is not easy to say 'No' to a request for sex') was added in order to explore how the desire for inclusion and social acceptance influenced adolescents' confidence in their ability to say "No" to a request for sex. A total of 55.2 % either strongly disagreed or disagreed and 44.8% strongly agreed or agreed with the statement. Analysis across gender indicated that male students (Male Students M=2.56; Female Students Senior M=2.17) [t(548) = 4.513, p<0.001] reported higher percentages of agreement with the idea that when your friends are involved in sexual activity it is not easy to say "No" to a request for sex. This data indicated that it was the males who were more inclined to feel this pressure for social acceptance from their close friends than were the females.

Question 31 ('Most members of our society are good role models on sexual matters') explored the nature of the example in sexual matters as set by members of the immediate community. A total of 62.1% either strongly disagreed or disagreed and 37.9% strongly agreed or agreed with the statement that most members of "our society" were good examples in matters dealing with sexual relationships. Analysis

across school category indicated that government school students (Private school students M=2.33; Government school students M=2.17) [t(549) = 2.117, p=0.030] reported higher percentages of disagreement with the idea that "most members of our society are good role models on sexual matters". From this analysis, it was obvious that three in every five respondents to the questionnaire did not think that society provided a large number of good role models on sexual matters. Government school students reported even higher percentages of disagreement with the contention that society provides good role models in sexual matters.

Question 37 ('The media [TV, Videos, DVD, Radio] are influencing bad behaviour that places young people at risk of contracting HIV and AIDS') was added to the questionnaire to explore the nature of media influence on adolescent behaviours that place them at risk of contracting HIV and AIDS. Data analysis indicated that 72% either strongly agreed or agreed and 28% strongly disagreed or disagreed with the statement. This analysis indicated that almost three quarters of the respondents to the questionnaire believed that the media influenced adolescent behaviours in ways that placed them at an elevated risk of contracting HIV and AIDS. The data in Phase One of the study indicated that many adolescents included pornographic material within the scope of media materials.

Lastly, the Phase One findings suggested that for the most part the popular female adolescents were those who were sexually active, rather than those who were not involved in sexual activity. To explore this, Question 55 ('Virginity is not desired by most popular girls in school') was added to the questionnaire. Data analysis indicated that 58.5 % either strongly agreed or agreed and 41.5% strongly disagreed or

disagreed with the statement. There were no statistically significant differences across all demographic categories. This analysis indicated that almost three in every five respondents to the questionnaire thought that adolescents did not see virginity as being necessary for popularity. However, this contention must be seen in the context of the limited importance placed on being popular as indicated by the responses to Question 30.

6.4.9.1 Enquiry conclusion.

Analysis of the above five questions indicated that adolescents living in Gaborone, especially male students, felt considerable direct and indirect pressures from their peers to engage in sexual activities that place them at risk of contracting HIV and AIDS. These adolescents also perceived that their society did not provide good role models in terms of sexual matters and that this situation was exacerbated by the extremely poor role models presented through the media. Even though the idea of female adolescents losing their virginity before marriage was contrary to most Setswana culture, the majority of respondents to the questionnaire indicated that, for girls, virginity and popularity were largely unrelated.

6.4.10 Conceptual cluster ten: Alcohol and drug use

Three questions were included in the questionnaire to explore the extent to which alcohol and drugs use might or might not influence at risk behaviours:

> Question 16. Most young people of my age use alcohol and drugs especially at parties
> Question 17. Using alcohol and drugs influences young people to engage in sex and other risk behaviours.
> Question 51. When using alcohol and drugs, young people feel that they cannot refuse to engage in sex and other risky behaviours

With regard to Question 16 (‘Most young people of my age use alcohol and drugs especially at parties’) 90.2 % either strongly agreed or agreed and only 9.8% strongly disagreed or disagreed with the statement. Analysis across gender, level of maturity, nationality, school category indicated that female students (Male Students M=3.36; Female Students M=3.58) [t(576) = -3.462, p=0.001], senior students (Junior students M=3.35; Senior students M=3.69) [t(570) = -5.430, p<0.001], Batswana students (Batswana students M=3.54; Non-Batswana Students M=3.26) [t(574) = 3.477, p=0.001], and government school students (Private school students M=3.38; Government school students M=3.58) [t(582) = -3.155, p=0.002] reported higher percentages of agreement with the idea that most young people the age of the respondent used alcohol and drugs especially at parties. It appeared that a great many adolescents living in Gaborone were involved in either alcohol or drug use or both. Phase One findings suggested that alcohol was more frequently used than drugs.

An overwhelming majority (95.7%) either strongly agreed or agreed that “Using alcohol and drugs influences young people to engage in sex and other risk behaviours” (Question 17). Analysis across gender and nationality, indicated that female students (Male Students M=3.48; Female Students M=3.64) [t(580) = -2.883, p<0.004] and Batswana students, (Batswana students M=3.61; Non-Batswana students M=3.44) [t(579) = 2.407, p<0.016], reported even higher percentages of agreement with the idea that use of alcohol and/or drugs made it easier for adolescents to engage in sex and other risk behaviours.

With regard to question 51 (‘When using alcohol and drugs, young people feel that they cannot refuse to engage in sex and other risky behaviours’) 74.2% either strongly agreed or agreed and 25.8% strongly disagreed or disagreed with the statement.

6.4.10.1 Enquiry conclusion.

This data suggests that the practice of alcohol consumption by adolescents, and particularly at parties, may well be common practice. Further the great majority of the respondents to the questionnaire acknowledged that the consumption of alcohol and or drugs can result in an increase in sexual activity and other risk behaviours. It seems from the responses to the question relating to the influence of alcohol and drugs on behaviour in a general sense (question 17) compared to responses to question relating to the influence of alcohol and drugs in a more personal sense (question 51) follows a pattern previously observed. That is, while adolescents perceive that there is a significant problem in their community (96% did), many still believe they are somewhat immune to effects of the problem (it does not apply to them) because they can refuse to participate.

6.5 QUANTITATIVE RESULTS: SCALE FORMATION

6.5.1 Introduction

Regression analysis was employed to explore the relationships between the HIV and AIDS risk factors identified from respective conceptual item clusters within the survey and participant demographics, and adolescents' views of the risk of their peers contracting HIV and AIDS. The first step in this process was to generate appropriate risk factor scales associated with respective conceptual items clusters. Internal reliability of each risk factor scale was determined using Cronbach's alpha.

6.5.2 Risk factor scales

The 51 attitudinal items were set against a four-point Likert scale running from 1 "Strongly Disagree" to 4 "Strongly Agree". Conceptual groupings within these items were subjected to confirmatory factor analysis in order to generate the risk factor scales. During this process items which loaded negatively were recoded and reliabilities (Cronbach's alpha) were calculated and monitored in order to maximise the factor reliabilities. This was done by eliminating any item or items that reduced a particular factor's reliability.

Factors were turned into scales by calculating scale scores. A scale score was calculated for a particular individual respondent by using SPSS to find the mean score from the Likert weightings across the items composing the respective factor. This process generated the following four risk factors scales: Adequacy of sources of information relating to HIV and AIDS scale ('Information Scale'); Broader social consequences of HIV and AIDS scale ('Social Consequences Scale'); Unique

pressures experienced by females scale ('Female Pressure Scale'); and Social/peer pressure to participate in risk behaviours scale ('Social/Peer Pressures Scale'). The factor loadings on these four scales are to be found in Table 6.4.

Attempts were made to create two other scales. The first scale involved misconceptions that revolved around contracting or preventing HIV infection. The four variables failed to form a correlation pattern with sufficient pair strengths to enable a reliable scale to be constructed. All the correlation coefficients between the four variables dealing with misconceptions lay at 0.16 or less. Of the six possible combinations, one correlation coefficient reached 0.16, three exceeded 0.10 and two correlation coefficients were below 0.10.

The second scale related to condom use and attitudes to condoms. However, again this factor failed to produce a reliable and usable scale. Again the reason lay in the fact that the seven items generally failed to form strong bivariate correlations. Only one pair of variables produced a correlation coefficient of greater than 0.15 ($r = 0.45$ for ". . . girls are not women enough if they use condoms" and ". . . boys are not man enough if they use condoms") and more than 75% of the remaining correlation coefficients lay at 0.10 or less.

Table 6.4 The factor loadings for the four scales

Question Number	**The 'Information Scale': α = 0.74**	Factor Loading
40	The government is doing enough to assist teenagers to avoid HIV/AIDS infection.	.77
32	Teachers at school are giving enough information to young people about HIV/AIDS.	.73
63	The Botswana Government has established enough clubs and organisations that help young people to avoid contracting HIV/AIDS.	.73
34	Most parents give adequate guidance to their teenage children on how to avoid contracting HIV/AIDS.	.64
39	Young people are getting enough information to enable them to make right decisions to avoid risky behaviours that may lead to an HIV/AIDS infection.	.64
57	The ABC message (Abstain, Be faithful, Condomise) is effective in assisting young people to avoid infection.	.44
	Social Consequences Scale: α = 0.44	
15	If someone is infected by HIV/AIDS he/she will lose many friends.	.748
49	When a person is infected by HIV/AIDS, society thinks she/he is a disgrace to the family.	.702
R42	Despite the treatments supplied by the government people who have HIV/AIDS are *not* living a very normal life.	.578
	Female Pressure Scale: α = 0.57	
23	Most girls are having sexual relationships with men who are older than themselves (Sugar Daddies).	.711
45	Young people feel important when a person gives them cell phones or airtime, even if it is in exchange for sex.	.682
60	Girls have sex with older men because of the money or gifts they get from them	.674
41	Most teenage girls find it difficult to say "no" to sex with an older respectable person who is like an uncle (Malume).	.522
22	Many teenage girls are being forced (or raped) to have sex.	.447
	Social/Peer Pressure Scale : α = 0.57	
17	Using alcohol and drugs influences young people to engage in sex and other risk behaviours.	.67
16	Most young people of my age use alcohol and drugs especially at parties.	.62
21	Most young people are involved in unprotected sex.	.57
38	Peer pressure is a major contributor to young people being involved in sexual activity.	.52
51	When using alcohol and drugs, young people feel that they cannot refuse to engage in sex and other risky behaviour.	.48
37	The media (TV, Videos, DVD, Radio) are influencing bad behaviour that places young people at risk of contracting HIV/AIDS.	.43
55	Virginity is not desired by most popular girls in school.	.39
52	When your friends are involved in sexual activity it is not easy to say "no" to a request for sex.	.37

The statistics describing the four scales formed from the factors shown in Table 6.4 are to be found in Table 6:5. Further, these statistics have been transposed into the four whisker plots found in Figure 6:9.

Table 6.5 Statistics of the four scales employed in the regression analysis

	Information Scale	Social Consequences Scale	Female Pressure Scale	Social/Peer Pressure Scale
Number of valid responses	516	554	522	505
Missing data	77	39	71	88
Mean	2.79	2.33	3.04	3.04
Standard Deviation	0.628	0.598	0.521	0.429
Minimum	1.00	1.00	1.40	1.25
Maximum	4.00	4.00	4.00	4.00
Median	2.83	2.33	3.00	3.00
25th Percentile	2.33	2.00	2.80	2.75
75th Percentile	3.17	2.67	3.40	3.38

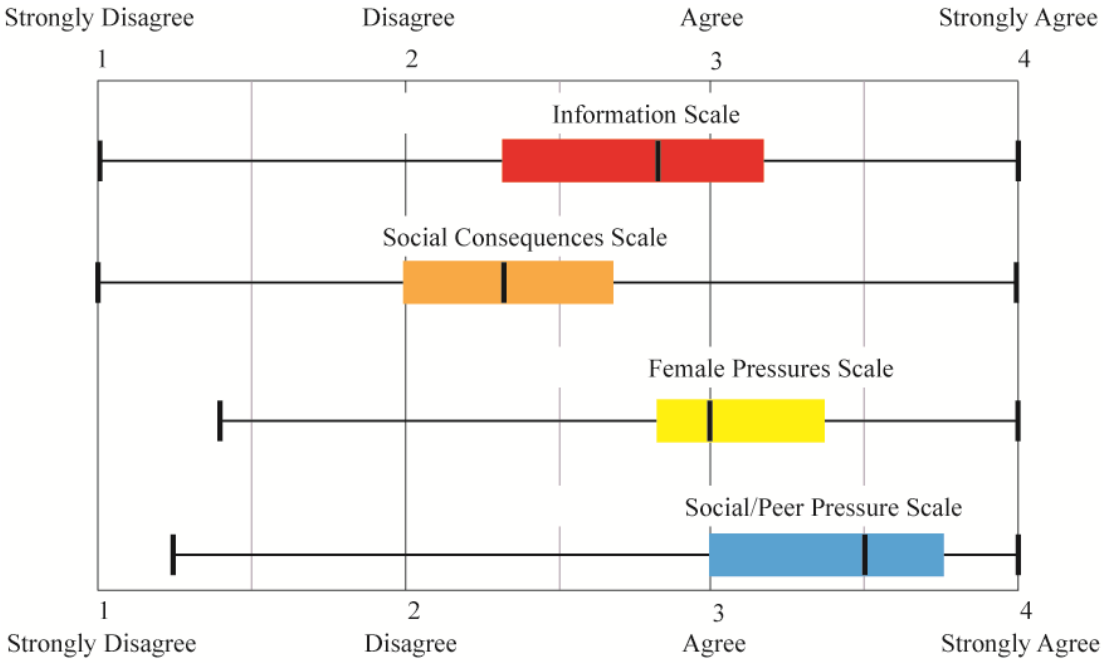


Figure 6.9 Whisker plots for the four scales, "Information Scale"; "Social Consequences Scale"; "Female Pressure Scale"; and Social/Peer Pressure Scale.

These plots are set against the Likert scale used with the component items. The mid-value of the Likert scale is 2.5. Distributions predominantly lying above 2.5 represent agreement with the contentions of the scales and distributions predominantly lying

below 2.5 represent disagreement with the scales' effects. The colour bands represent the spread of scores from the 25th percentiles to the 75th percentiles and the black bars inside the colour bands represent the median values of the four scale distributions.

6.5.2.1: Adequacy of sources of information scale

The six items within this cluster when combined generated an adequacy of information scale (Table 6.4), which is a measure of the degree to which the participants agreed that there was sufficient information about HIV and AIDS for them to access in their communities.

The mean value of this Information Scale (M = 2.79, SD = 0.63) is greater than 2.5 (the mid value of the Liker Scale) indicated that an easy majority of the participants perceived that the information about HIV and AIDS as supplied by the various sources is adequate and appropriate. The actual spread of scores on this scale is represented by the first whisker plot in Figure 6.9.

Analysis across gender and maturity level reported no statistically significant difference between male and female participants in this scale, but that the junior students reported significantly greater scores (M = 2.94, SD = 0.61 and M = 2.60, SD = 0.60) [$t(508) = 6.372$, $p < 0.001$] than the senior students for the adequacy of information from the various sources. In other words, the more mature students were less certain about the adequacy and appropriateness of the information supplied.

6.5.2.2: The social consequences scale

Three items gave rise to the social consequences scale; these included items 15 and 49 and the reverse coding of item 42 (see Table 6.4). This scale provided a measure of the potential negative social consequences of contracting HIV and AIDS as perceived by the participants to the questionnaire.

The mean value of this Social Consequences Scale (M = 2.33, SD = 0.60) indicated that a majority of the participants disagreed with the contention that a person who contracted AIDS would suffer social consequences as a result. The whisker plot (see the second whisker plot in Figure 6.9) indicated that more than 50% of the scores are easily less than the midpoint of the Likert Scale (2.5).

Analysis of the Social Consequences Scale across gender and maturity level reported statistically significant differences between male and female (M = 2.42, SD = 0.57; and M = 2.28, SD = 0.61) [$t(546) = 2.94$, $p = 0.003$] and junior and senior students (M = 2.23, SD = 0.61 and M = 2.44, SD = 0.60) [$t(542) = -4.14$, $p < 0.001$]. For both genders and maturity levels it was only a minority of the participants who perceived that there would be major negative social consequences if they contracted HIV and AIDS; it was however the males and senior students for whom these minorities were greater.

6.5.2.3 The female pressure scale

The five items composing the Female Pressure Scale are to be found in Table 6.4. This scale provides measures of the degree to which the respondents felt that their female peers were pressured into risk behaviours by the offer of material gifts and the

respondents' perceptions of the duress placed upon young females to respect requests by older men, including requests of a sexual nature.

Table 6.5 provides the mean value of this Female Pressure Scale (M = 3.04, SD = 0.52) and this suggests that a majority of the participants perceived that girls are subject to pressures not felt by the boys to participate sexual activity. The whisker plot (third down in Figure 6.9) suggests that more than 75% of the respondents agree with the contention that girls are economically or culturally pressured or forced to participate in risk behaviour by older men.

Analysis across maturity level registered no statistically significant difference between junior and senior participants. However, female participants reported statistically significant greater scores (M = 3.08, SD = 0.53; and, M = 2.96, SD = 0.50) [t(515) = -2.429, p =0.015] than the males on the Female Pressure Scale.

6.5.2.4 Social/Peer pressure scale

In that much of the social/peer pressure to participate in risk behaviours often occurs in social settings such as parties of various kinds, eight survey items were constructed to explore social/peer pressures that surrounded the behaviours associated with parties including the use of alcohol. The eight items composing the Social/Peer Pressure Scale are listed in Table 6.4. The total effect of the scale is to provide measures of the degrees to which the participants agreed with the contention that adolescents felt pressure from their peers, social contexts and the media to participate in risk behaviours including alcohol and drug consumption and sexual activity.

Table 6.5 shows that the mean value of this Social/Peer Pressure Scale (M = 3.04, SD = 0.52) exceeds the 2.5 mid-point of the Likert scale indicating that a majority of the

participants perceived that there was significant pressure from their peers and society to participate in risk behaviours. The last whisker plot in Figure 6.9 indicated that more than 75% of the participants were in agreement with the effect of the scale. Analysis across gender and maturity level reported no statistically significant difference between male and female participants or between junior and senior students in their views of the impact of social/peer pressure on their decision-making in this arena.

6.6. QUANTITATATIVE RESULTS PREDICTORS OF RISK

6.6.1 Linear Regression

Multiple linear regression creates a linear relationship between a dependent variable (an outcome variable) and one or more independent variables. The coefficients of the independent variables provide measures of the respective strengths of the relationships between the particular independent variables and the dependent variable. In this way the relative strengths of the effects that the independent variables have upon the dependent variable can be compared with each other.

6.6.2 Principles of linear regression

The following principles of regression analysis are summarised from (Howell 1997).

6.6.2.1 Principle One

The dependent variable is chosen because it is central to the phenomenon to be examined. On the other hand independent variables are selected because they provide measures of the effects under consideration.

6.6.2.2 Principle Two

The regression process excludes those variables whose relationships with the dependent variable do not meet the 95% level of confidence or its equivalent.

6.6.2.3 Principle Three

Multiple R square provides a measure of the proportion of covariance (related variance) between the dependent variable and the collective independent variables. In effect, multiple R square provides a measure of that proportion of the variance in the dependent variable that is explained by the equation linking the independent variables to the dependent variable.

6.6.2.4 Principle Four

Standardised regression equations return Beta coefficients that provide measures of the strength of the relationship between each independent variable and the dependent variable. A standardised regression equation enters all variables as Z scores and returns a relationship (an equation) in which the constant term is zero. Further, the mean values of all Z scores are zero and standard deviations of all Z scores are 1.0. In other words, Z scores 'count' in standard deviations. For a normal distribution, a Z score ranges from -3.0 to +3.0.

Consider the following standardised regression equation.

$$Dep.Var = \beta_1 Indep.Var_1 + \beta_2 Indep.Var_2$$

If the $Indep.Var_2$ is held in its mean position (zero) and $Indep.Var_1$ is allowed to vary by one standard deviation (1.0), the change in the Dep.Var is β_1 of a standard deviation. Similarly, if $Indep.Var_1$ is held in its mean position (zero) and $Indep.Var_2$ is allowed to vary by one standard deviation (1.0) then the change in the Dep.Var is β_2 of a standard deviation. In other words the Beta coefficients provide measures of the respective strengths of the effects that the respective independent variables have upon the dependent variable.

6.6.2.5 Principle Five

In multiple linear regression equations, each Beta coefficient relates the corresponding independent variable to the dependent variable only and the coefficients do not provide information about any inter-relationship between independent variables.

6.6.2.6 Principle Six

Negative Beta coefficients imply reverse connections between the respective independent variable and the dependent variable. That is, *increasing* scores for the independent variable cause *decreasing* scores in the dependent variable. The magnitude of the Beta coefficient provides information about the size of this effect.

6.6.3 Application of regression analysis: All participants

Regression analysis was employed to explore the relationships between various independent variables and the participants' perception of the degree of risk faced by the adolescents living in Gaborone in relation to contracting HIV and AIDS. In this process Question 14 ('Most young people of my age are at risk of contracting HIV and AIDS') was employed as the dependent variable. The independent variables included: Individual misconception items, traditional culture items, the four conceptual risk factor scales and the demographic characteristics (gender, age, nationality and maturity level).

Firstly, hierarchical regression was employed in order to determine the relative influence of the various categories of variables (demographic characteristics, the four risk factor scales, selected misconception questions and the traditional culture items).The first group of independent variables to be added was the participant demographic items, followed by the Risk Factor Scales, the misconception items and finally the traditional culture items. The summary for this regression shown in Table 6.6.

Table 6.6 Regression analysis for predictors of perception of risk: Hierarchical Regression

Model	R	R Square	R Square Change
Demographic Variables (DV)	.282	.080	.080
Plus four Risk Factor Scales (RFS)	.483	.233	.154
Plus four Misconceptions Items (MI)	.507	.257	.024
Plus four Traditional Culture Items (TCI)	.519	.269	.012

The data indicated that the four Risk Factors scales collectively contributed approximately 15% of the total explained variance in the participants' view of the risk of their peers of contracting HIV and AIDS (Question 14). This was followed by the Demographic items that contributed a total of 8% of the variance of the dependent variable. The misconception items collectively contributed a little over 2% of the dependent variable. Finally, the traditional culture items contributed a little over 1% of the variance of the dependent variable. In total 27% of the variance of the item 'Most young people of my age are at risk of contracting HIV and AIDS' was explained by the variables entered into the hierarchical regression process.

The same variables were entered into a backward, stepwise regression process. This process creates a succession of models, starting with all independent variables entered into the process. Those variables that did not meet the 0.05 level of significance were successively removed from the process until a stable structure was achieved. The independent variables surviving this process along with their respective Beta coefficients are to be found in Table 6.7. These variables constitute Model 1 of the regression process. These variables collectively explained a total of just under 27% of the variance of the dependent variable 'Most young people of my age are at risk of contracting HIV and AIDS'.

Table 6.7 Regression analysis for predictors of perception of risk: All participants

Independent variables (R^2 = 0.271)	Beta	t	sig.
Social/Peer Pressure	.247	4.835	<.001
Maturity Level (Junior = 1; Senior = 2)	.196	4.111	<.001
Female Pressure	.140	2.642	.009
Gender (Male = 1; Female = 2)	.128	2.816	.005
"Young people who come into contact with blood while fighting or helping an injured person are likely to contract an HIV infection".	.103	2.226	.027
Social Consequence	-.136	-2.908	.004
"It is easy for most young people my age to abstain from sex before marriage".	-.118	-2.425	.016
"Most HIV infections among young people happen through mother-to-child transmission, not through sexual activity".	-.103	-2.217	.027

The strongest predictor of participant's perception of risk was Social/Peer Pressure Scale with a Beta coefficient of 0.25. The positive coefficient implied that a plus one standard deviation rise in the measure on the Social/Peer Pressure scale will produce a quarter of a standard deviation rise in the measure on the perceptions of risk (of contracting HIV). This implies that those participants who perceived their fellow young people to be influenced by social and peer pressure to indulge in risky behaviours (such as using alcohol, attending parties and engaging in sex) also saw those same young people as being definitely at risk of being infected with the HIV. Mature students (seniors) tended to perceive this risk of HIV infection to be greater than did the junior students (coefficient Beta for Maturity = 0.20) and female students also tended to perceived the risk of HIV infection to be greater than did the male students (coefficient Beta for Gender = 0.13). Similarly, respondents who generally believed that those females who were subjected to rape, who had sex with older men or who had sex for reward also perceived that those females were at a greater risk of infection with the HIV (coefficient Beta = 0.14). Finally, those who indicated a belief that young people who come into contact with blood while fighting or helping an

injured person tended to perceive that those young people were at a higher risk of contracting an HIV infection (coefficient Beta = 0.10).

On the other hand three variables had negative values for coefficient Beta. This implied that *increasing* values of the variable were associated with *decreasing* values for the dependent variable. Those participants who scored highly on the social consequences scale (that is, those who perceived greater social consequences to being infected with the HIV) tended to return lower scores on the risk scale (coefficient Beta = -0.14). This implies a tendency for some participants to associate greater social consequences with lower levels of risk. Similarly, those participants who believed that it was easy for young people to abstain from sexual activity also tended to see less risk of contracting HIV (coefficient Beta = -0.12). Finally, those who perceive that most HIV infection is through mother to child transfer rather than through sexual activity also perceived lower levels of risk of contracting HIV (coefficient Beta = -0.10).

It is obvious that both maturity (senior and junior respondents) and gender both play a part in determining the degree of risk as indicated by the dependent variable. Hence the regression analyses will be repeated for male- and female-only respondents. Finally, regression will be conducted for male junior, male senior respondents and for female junior and female senior respondents.

6.6.3.1. A male verses female comparison

Two new models (Model 2a and Model 2b) were generated by taking the eight significant independent variables identified in Model 1, removing the gender variable

and then regressing the remaining variables against the dependent variable Question 14 ('Most young people of my age are at risk of contracting HIV and AIDS'), firstly with only the male participants (Model 2a) and secondly with only the female participants (Model 2b). Again, the backward stepwise regression process was used. The five surviving significant independent variables (at the 0.05 Level) are to be found in Table 6.8. Collectively these account for 27% of the explained variance in the participants' perception of risk of their peers contracting HIV and AIDS.

Table 6.8 Model 2a: Regression analysis for predictors of perception of risk for male-only respondents

Independent variables (R^2 = 0.269)	**Beta**	**t**	**sig.**
Social/Peer Pressure	.307	3.920	<.001
Maturity Level	.178	2.600	.010
Female Pressure	.168	2.105	.037
Social Consequences	-.195	-2.946	.004
"It is easy for most young people my age to abstain from sex before marriage".	-.181	-2.608	.010

Three variables were positively linked to the dependent variable, 'Risk of contracting HIV'. That is, increases in these variables produced increases in the dependent variable. Of these, the strongest predictor of male students' perception of risk was the Social/Peer Pressure Scale (coefficient Beta = 0.31), followed by level of maturity (coefficient Beta = 0.18) and perception of female pressure (coefficient Beta = 0.17).

Two variables produced negative Beta coefficients indicating that increases in these variables produced reductions in measures of the dependent variable. These included perceptions of social consequences (coefficient Beta = -0.20) and it is easy for young people to abstain from sex before marriage (coefficient Beta = -0.18).

The implications of this model are as follows. Boys were very mindful of those social/peer pressures that induced them to indulge in risky behaviours and this in turn raised their perception of risk of HIV infection. To a lesser extent, those who were more mature perceived the greater risk of HIV infection and those who were more aware of the pressure faced by their female friends also perceived greater risk of HIV infection. On the other hand those who believed that there were social consequences for HIV infection perceived a lesser risk of infection and those who believed that it is easy to abstain from sexual activity also perceived a lesser risk of HIV infection.

Model 2b was generated by applying backward stepwise regression using the same eight significant independent variables identified in Model 1 for female-only respondents. Again, the dependent variable was Question 14 ('Most young people of my age are at risk of contracting HIV and AIDS'). A total of six independent variables survived the process at the 0.05 level of significance. These are to be found in Table 6.9. Collectively, they account for 25% of the explained variance in the participants' perception of risk of their peers contracting HIV and AIDS.

Table 6.9 Model 2b: Regression analysis for predictors of perception of risk for female-only respondents

Independent variables (R^2 = 0.251)	Beta	t	sig.
Maturity Level	.23	4.117	<.001
Female Pressure	.20	3.139	.002
Social/Peer Pressure	.19	3.084	.002
"Young people who come into contact with blood while fighting or helping an injured person are likely to contract an HIV infection".	.14	2.567	.011
"Most HIV infections among young people happen through mother-to-child transmission, not through sexual activity".	-.18	-3.216	.001
Social Consequences	-.12	-2.117	.035

Four of the independent variables returned positive Beta coefficients implying that increases in these variables produced increases in the dependent variable. Of these, the strongest predictor of the female students' perception of HIV and AIDS risk was Maturity Level (coefficient Beta = 0.23) followed by perceptions of Female Pressure (coefficient Beta = 0.20); perceptions of Social/Peer Pressure (coefficient Beta = 0.19); and belief that infection occurred through contact with blood (coefficient Beta = 0.14).

Two variables returned negative Beta coefficients implying that increases in these two variables produced corresponding decreases in the dependent variable. These included: a belief that most infection among young people occurs through mother-to-child transmission rather than through sexual activity (coefficient Beta = -0.18); and a belief that there were negative social consequences to being HIV positive or having AIDS (coefficient Beta = -0.12).

Table 6:10 Comparison of regression results between male and female respondents

Male Only Independent Variables	Beta	Female Only Independent Variables	Beta
Social/Peer Pressure	0.31	Maturity Level	0.23
Maturity Level	0.18	Female Pressure	0.20
Female Pressure	0.17	Social/Peer Pressure	0.19
Social Consequences	-0.20	"Young people who come in contact with blood while fighting or . . . are likely to be infected with HIV"	0.14
"It is easy for most young people my age to abstain from sex before marriage	-0.18	"Most HIV infections among young people happen through mother-child transmission, not through sexual activity"	-0.18
		Social Consequences	-0.12

Table 6:10 brings these two sets of results together. It can be immediately seen that the perceptions of the male respondents and the female respondents are different. For males, the pressure exerted by peers to indulge in those behaviours that, in the opinion

of the respondents, raises the level of risk of infection with HIV is very strong. The remaining variables exert a moderate influence. The more mature the respondents, the greater their perceived risk and the more strongly they perceive the effects of female pressure the greater their perception of risk. As opposed to the effect of these variables, the perception of 'social consequences' and 'agreement that abstinence is easy' have the reverse effect on the perception of risk.

On the other hand for girls there is a cluster of three variables that have a moderately strong effect on the perceived level of risk. These are, in order of strength, maturity (junior or senior), perception of female pressure and social/peer pressure. To a lesser extent, girls believe that contact with blood is a means raising the degree of risk level – though the effect is not strong. Two variables have the reverse effect. Girls indicate that mother-child transmission rather than sexual activity is linked to a decline in the perception of the level of risk. To a lesser extent the belief in social consequences of being HIV positive or having AIDS is also linked to a decline in the perception of risk level.

The important differences lie in the strength of the link between social/peer pressure and the perception of risk among males and the fact that females are more aware than are the males of the pressures for females to acquiesce to sexual activity with older men. Also, females downgrade the effect of heightened social consequences on the reduction of risk.

6.6.4 A gender/maturity level comparison

A fourth model (model 4) was generated by regressing the eight significant factors identified in model one against the same dependent variable, (Question 14 – 'Most young people of my age are at risk of contracting HIV and AIDS') for each of four groups of respondents. These groups were: junior males, senior males, junior females and senior females. These groups were chosen as a result of the analysis of the dependent variable described earlier this chapter. Backward stepwise regression procedures were employed at the 0.05 level of significance. Table 6.11 provides a telling overview of the respondents' perceptions of those pressures involved in gravitating toward at risk behaviour.

Table 6.11 Model 4: Regression analysis for predictors of perception of risk across the respondents separated by gender and by maturity levels

Independent variables	Beta	t	sig.
Junior male students: (R^2 = 0.198)			
Social/Peer Pressure	0.25	2.322	.022
"It is easy for most young people my age to abstain from sex before marriage".	-0.20	-2.012	.038
Junior female student (R^2 = 0.225)			
Social/Peer Pressure	0.27	3.78	.002
"Most HIV infections among young people happen through mother-to-child transmission, not through sexual activity".	-0.16	-2.168	.032
Senior male students (R^2 = 0.272)			
Social/Peer Pressure	0.45	4.460	<.001
Social Consequences	-0.34	-3.435	<.001
Senior female students (R^2 = 0.152)			
Female Pressure	0.33	3.979	<.001
"Most HIV infections among young people happen through mother-to-child transmission, not through sexual activity".	-0.22	-2.667	.009

It can be seen that for each subgroup two variables survived the backward stepwise process at the 0.05 level of significance. In each case one of these variables was positive and the other negative. Further, the percentage of variance of the dependent variable shared by the independent variable ranged from 15% to 27%.

The junior males linked such practices as the use of alcohol, partying and the influence of friends to heightened levels of risk (Beta coefficient = 0.25). In addition they linked increasing measures of the belief that abstinence is easy to decreasing levels of risk (Beta coefficient -0.20).

The senior males also directly linked the same social and peer pressures to increasing levels of risk. However, in the case of the older males, the Beta coefficient had risen to a powerful 0.45, meaning that a one standard deviation increase in measures of the social/peer pressure scale would produce almost a half of a standard deviation

increase in the dependent variable, level of perceived adolescent risk of contracting HIV. For the senior males, the variable measuring the belief that abstinence from sexual activity was easy did not survive the test of significance and was dropped by the regression process. In its place was the variable measuring the strength of the belief that those who were HIV positive would suffer social consequences as a result. This variable was strongly and negatively linked to the dependent variable (Beta coefficient = -0.35). The implication is that, for the senior males, increasing measures of the strength of the belief concerning social repercussions linked with decreasing measures in the level of perceived risk.

The junior females connected the social and peer pressures to the risk of contracting HIV in a manner commensurate with the junior males (Beta coefficient = 0.25). However, they negatively related the belief that most HIV transmission occurred through the association between mother and child rather than through sexual activity to risk level. That is, the more strongly they believed that the main channel of infection was through the mother-child connection, the lower they perceived the level of risk to adolescents.

Finally, for the senior females the social/peer pressure scale failed to survive the backward stepwise regression process. In its place, the female pressure scale was very strongly linked to adolescent risk of contracting HIV (Beta coefficient = 0.33). A one standard deviation rise in the female pressure scale results in one third of a standard deviation increase in the level of risk. Further, the negative connection between the belief that HIV transmission from mother to child was greater than through sexual activity and the level of risk was strengthened (Beta coefficient = -0.22). This meant

that a one standard deviation rise in the belief that transmission from mother to child was greater than through sexual activity caused a corresponding decline of about one fifth of a standard deviation in measures of the perceived levels of adolescent risk.

It is this final regression model (Model 4) that is of greatest importance. The earlier regression models provide the pathway that led the researcher to realise the significance of the separation of the respondents into the four regression groups. The implications of Model 4 will be discussed in the review of this chapter.

6.7 REVIEW

6.7.1 Overview

This thesis is about risk – the respondents' perceptions of the risks faced by adolescents of contracting the HIV. It is also about the respondents' perceptions of those factors (both pressures and behaviours) that help to make them vulnerable to the virus. This section summarises the findings of Phase Two of the study – the quantitative data arising from the survey that was developed from the results of Phase One of the study.

6.7.2 Representation

In total, 593 secondary students completed usable questionnaires. A total of 235 respondents attended 3 private schools and 340 respondents attended 3 government schools – all within the city of Gaborone. These schools were randomly selected. Of the 593 respondents, 133 were junior males (males enrolled in junior secondary schools), 194 were junior females, 99 were senior male and 149 were senior females.

It can be argued that this group forms a reasonable representation of adolescents in Gaborone.

6.7.3 Risk

The respondents to the survey perceived that the general risk of contracting HIV as faced by the average adolescent in Gaborone was high to very high. Phase One of the study found that adolescents were aware that the virus could be transmitted through bodily fluids (Phase One results). Hence 78% of the respondents believed that fighting or helping an injured person placed that person at risk (Item18). They also understood that sexual activity was a major vehicle for infection and yet almost three in every four respondents to the survey agreed or strongly agreed that 'Most adoelescents are involved in *unprotected* sex' (Item 21).

The results of Phase Two of the study indicated that the perceptions of risk among the respondents were by no means uniform – these perceptions were complex. For example, one in every three respondents believed that transmission through mother-to-child contact was responsible for more HIV infections than sexual activity (Item 35) and approximately one in every two respondents believed that it was "easy for most young people . . . to abstain from sex before marriage" (Item 33). What is more it appeared that the respondents non-consciously or unwittingly separated *generic risk* from *personal risk*. The generic risk applied to unknown others out there while personal risk applied to the self and the immediate friends of the self. Generic risk was very high while personal risk was apparently minimised. Generic risk was associated with the behavioural choices (Item 64) made by young people in general. Generic risk was also related to young people's involvement in situations and

activities associated with risk entered into by social teenage groups. It was for this reason that the measure of generic risk of contracting the HIV was later used as the dependent variable for regression analysis.

The degree of risk was perceived to be roughly equal for students attending government schools and those attending private schools and for those from rural villages and those from Gaborone. However the situation in regard to risk and gender was complex. The results indicated that males and females were subjected to different types of pressures that altered the nature of the risks faced.

6.7.4 Scales

6.7.4.1 Information scale

The first of the four scales was the Information scale. The scale basically indicated that a majority of respondents were in general agreement that the combination of governmental sources, teachers and parents provided sufficient information, strategies and skill development to allow adolescents to make those decisions that allowed them to avoid infection. However, statistics indicated (see Figure 6.9) that more than 25% of the respondents disagreed with the message of the scale. The implication is that while considerable and commendable efforts have been made in regard to dissemination of information, there is, in the eyes of the respondents, further to be done. Adolescents need to be kept up-to-date with information and they need to continued development in life skills.

6.7.4.2 Social consequences scale

The second scale was composed of three items that implied certain social consequences to becoming HIV positive or having AIDS. This involved the possible loss of friends, the potential for disgrace being brought to the family and a general inability to live a normal life. Overall a majority of the respondents disagreed with the implications of the scale (see Figure 6.9). For them while there may be some social repercussions to having the virus, for the most part life goes on with a reasonably normal flow. However, more than 25% of the respondents were in agreement that there were certain social consequences to succumbing to the virus.

6.7.4.3 Female pressures scale

The third scale was the Female pressure scale. This scale involved five items related to sexual activities between girls and older men in which money or gifts changed hands or girls were coerced by the authority of social or family position or by use of force. More than 75% of the respondents were in agreement with the implications of the scale.

6.7.4.4 Social/Peer pressures scale

The final scale involves Social and peer pressures. This scale relates to attendance of parties, use of alcohol or drugs, the media and their effects upon sexual activity. Again, more than 75% of the respondents were in agreement with the essence of the scale.

6.7.5 Condoms: Availability and use

Though the seven items related to condoms failed to form a scale they remain important. Responses to these items convey the message that despite the presence of the virus and despite the messages from the government (the ABC strategy), many adolescents were and are involved in unprotected sex (not using condoms). A majority, and particularly the younger respondents indicated that condoms were not easy to access. Though possibly used as an occasional taunt, the beliefs that implied those who used condoms lacked certain elements of courage (neither 'man' for males or 'woman' for females) were not held by a majority of the respondents. However, most respondents felt that it was easier for boys to carry condoms than girls. Girls who carried condoms were labelled "morally loose". So condoms were not generally being used by sexually active adolescents. They were not easy to obtain and when obtained it was socially more acceptable for males to carry them than females.

6.7.6 Regression analysis

6.7.6.1 Loss of the information scale

The information scale failed to meet the 0.05 level of significance in the backward stepwise process. The reason is that the information scale and the dependent variable ('most young people my age are at risk of contracting HIV/AIDS') share less than 1% common variance. In other words, the two variables are unrelated. In the perceptions of the respondents, risk of contracting HIV did not depend upon how much or how little knowledge an individual had. Risk depended upon other elements. Phase One of the study clearly found that risk was linked to behaviours and those factors that influenced behaviours.

This does not mean that information about HIV and AIDS is unimportant. The implication from both phases of this study is that adolescents need to be fully informed and skilled so that they can determine their own courses of behaviour.

6.7.6.2 The final partitioned regression model (Model 4)

Table 6.11 is incredibly informative. It shows that the social/peer pressure lies like a background theme for much of the table. Junior males and junior females were aware that the activities and attitudes of peers had the potential to affect individual behaviours. Such social activities as the attendance at parties, the use of alcohol and sexual activities among friends were seen to have their effects on individual behaviours and thus to raise the level of risk. For the senior males, these influences gelled into a dominant and almost overwhelming impetus to indulge in pleasurable but risky behaviours.

For some junior males the (perhaps naïve) belief that abstinence is easy was linked to a reduced sense of risk. This belief disappeared for the senior boys. This was possibly due to the fact that physical and sexual maturity made the senior boys more aware of the strength and nature of natural sex drives. However, in place of this lost belief, there was a tendency among sufficient of the senior males to potentially link the experience of negative social consequences of having AIDS to a reduction in their perception of risk.

Young females gave evidence of an awareness that social and peer pressures could give rise to influences and behaviours (use of alcohol, attendance at parties and

friends who indulge in sex) that potentially raised the level of perceived risk. However, for some young females the belief that most HIV infections among young people are caused by mother-to-child transmission rather than sexual activity reduced their perception of risk.

For senior females there was a strengthening of the reverse link between the belief about mother-to-child transfer and a decline in the perception of risk. However, the sense of social and peer pressure among the junior girls was replaced by a dominating awareness of the power, financial resources and sexual appetites of some older men. The fact that this awareness of female pressure did not survive the backward stepwise regression process for any other group (junior and senior males, junior females) is significant. It was unique to the senior females who were reaching toward the bloom of their physical maturity. As a group, they alone were aware of this uniquely directed pressure and they strongly linked it to their perception of risk in relation to HIV and AIDS. Perhaps, for the senior females, the strengthening of the relationship between the belief about the mother-to-child transmission and a reduced sense of risk was a way of ameliorating the effect of the strong relationship between female pressure and a heightened sense of risk.

6.8 DEMOGRAPHIC PATTERNS WITHIN THE RESPONSES

The results of the model 4 regression analysis have indicated the importance of the differences in responses to the questionnaire by respondents of different gender and maturity levels. In addition, two distinct socio-economic response patterns became visible in the analysis of the conceptual clusters (Chapter 6, section 6.5). The first involved Batswana students, students enrolled in **g**overnment schools and students

from homes of lower socio-economic status (designated BGL). The second group were more likely to be non-Batswana students, to attend private schools and to come from homes of Higher socio-economic level (NBPH).

In comparison to the NBPH group, the BGL were more likely to perceive less severe social consequences for those with HIV/AIDS and they were more likely to feel that information about AIDS was sufficient. They were more likely to indicate a view that partying and alcohol consumption was common and linked to at-risk behaviour. Further, they were more likely to report that condoms were difficult to access and to indicate a belief that it was not manly/womanly to use condoms.

This chapter has already suggested that the respondents from the NBPH group may come from more economically advantage homes that could be geographically separated from the densely packed suburbs and therefore adolescents from these home may have been somewhat insulated from the real effects of living with AIDS.

6.9 INTERGRATION PROCESS

The following chapter will synthesize the Phase One and Phase Two findings and relate these with the decision making model (Figure 5.1) and the reframing models (Figures 5.2 and 5.3) and will draw the thesis to a close.

CHAPTER 7

THE SYNTHESIS

7.0 OVERVIEW

The previous two chapters have presented the findings from the analysis of the data obtained firstly from phase one (the qualitative component) and then phase two (the quantitative component) of the study. This final chapter focuses on the synthesis of these two separate components and brings the study to its conclusion. The chapter begins with a review of the study purpose and the study method, and then presents a summary of the main findings, discussions and recommendations arising from these findings. Finally the study limitations and strengths are outlined and suggested future directions in research are listed.

7.1 STUDY PURPOSE AND METHOD

The purposes of this study were, firstly, to examine the knowledge, understanding, and perceptions of adolescents living in Botswana in relation to the risks faced by their peers of contracting HIV and AIDS; and, secondly, to gain a greater understanding of their views of practices that have the potential to increase their peers' risk of contracting HIV and AIDS and their views of those factors that influenced their peers to engage in those practices. Finally, the study aimed to explore adolescent perceptions of strategies for prevention of HIV and AIDS infection. Information of this kind may enhance the design and function of HIV and AIDS age-sensitive and culturally-appropriate preventative strategies.

The strategy of asking these adolescents to report on the behaviour as well as the intentions of their peers rather than asking them to disclose their own actions was designed to abide by the requirements of various ethic committees and may have encouraged more open and frank responses.

This strategy also enabled the researcher to go beyond just exploring intentions, which was the focus of many of the Botswana-based adolescent HIV and AIDS studies reviewed (Chilisa et al., 2011a; Modie-Moroka et al., 2011; Onyewadume & Mbingwe, 2011; Pilane et al., 2011; Sedimo & Ngwako, 2011). Intentions do play a part in influencing adolescents' behaviour, but as this study and other studies have noted, intentions do not always result in safe behaviour (Morris, 1996; Myers, 1998). This study therefore explored the perceptions of adolescents living in Botswana in relation to behaviour that, in their view, placed their peers at risk of contracting HIV and AIDS. Further, this study acknowledged the complexity of the society in which the participants of the study and their peers function. Prior studies (see the review of literature) accessing adolescents in Botswana (Chilisa et al., 2011a; Chilisa et al., 2011b) indicated that adolescent intentions to participate in risk behaviour were influenced by a combination of diverse factors which included: a range of ethnic, cultural and traditional beliefs; various Christian views; aspects of western lifestyles that adolescents were exposed to; gender perspectives; differing maturity levels, and types of schooling they were receiving. The views of the participants in the current study were consistent with these prior research findings.

In recognition of this complexity, and to explore the four broad research questions of this study, a Composite Conceptual Framework Model (CCFM) was adopted as a guide. This model merged the concepts of the Health Belief Model (HBM) and the

Theory of Reasoned Action (TRA) model. The concepts of HBM, in particular, guided the study in the design of the qualitative data collection starter questions enquiring about participants' health beliefs and perceptions relating to adolescents' susceptibility of contracting HIV and AIDS, beliefs relating to the severity of HIV and AIDS and beliefs about the utility of possible preventative action. The concepts of the TRA, on the other hand, guided the study in relation to the enquiry into participants' perceptions about the influence of social factors on their intentions and decisions to participate or not to participate in risk behaviours. Besides informing the design of the qualitative research component starter questions, the concepts of the HBM and the TRA provided a broad framework for data analysis and interpretation of this analysis.

In an exploration of the four broad questions that guided this study, an exploratory mixed-method approach was adopted, in which the research was divided into two components: phase one with a qualitative research orientation and phase two with a quantitative research orientation. Phase one (the qualitative research component) accessed a total of 216 participants. The participants' responses, generated through one-on-one interviews, focus group discussions and reflective narratives, were initially analysed utilizing the qualitative data analysis software QSR NVivo 9.0. Guided by the principles of inductive thematic analyses, a system of interrelated conceptual themes was generated from the participants' responses.

The findings of the qualitative data analysis were used to generate the items of the survey questionnaire (phase two) that was completed by almost 600 adolescents living in Gaborone, Botswana. The data from the questionnaire were statistically analysed

using the SPSS 18.0 (IBM Corporation, 2011). Descriptive statistics were calculated to gauge support for the qualitative data analysis conclusions. Then t-tests and ANOVA's were run to locate areas of significant differences between respective adolescent subgroups. Further, linear regression was used to explore relationships between sets of independent variables and the specific dependent variables.

This mixed method approach provided both a rich and detailed understanding of the participants' perceptions of risk and those factors associated with risk in relation to HIV and AIDS. It also permitted an examination of the relationship between perceptions of risk factors and various demographic variables.

7.2 MAIN FINDINGS OF THE STUDY

7.2.1 Research question one

> *What are the participants' perceptions of the degree to which adolescents living in Botswana are at risk of contracting HIV and AIDS?*

The phase two (quantitative) data analysis strongly supported the phase one (qualitative data) conclusion that the majority of participants believed that the risk of contracting HIV and AIDS for adolescents living in Botswana was high. This view is consistent with recent data which indicate the highest incidence of HIV and AIDS worldwide occurs in sub-Sahara Africa (Tim & Suzette, 2004; UNAIDS, 2012a; UNAIDS & WHO, 2000, 2009; UNDP, 2001)

The item and scale analyses of quantitative data indicated that it was the female students, the senior students and students enrolled in government schools, that reported a higher percentage of agreement to this view. It is also important to notice

that both the qualitative and quantitative data analyses indicated that the respondents were more than willing to label their peers as being highly susceptible to contracting HIV and AIDS, while oftentimes excluding themselves and their close friends from the high risk category. The data suggested that many adolescents living in Botswana were transferring significant susceptibility to others rather than fully acknowledging their own risk. The data indicated that most of the respondents perceived that female adolescents were more at risk of contracting HIV and AIDS than were the male adolescents. Once again this perception reflected epidemiological data, which indicates that in Botswana the onset of HIV status is earlier among female adolescents than among males, and females have relatively higher prevalence rates of HIV and AIDS than their male counterparts (Bene & Darkoh, 2012; CSO, 2009; Rakgoasi & Odimegwu, 2013). Studies elsewhere also indicate that females have higher prevalence of HIV and AIDS infections than males (Aulagnier et al., 2011; Bhana & Pattman, 2009; Booysen & Summerton, 2002; Hodge & Roby, 2010).

The data indicate that when the adolescents living in Botswana think about risk for female adolescents in contrast to risk for male adolescents, they think in terms of two separate situations that place them at risk: sexual relationships with their peers and sexual relationships with older men. The regression analyses indicated that those who felt this risk most keenly were the older female adolescents.

The quantitative analysis appeared to contradict the qualitative data analysis relating to risk level for specific sub-groupings. Participants in phase one suggested that those living in the rural areas were more at risk of contracting HIV and AIDS than those living in the city, and also students attending government schools were more at risk

than those attending private schools. However, analysis of phase two found no differences in the perceptions of risk levels for rural and urban dwellers, and public and private school attendees. In exploring the qualitative data further, it was noted that when the respondents were discussing the relative risk of these sub-groupings (in particular students living in rural areas) it was often in the context of the relative difference in knowledge about HIV and AIDS between these sub-groupings. This view parallels that of other researchers exploring the AIDS situation in Botswana. For example, Heald (2006, p. 33) stated that "though 'knowledge' of the disease was probably good in the major urban areas, in the sense that people had heard of it, this did not necessarily hold in rural villages".

There was also a perception held by both government and private school students that the government school students were less likely to be informed about HIV and AIDS, even though they also acknowledged the existence of a greater number of HIV and AIDS school-based programs at government schools. This finding is consistent with studies based in Belgium which also indicated that type of education system, social economic status and maturity level of students, indeed have an influence on students' knowledge relating to myths, transmission, risk behaviour and blood transfusion issues (Rossem et al., 2010). Results from Phase Two indicate that when all factors (knowledge, beliefs and actions) were considered there was really very little difference between any of their peer subgroups in terms of the perception of risk of contracting HIV and AIDS.

Perhaps the most important aspect of the participants' evaluation of the risk of their peers contracting HIV and AIDS, which was strongly reinforced in the quantitative

data analysis, was that they were willing to label 'adolescents in general' as having a high risk, but did not place themselves or their friends in the 'adolescents in general' category. Previous research (Ball, 1996) had also identified this sense of near invincibleness ('it may happen to others but not to me') among some adolescents living in Botswana. However, the extent to which this view that other adolescents may be at a higher risk than themselves was not expected.

In conclusion, pertaining to the level of risk, the Botswana adolescents who participated in this study perceived that the risk of their peers contracting HIV and AIDS was very high, particularly so for their female peers, and this perception paralleled other recent data. Such parallelism with the results of other studies gave the researcher a measure of confidence in the validity and reliability of the adolescents' responses in other domains.

7.2.2 Research question two

> *What are the participants' perceptions of behaviours that have the potential to increase the likelihood that adolescents will contract HIV and AIDS?*

The phase two (quantitative data) analyses strongly supported the conclusions obtained from the phase one data (qualitative component) that nearly all participants saw that the risk to adolescents living in Botswana of contracting HIV and AIDS was almost overwhelmingly due to their own decisions. The participants in the study believed that despite widespread knowledge about HIV and AIDS, Batswana adolescents persisted with behaviours that placed them at risk of infection.

Participants in this study acknowledged that there was potential for HIV transmission to occur through exposure to blood, kissing, use of contaminated drug needles and mother-to-child transmission. However, they identified sexual activities as the greatest of the HIV and AIDS risk factors faced by adolescents living in Botswana. They suggested that this resulted from the frequent participation of their peers in unprotected vaginal sexual activities, often involving multiple partners.

7.2.2.1 Sexual activity

The participants in this study identified heterosexual activity as the behaviour adolescents in Botswana engaged in that had the highest potential of causing HIV infection among them. The literature suggests that adolescents' physical, emotional and mental developmental process, as well as their desire to experiment, potentially reduces their perception of personal vulnerability and has the capacity to increase their involvement in sexual activity (Healey, 2003; Rathus et al., 2002; Rice, 1984). The data indicate that adolescents living in Botswana were involved in sexual activity like many other adolescents elsewhere. What is different about adolescents living in Botswana and the sub-Sahara region, however, is that they are living in societies that have high prevalence of HIV and AIDS (UNAIDS, 2012a). Exposure to HIV infection through unprotected sex is therefore higher than for those living in other regions of the world. A study accessing Batswana adolescents indicated that by the age of 20 years more than half of all unmarried males and females in Botswana have experienced sex (UNICEF, 2001). As highlighted in the literature review, early sexual debut is associated with lower levels of contraceptive use, and with negative consequences such as unwanted adolescent pregnancies and parenthood, lower levels of academic achievement, increased levels of school problems, substance abuse, and

increased sexually transmitted infections, including HIV and AIDS (Baumgartner, Geary, Tucker, & Wedderburn, 2009; Lohman & Billings, 2008).

7.2.2.2 Unprotected sex

Unprotected sexual activity involving non-use of condoms was identified throughout this study as another behaviour that places adolescents living in Botswana at high risk of contracting HIV and AIDS. It is well established that condom-use during sexual intercourse reduces the likelihood of one contracting sexually transmitted infections, including HIV and AIDS (Adetunji & Meekers, 2001; Kayiki & Forste, 2011; Lotfi, Tehrani, Yaghmaei, & Hajizadeh, 2012). The participants suggested possible reasons for this non-use of condoms and these included: adolescents had difficulty in accessing condoms; some adolescents were uncertain about how to correctly use condoms; and many adolescents doubted their efficacy. Finally, participants also intimated that those in long-term relationship often felt that the longevity of the relationship significantly lowered the risk of contracting HIV and therefore there was a tendency for these young people to disregard the need for condom use.

7.2.2.3 Multiple sexual partners

Participants in this study identified concurrent multiple sexual partners as one of the practices that placed their peers at risk of HIV and AIDS infection. Concurrency in this context is defined as "overlapping sexual partnerships in which sex with one partner occurs between two episodes of sex with another partner" (Maher, Waswa, Karabarinde, & Baisley, 2011, p. 3). It is apparent from the data that the adolescents did not always equate the number of sexual partners with the level of risk. Many

participants perceived male adolescents as having a higher number of sexual partners but that this did not necessarily always result in their being at greater risk of contracting HIV and AIDS infection. Rather, the greatest level of risk appeared to be associated with the degree to which there was involvement in sexual activity with those not of their own adolescent community. Female adolescents were perceived to be at a greater risk of contracting HIV and AIDS because of their sexual relationships with older men, which in the literature is commonly referred to as 'intergenerational sex' (Weiser et al., 2006). The literature suggests that intergenerational sex is responsible for transmitting HIV between age groups. Because it is often associated with a disparity in power, intergenerational sex often involves the non-use of condoms because the age difference between older men and younger adolescent females means the latter are less able to negotiate for condom-use (Wyrod et al., 2011).

7.2.2.4 Exposure to contaminated blood

A small number of participants in this study held the perception that exposure to contaminated blood through fighting and assisting a friend when injured is a significant factor that places adolescents at risk of contracting HIV and AIDS. There were also a few adolescents that rated the transfer of HIV from mother to child as a cause of high HIV infection among their peers. Those that held this view were more likely to be junior students rather than their senior counterparts. While it is known that contaminated blood and mother-to-child transmission do occur (CSO, 2009), this study suggests that these factors were perceived to be a lesser risk than sexual activity.

7.2.2.5 Other sexual activities

The participants of this study did not of their own volition mention oral sex, anal sex, masturbation, lesbian or homosexual sex and deep petting as behaviours that may increase the likelihood of adolescents living in Botswana contracting HIV and AIDS. However, when asked, they indicated that such sexual activity occurred among adolescents living in Botswana, but they offered no comment about whether or not these activities contributed to the risk of contracting HIV and AIDS.

There was some evidence to suggest that knowledge of, and experimentation with, a range of sexual behaviours resulted from viewing pornography. Lesbianism and homosexuality are illegal in Botswana, yet homosexuality is one of the activities that are responsible for significant transmission of HIV around the world (Smith, Tapsoba, Peshu, Sanders, & Jaffe, 2009). The dearth of reporting of homosexual activity in Botswana means that there are limited opportunities for programs to include discussions aimed at protecting adolescents from contracting HIV and AIDS through such activities.

Overall, adolescents living in Botswana perceived that the three major behaviours that place their peers at risk of contracting HIV and AIDS are sexual activity, unprotected sex and multiple sexual partnerships.

7.2.3 Research question three

> *What are the participants' perceptions of factors that have the potential to influence adolescents' participation in at-risk behaviours?*

Participants' statements implicated a range of pressures that, in their view, had the potential to influence the sexual behaviour of adolescents. These have been noted in Figures 5.2, 5.3 and 5.4 and will be reviewed in the discussion of the decision-making pathway below.

7.2.3.1 The decision-making pathway

The data elicited in this study indicated that most adolescents living in Botswana initially (that is in their early adolescence) intended not to become involved in premarital sexual activity and to later avoid unprotected sexual activity. Many younger adolescents advocated abstinence until marriage. However, in the view of the participants, in spite of these initial intentions many of these adolescents ultimately and knowingly participated in high-risk behaviours.

If what the participants believed was true of these adolescents, then their knowledge relating to HIV and AIDS generated health beliefs that interacted with their moral and cultural beliefs to produce the initial intentions not to knowingly participate in high-risk behaviours. For many adolescents, these initial intentions must have been overturned in order to permit themselves to participate in these risk behaviours.

The researcher believes that this paradox can be understood in part by surmising a potential pathway by which these adolescents changed or 'reframed' their initial intention to avoid high-risk sexual activity, thus allowing themselves to be involved in

such activity. It was noted that participants in the study suggested that while many adolescent peers indulged in risky behaviour, they acknowledged that not all did. This suggests that there was a point where decisions were made either to participate or not to participate in high-risk sexual activity.

The researcher proposed a five-step decision-making process beginning with adolescents' first contact with information about the AIDS situation in Botswana and their initial decision to avoid at-risk behaviour, and leading to the point where they were caught up in risky behaviours or remained determined to avoid such behaviours (See Figure 7:1). In this model, each preceding step influenced the succeeding step leading to an end result of avoidance of or involvement in those at-risk behaviours.

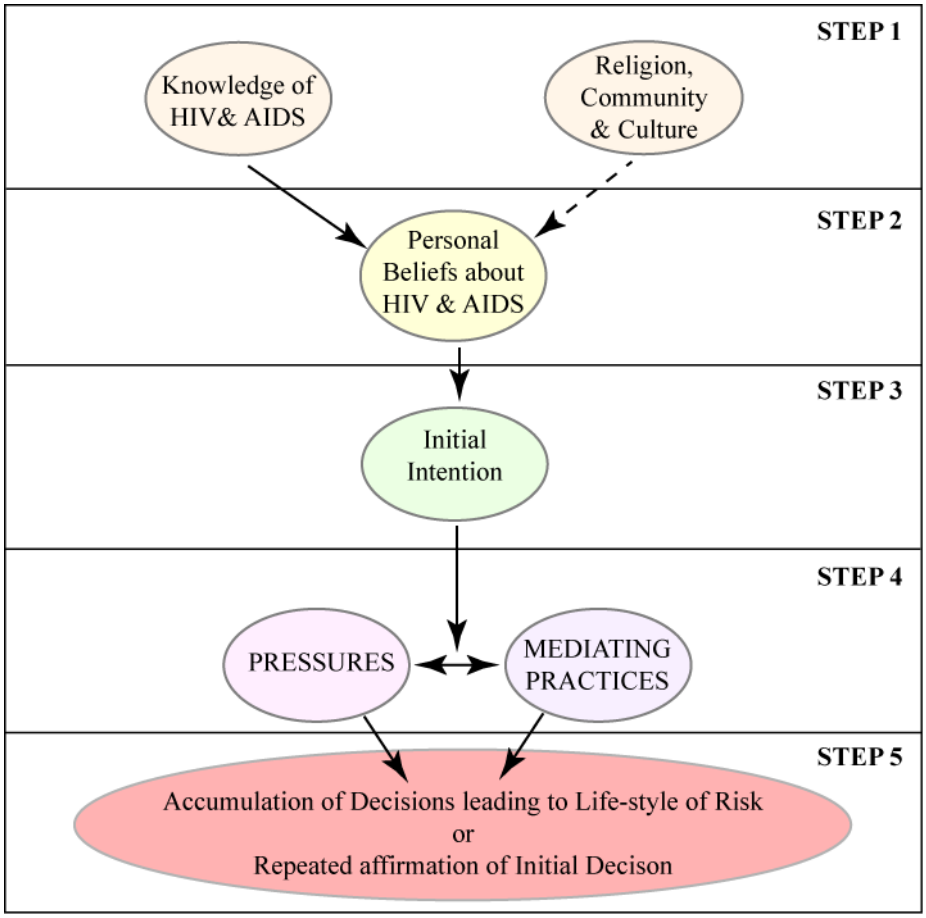


Figure 7.1. The five-step process leading to a life-style of risk or an affirmation of the initial decision to avoid such risk.

In Figure 7.1 the first step in the pathway involves the acquisition of information and knowledge about HIV and AIDS. The findings from the quantitative data analysis indicated that most of the adolescents perceived that they were obtaining sufficient information from a variety of sources about HIV and AIDS. There was general agreement that the sources of information should and did involve the respective authority structures: the government, the schools and parents. For these adolescents the schools were the most effective in dispensing HIV and AIDS information followed by the government and the least effective, in the participants' view, were the parents. According to the analysis, the government ABC (Abstain, Be faithful, Condomise) campaign was seen by most of the participants to be effective in highlighting steps that may be taken to avoid HIV and AIDS infection. This

campaign, however, appealed more to female students than the male students. The data further suggest that some aspects of Setswana cultural values and practices still have an influence on adolescents' thinking for such values as, for example, the appropriateness of having a child before marriage. It is important to notice that most of the participants had the view that traditional culture was losing its influence over adolescents' behaviours as indicated by, for example, the number of young women who become pregnant before marriage.

A number of respondents also noted that there were some common misconceptions about HIV and AIDS circulating within some of their peer communities. However, although the qualitative data (phase one) indicated a number of the common misconceptions that were possibly held by 'others'. the quantitative analysis (phase two), while acknowledging the presence of these misconceptions, found that they were not held by most of the adolescents living in Botswana. The one belief that produced the widest agreement among the participants (while still remaining a minority view) involved the possible transmission of HIV through casual contact with blood, such as helping an injured person.

In general, these findings indicated two things. Firstly, Batswana adolescents believed they were well supplied with information about HIV and AIDS. Secondly, the misconceptions explored were not held by the majority of adolescents living in Botswana and thus had little impact on the behaviour patterns of adolescents living there.. The model above (Figure 7:1) proposes that the knowledge gained by adolescents leads to the second step, the establishment of personal health beliefs.

The participants perceived that their peers (others, not themselves) were highly susceptible to contracting HIV and AIDS and that the consequences of doing so were severe in that they impacted on the physical and psychological aspects of their health, their life styles, and ultimately caused death. As a result, participants intimated that they believed that many adolescents initially intended to avoid those behaviours that put them at risk of contracting HIV and AIDS (third step).

While it could be considered that the intentions to avoid infection could be influenced by the social consequences of becoming HIV positive and showing symptoms of AIDS, the data indicate that this was not always the case. The quantitative data analysis indicated that the majority of the participants perceived that while there were certain social consequences of contracting HIV and AIDS, these consequences were not serious. Life continued after infection.

So, in the view of the participants, the initial intention of Batswana adolescents was to avoid infection. However, the participants' statements also indicated that, for many adolescents, these intentions came under sustained erosion from a number of sources (fourth step). This is the beginning of the reframing process (see Figures 5:1 and 5.2).

The model suggests that the initial reframing stage involves internal pressures – the innate sex drives and the diminution of personal senses of susceptibility. Innate sex drives power an interest in matters related to sex and can create moments of intense passion that can be unexpected and unplanned. For some adolescents this could explain episodes of risk. Generally, the innate drives remained an underlying motivation that supplements certain external pressures and contextual situations that,

for many adolescents, culminate in risk-taking behaviours. Along with this, the process of perceiving others to be more susceptible than themselves to the HIV and AIDS than tends to bolster a perception of invincibility. That in turn, reduces the sense of personal susceptibility and thereby increases the individual's vulnerability to a range of external pressures and contextual circumstances.

The external pressures and mediating practices (see Figure 5.2) include the following: the desire for social acceptance; the desire for involvement in activities engaged in by peers; the influence of the media; unequal partner-power; poverty; misconceptions; partying; consumption of alcohol and drugs; and viewing pornography.

Several questions were added to the survey instrument in the quantitative component to enquire how widespread and influential the indirect peer and direct peer pressures were on adolescents' decision-making process in relation to participation in at-risk behaviours.

For many adolescents the commencement of the fifth step was not necessarily a particular moment when a clear cut decision was made, but rather it reflected an accumulation of many small decisions that caused a gradual involvement in a succession of activities that carried the individual toward a life-style of risk. For those who largely adhered to their initial decision, each new situation involved a reaffirmation of that initial decision not to become involved in sexual activity.

The literature indicates that adolescents find fulfilment and enjoyment in associating together and engaging in social activities (Sternberg & Williams, 2010). Without

adequate parental supervision social groups of post-pubescent adolescents can explore activities that put them at risk. These include partying and indulgence in alcohol, drugs and sex. The media, particularly foreign films and television, reinforce the allure of alcohol and the party scene. They portray a range of enticing images and contexts that whet an appetite for more, an appetite that is intensified through access to internet pornography. Personal phones can hold and transmit sexual images and replay explicit video clips.

Both the quantitative and qualitative analyses indicate that adolescent females encounter intense pressures to be in involved in risk behaviours, pressures that are not experienced by adolescent males. The two major sources of this pressure are firstly, being tempted to be involved in intergeneration sex by the potential for rewards, and secondly, the difficulty in saying "No" to requests for sex by older 'respected' men. Indeed, for the senior female students the strongest predictor of the level of risk of adolescents living in Botswana contracting HIV and AIDS was the degree to which they perceived the pressure to participate in intergenerational sex. Because sex with older men, which was reported as a rather common occurrence, is considered as potentially placing the adolescent females at a greater risk of contracting HIV and AIDS than peer sex, participants perceived that adolescent females were at a higher risk of contracting HIV and AIDS than their male counterparts. Forced sex or rape perpetrated by peers or older men, was also identified as an added risk factor for female adolescents.

The Phase One data indicated that the desire to own material things was linked to adolescents' need for popularity. However, the Phase Two data indicated that

popularity per se was not the driving force in this context. Rather, it was the desire to acquire cell phones or airtime in order to be like others that influenced some aspects of behaviour. This was suggested as a part of the reason that drew some young girls into intergenerational sex.

Unsupervised parties were also points of particular danger for adolescents. Participants indicated that many parties involved the use of alcohol and illicit drugs and encouraged a range of sexual activities from sex games to group sex. According to the respondents, alcohol and drug use was common among their peers and this often resulted in unprotected sex. The results of the study suggested that adolescents became involved in such practices because they wished to be no different from others in their community, and it was much more difficult to say 'NO' when under the influence of alcohol and drugs. Once again, there was a tendency for the respondents to rate alcohol-use as a significant contributing factor in at-risk behaviour for other adolescents rather than for themselves.

The majority of the participants agreed with the view that most adolescents became involved in unprotected sex despite knowing that condoms have the potential to protect the users from contracting the HIV. The data suggest a number of reasons why condoms were not widely used. Firstly, it was not easy to access condoms. Secondly there was a widely held view that it was not 'manly' to use a condom. Thirdly, there was a belief that stocks of condoms were often held beyond their 'use-by' date. Fourthly, there was also a view, held by a significant minority of the adolescents surveyed, that condoms were not always effective or did not provide adequate protection against HIV infection. Fifthly, some adolescents did not know how to use

them, claiming that they did not fit as they were either too loose or too tight. Sixthly, those in long-term relationships often disregarded the use of condoms. Finally, these factors were exacerbated by the perception that it was culturally and socially unacceptable for female adolescents to carry condoms or to control their use in sexual encounters.

As discussed earlier, the adolescents in this study were aware that condom-use was meant to provide protection against pregnancy and transmission of infection. However, accessibility was and is a complex issue. There are numerous outlets for the sale of condoms and condoms are also freely available from most Botswana government clinics. But there are age-limitations in obtaining them. A number of participants in the study voiced the opinion that an increase in availability of condoms would increase sexual activity amongst their peers. It is likely that this reflects a wider community opinion that is related to the establishment of legal age-limits on obtaining condoms.

For many adolescents these pressures and contextual activities (see Figures 5.2, 5.3 and 5.4) sweep good intentions away and progressively draw individuals into pleasurable but dangerous behaviours involving unprotected sexual activity and sex with multiple partners. However, some adolescents will remain determined to protect themselves.

7.2.4 Research question four

> *What are the participants' perceptions of strategies that would contribute to a reduction in the likelihood of contracting HIV and AIDS among adolescents living in Botswana?*

Participants' statements implicated a range of prevention strategies that include potential governmental actions, parenting activities, and responsibilities that adolescents should assume.

Section 5.7 presented the participants' perceptions about a range of prevention strategies they believed could reduce HIV and AIDS infection among their peers. For these participants the government, their parents, teachers and other significant people within their communities and the adolescents themselves all need to play a part if there is to be a reduction in adolescents' HIV and AIDS infection rates.

Firstly, the participants perceived that it is the government's role to lead out in the following preventive strategies:

1. The government should increase the distribution of HIV and AIDS information that is age-sensitive, age-relevant and culturally appropriate. The government should use a range of different media and information channels but concentrate efforts on those that will deliver to adolescents. Participants mentioned community clubs and organisations that are frequented by adolescents and indicated that community programs and meetings should be attractive and relevant to these adolescents. These programs should directly involve adolescents in their organisation and their discussion processes.
2. The government should require schools to set aside specified times for HIV and

AIDS prevention lessons and discussions.

3. The government should review the curriculum related to HIV and AIDS to ensure that key information is present. Such a curriculum should be wide-ranging and be aimed at preparing adolescents for the world they will inhabit. They should be equipped with the skills to handle a range of pressures especially, in the context of the HIV and AIDS epidemic, enticement to engage in at-risk sexual behaviour and to be more discerning is accessing the media's insidious potential to present content in sexually appealing ways.
4. The government should re-examine adolescent access to alcohol and drugs. The researcher acknowledges that legislation is not going to stop adolescent access to alcohol and drugs and hence consideration should be given to alternative social strategies that will minimise use.
5. The government should ensure that condoms are more freely available and accessible to adolescents. This should also involve a reconsideration of legal age-limits.
6. The government should ensure that counselling centres and clinics become more adolescent user-friendly.
7. The final point is an implication arising out of the data and stems from regression analysis relating to the perception of senior female students that their risk of HIV infection is connected to older influential males seeking sexual favours. The government really should attempt to counter a culture that turns a blind eye upon the actions of older, and often powerful, men who prey upon young women.

Secondly, the participants suggested that it was their parents' role to lead out in the following preventative strategies:

1. Parents should be encouraged to openly discuss aspects of sexual matters and moral values with their adolescent children.
2. Parents should be role models that their adolescent children can emulate on issues pertaining to family relationships and meaningful sexual relationships.
3. Parents should provide reasonable supervision of their adolescent children's activities.

Thirdly, participants felt that it was the responsibility of elders, community leaders and particularly schoolteachers also to contribute to these same preventative strategies. The participants' responses implied that it was in many instances easier for adolescents to interact with teachers than parents in these matters and thus perceived this interaction to be potentially very effective. These adolescents perceived that their society does not provide them with good role models in terms of sexual matters and that the media presents extremely poor role models to these adolescents.

Fourthly, the participants indicated that the adolescents had a responsibility to make decisions. Their responses implied that:

1. Adolescents could decide to avoid premature sexual involvement, which they implied would mean abstinence until a permanent and ongoing monogamous relation was established (most often through marriage).
2. Adolescents could decide to take appropriate precautions (use condoms) and avoid situations where the social environment and/or the use of alcohol meant that were at risk of having unprotected sex, and particularly unprotected sex with multiple partners.
3. Adolescents could bolster their initial decision to avoid risk behaviours by

associating with others who had made similar initial decisions – this would include such strategies as associating with adolescents in Christian communities and/or appropriate community clubs.

7.2.5 Differences across demographic characteristics

Despite the variation in views held by the participants, analyses of the quantitative data indicated the presence of discernible trends across the respective demographic characteristics.

The vast majority of the participants perceived that the risk of contracting HIV and AIDS was very high for adolescents living in Botswana. However, a significantly greater number of junior students compared to senior students, females compared to males, and those from the BGL cluster (Batswana students, Government school students and students from homes of Lower socioeconomic status) as compared to those from the NBPH cluster (non-Batswana students, private school students and students from higher socioeconomic homes) held this view.

The majority of the participants reported that in their view there was no difference in the level of risk between adolescents living in different communities and going to different types of schools. However, a higher proportion of students from the BGL cluster as compared to the NBPH were of this opinion.

The majority of the participants, independent of gender, maturity and socio-cultural background, perceived that HIV and AIDS information from teachers, parents and

government was adequate. However, a significantly greater number of junior students as compared to senior students and those from the BGL cluster as compared to the NBPH cluster held this view.

With respect to the reframing stage in the decision-making process, most of the participants perceived that the impact of the broader social consequences of contracting HIV and AIDS were not all that high, with the junior students, the female adolescents and the BGL students cluster returning significantly higher percentages with this view. On the other hand, senior male students were more aware of the social consequences of being HIV positive and linked a realisation of the social consequences (to the self and to the family) of having AIDS directly to a moderation of those behaviours that potentially elevated the risk of HIV infection.

The survey results showed that there was no gender and socio-cultural background difference among those who expressed views relating to misconceptions about HIV and AIDS, but there was a difference between the maturity levels. Even though most students appear not to hold the common misconceptions about HIV and AIDS, when misconceptions were held it was more likely to be the junior students rather than the senior students who held these misconceptions.

Whilst the majority of the participants felt there were significant external pressures placed on female adolescents to be involved in sexual activity from the offer of material rewards in exchange for sex and sexual requests from powerful men, it was the BGL cluster students and females that reported this pressure more frequently. It

was, however, the male students and the junior students who felt peer pressure and social acceptance pressure the most.

The majority of the respondents perceived that sexual activity, sexual activity with multiple partners and unprotected sex were the major behaviours that placed their peers at risk of contracting HIV and AIDS, but it was the female students rather than the male students who perceived that adolescents living in Botswana were involved in these risk behaviours. Once again the majority of the respondents perceived that alcohol consumption was likely to lead to risk behaviours. However, it was the female respondents, the seniors and the BGL cluster of students that rated this view the highest. Condom accessibility was seen to be difficult by around half of the participants, but a greater number of junior students and BGL cluster students held this view. There was no gender difference with this view.

The partitioned regression analyses of the participants provide a glimpse of the way the views of male and female participants in the study evolved as they matured (see Table 6:11). Junior males, junior females and senior males acknowledged the strength of peer influence or peer pressure to indulge in a range of social behaviours that placed individuals at risk of contracting the HIV. In all three situations the social peer pressure to indulge in these risk behaviours was the strongest predictor of their perception for the risk of HIV infection. In other words, for junior students, and particularly for the senior male students, it was this indirect and direct peer pressure that most often compromised their resolve to say "NO" to requests for sex.

Junior males somewhat naively believed that it was easy for most young people to abstain from sex before marriage and that such abstinence reduced their perception of risk. This changed as the junior males entered further into adolescence. Among the senior males the linkage between social peer pressure (to become involved in risk behaviours) and the risk of HIV infection became exceptionally strong while the naïve acceptance that abstinence was easy totally disappeared. In its place there grew a realisation that there were social costs to contracting AIDS and these costs did provide a deterrent that somewhat reduced the ultimate risk of contracting HIV.

Regression analysis of data supplied by the senior female students revealed their perspective on the risk of HIV infection. In their view, the strongest predictor of risk of HIV infection was the variable constructed around pressure brought to bear on them by older influential males who used either their authority or their access to economic inducement, or a mix of both, to satisfy their own sexual appetites. This created an environment of risk that was unique to older female adolescents.

7.3 DISCUSSION AND RECOMMENDATIONS

One of the major findings of this study is the understanding of the two-stage nature of the decision-making model (see Figure 5:1) relating to participation in risk behaviour among adolescents: an initial intention stage followed by a reframing stage due to the impact of pressures and mediating practices on the development of the decision-making pathway shown in Figure 7.1. The decision-making model suggests that reduction in risk behaviours by these adolescents will be brought about by increasing the strength of the initial intentions and reducing the impact of these pressures and mediating practices, and developing in these adolescents skills to significantly

increase their ability to withstand these pressures, pressures often experienced at or near to the point of final decision-making.

7.3.1 Initial Intentions

The strength of these initial intentions was, to a large extent, dependent upon the adolescents' understanding of their vulnerability and susceptibility to contracting HIV and AIDS and the consequences of the infection, along with the suite of values acquired from their religious, cultural and family communities.

The participants in this study acknowledged that all adolescents living in Botswana were at high risk of contracting HIV and AIDS. Such an acknowledgement is a positive first step towards the acceptance that they are vulnerable and susceptible to HIV infection. It is therefore reasonable to conclude that the programs and initiatives as implemented by the government of Botswana, teachers in various schools, parents and organisations are somewhat effective in sensitizing adolescents to the risks of HIV infection. Reduction in HIV infection among adolescents in Botswana will therefore depend on continued efforts to reinforce such programs which highlight the levels of risk to which these adolescents are exposed and importantly, equip adolescents to avoid or minimise those risks.

It is, however, worrisome that this study confirms the results of Ball's (1996) work, which found that adolescents do not believe that they are 'personally' likely to become infected. The tendency of excluding themselves and their closer friends from personal susceptibility has negative implications and may for example, create a false sense of uniqueness and hence a sense of invincibility to infection. Such views

undermine the Botswana government programs and all other intervention programs that work towards sensitizing adolescents that they are personally vulnerable and susceptible to contracting HIV and AIDS.

It is recommended that current and future interventions and programs that target adolescents in Botswana need to systematically address and correct such views and aim to make adolescents aware that they are personally susceptible to HIV infection. The present campaigns and programs need to add an element that reinforces the fact that while adolescents in general are exposed to a high risk of contracting HIV and AIDS, they and their closer friends are, in particular, also personally at risk.

While acknowledging personal risk, participants in this study perceived that female adolescents were at a higher risk of contracting HIV and AIDS than were their male counterparts. It is important to notice that one of the implications of this perception is that males may develop a false impression that they are somewhat less susceptible and perhaps even immune to infection, thereby reducing their resolve to take preventative measures. This might be the reason this and other studies (Senn, Carey, Vanable, Urban, & Sliwinski, 2010; Townsend et al., 2011) have indicated that while both male and females adolescents are involved risk behaviours, it is the male adolescents who appear to be more generally involved in such behaviours as the non-use of condoms and engaging in multiple sexual partnerships. To counter this perception the current and future intervention programs need to highlight the fact that male adolescents are also at significant risk of contracting HIV and AIDS if they participate in risk behaviours.

The data indicate that the majority of the participants perceived that the introduction of ARV treatment has meant that most people with the HIV are living a 'relatively' normal life. The consequence of this view would normally be to reduce the strength of the adolescents' initial intention not to participate in risk behaviour. It is important then that the present intervention programs should emphasise that the lack of observable symptoms of the HIV infection does not mean that a person is HIV free and cannot transmit the virus to others. Further, such intervention programs should also emphasise the vital observation that prevention of HIV and AIDS infection in the first place is better that alleviating its effects afterwards.

Finally, the participants perceived that initial intentions can be further strengthened if religious, cultural and family adult members provide adolescents living in Botswana with better role models, ones that significantly reinforce positive values relating to HIV and AIDS risk-reduction practices. This also means that society in general needs to take a stand against predation by older and more influential males who use status and affluence to satisfy their sexual appetites.

7.3.2 Decision-making: Factors that Potentially Reframe

Analyses of the data in this study indicate that participants perceived that while the majority of their peers' initial intentions were to avoid risk behaviour, such initial intentions were often reframed. These adolescents have implied or identified a number of situations and factors that influence this reframing process.

7.3.2.1 Natural Sex Drive

One's natural sexual drive, resulting from the surge of hormones during pubescence, has been identified or suggested by adolescents involved in this study as a factor that influences the reframing of adolescent decision-making to participate in risky sexual activity. This is certainly consistent with the transition in views from that of the junior boys who believe that abstinence is an "easy" way of reducing ultimate risk of infection, to the perceptions of senior boys for whom abstinence is not a realistic consideration (see the partitioned regression analyses in chapter 6).

There are very few reported public campaigns in Botswana that make direct reference to assisting adolescents in handling natural sexual drives. While omission of this topic may be due to cultural sensitivities and the assumption that it is covered in human anatomy and development subjects in school curricula, there remains an urgent need for open, culturally appropriate and frank discussion about one's natural sexual drive, to assist adolescents in handling these drives.

7.3.2.2 External Pressures

The participants have also identified a number of external pressures that influence the reframing process. These include peer and social pressures, media influence, socially long-term partner apathy. According to the participants these pressures are mediated by alcohol consumption, attending parties, viewing pornographic material and particularly for female adolescents, the prospect of material rewards for sex.

Peer pressure has been identified by participants in this study as a strong influence that often reframes initial intentions to avoid the risks posed by social behaviours to

HIV infection. Several parallel studies have also identified peer pressure to be associated with influencing risk behaviours among adolescents (Kuntsche et al., 2014; Mulugeta & Berhane, 2014).

This study identifies the pressure of social acceptance, where most adolescents want to be included in those activities that 'everybody else' in their age group is doing, as a major aspect of risk. Other studies have also identified the need for social acceptance among adolescents as a major cause of involvement in risk behaviours (Janssen, Mathijssen, Bon-Martens, Oers, & Garretsen, 2014).

According to the participants, the media, which includes TV, newspapers, radio, internet, video and magazines, has a strong influence on the inquisitive minds of adolescents. While some media material can be inspiring, educational, entertaining and motivational to adolescents, other elements can be destructive. Participants in this study indicate that most of their peers are accessing and sharing pornographic material that influences and promotes behaviours that place them at risk of HIV infection. Such behaviours include involvement with multiple sexual partners and the non-use of condoms.

Given the dire effect that AIDS has on the people of Botswana and its effect on the national economy, government could open discussion about the ethics and advisability of instituting some means of electronically identifying and blocking websites considered to portray dangerous practices.

Controlling adolescents' access to internet pornography is a difficult challenge and any such efforts needs to be supplemented by a concerted campaign by government and community agencies, schools and families to help adolescents recognise the inherent dangers of pornography and to be selective in what they choose to watch. In their recommendation for possible prevention strategies and suggestions, these adolescents have suggested that the government has a role in coming up with programs that educate about HIV and AIDS. The media can be used by the government for interactive, entertaining yet educational programs about HIV and AIDS. Currently Botswana has a TV programs called 'Talk Back' which presents among other things HIV and AIDS educational messages that target the youth. However, a recent study has indicated that 'Talk Back' programs have not been very successful in educating adolescents about HIV and AIDS because of the content of the messages as well as the way they are presented (Nleya & Segale, 2013). It is therefore recommended that future TV 'Talk Back' programs should be more appealing to the youth and include those issues that adolescents actually perceive to be of concern to them. This could well mean that further research should be conducted into this aspect.

Respondents to the study have associated attendance at parties, where alcohol is consumed, drugs are used and sexual activities engaged in, with a lack of parental supervision. They perceived that parents should provide closer supervision and that this will reduce the pressure to participate in risk behaviour that can result in contracting HIV and AIDS. Programs that address preventative strategies in the fight against HIV and AIDS should, therefore, include alerting parents to the real risks inherent in unsupervised adolescent parties and equipping them with ways of more

closely supervising their children's activities, especially those that involve the attendance at such parties.

7.3.2.3 Unsafe Sex

The debate as to whether it is morally right to make condoms available to adolescents is one in which all people in Botswana must engage. Participants in this study have indicated that condoms are available in Botswana, but that they are not readily accessible to them. This is mainly due to the stigma that is associated with buying or obtaining them. Those who advocate against condom accessibility to adolescents say that placing condoms in the hands of adolescents is actually promoting promiscuity and has the effect of increasing sexual activity among them. The participants in this study, however, did not see a direct connection between condom accessibility and the frequency with which their peers' became involved in sexual activity. Others have expressed the same thought that condom accessibility does not necessarily increase sexual activity but rather provides protection against HIV infection among adolescents (Blake, Ledsky, Goodenow, Sawyer, & et al., 2003; Guttmacher, Lieberman, Ward, Freudenberg, & et al., 1997; Guttmacher, Lieberman, Ward, Radosh, & et al., 1995). While it is beyond the scope of this study to have a position in this debate, there are very few studies carried out in Botswana on the topic of condom availability to adolescents and it is highly recommended that Botswana as a country should consider this important subject. At the centre of this discussion must be the overall wellbeing of Botswana's adolescents. Such a discussion must also include parents, traditional leaders, community leaders, educators and policy makers.

7.3.2.4 Girls and Intergenerational Sex

Participants had a lot to say about 'Sugar Daddies' and those who use cultural or family authority to prey upon young, vulnerable female adolescents. Often these adolescents come from poor families and are enticed into sex for money or gifts. Virgins are frequently targeted for unprotected sex because of the 'cleansing' belief held by some predators. Participants even hinted at situations in which some adults involve pre-pubescent adolescents in sexual activity because of a belief that these adolescents cannot be infected with the virus. The majority of these activities are outright child abuse. There really needs to be a public conversation about ways of curtailing these kinds of activities. They are obviously illegal and should be abhorrent to public sensibilities.

The participants observed that girls are also having sexual relationships with older men, often because of the gifts or money they receive in exchange for sex. Further, they noted that most often in such relationships it is the female adolescents who have the lesser negotiating powers. This also applies to the use of condoms and that in turn places them at a greater risk of contracting HIV and AIDS.

It is for these reasons that the design of current and future intervention programs should be gender selective. Some programs should focus upon female adolescents and be specifically directed at helping them to become aware of the difficult situations that relationships with older men will place them in. Such programs should not only encourage female adolescents to refrain from such relationships, but also help them to deal with the pressure associated with the offer of money and gifts from older men, and equip them with the resolve and the life skills to decline such offers in a culturally

appropriate and respectful way. Parents must see it as their responsibility to provide advice and direction to their daughters and to counsel them in money matters.

The government should assume responsibility to deal with intergenerational sex as a matter of policy. In particular, child sexual exploitation by adults should be specifically targeted and perpetrators punished. Further, consideration should be given to facilitating the reporting of incidents of abuse and empowering adolescents to deal with mediating factors that encourage these practices.

7.3.2.5 Males and Countering Social Pressures

On the other hand, programs focussed on male adolescents should place emphasis on the risks associated with partying, alcohol and drug-use, sexual activity, non-use of condoms and multiple sexual partners.

Analyses of the data suggest that younger adolescents are likely to hold a greater number of misconceptions about HIV infection than those who are older. Young males also naively assume that it is easy to abstain from sexual activity. As these young male adolescents grow older, the more they understand the exposure to the risk of contracting HIV and AIDS and the more they appreciate the connection between risk behaviours and HIV infection. This is the period when they begin to feel the strength of the inner sex drives and become exposed to many more social pressures, and this often causes them to jettison their former belief that abstinence is easy. This does not mean that abstinence until marriage is not a realistic option, but that maintaining non-involvement in sexual activities is increasingly difficult with age.

7.3.3 Personal Responsibility

Both the qualitative and quantitative analyses have indicated that the majority of adolescents living in Botswana perceive that the risk of contracting HIV and AIDS for adolescents living in Botswana is overwhelmingly due to their own behaviours. The acknowledgement that the risk of HIV infection among adolescents is mainly due to their own actions is a positive element and important in facilitating behavioural change during the reframing process of decision-making.

Taking full responsibility for and acknowledging one's actions is a first step towards behavioural change. Implementation of programs among adolescents that are aimed at increasing resolve to avoid risk behaviours will depend partly on reinforcing this belief of personal responsibility. Intervention programs need to make good use of this acknowledgement by adolescents of their contribution to the problem and by implication, to the solution.

While it is commendable to encourage adolescents to completely abstain from sexual activity before maturity and marriage, it is unreasonable to assume that all adolescents will actually do so. Intervention programs among adolescents living in Botswana should acknowledge the multiple internal and external pressures faced by adolescents. As noted in other studies, campaigns that focus on abstinence alone have not been effective in influencing adolescents to avoid sexual activity that result in HIV and AIDS infection (Cabassi, 2004; Merson et al., 2008; Underhill et al., 2007). This and other studies indicate that the reduction of the risk of HIV and AIDS infection among adolescents is dependent on addressing several elements of adolescents' perceived realities in their lives, rather than focusing simply on abstinence.

7.3.4 Participants' Perceptions of Needs

Participant's statements indicated over and over again that in many situations the adolescents were not only seeking greater understanding of the facts about HIV and AIDS, but were, more importantly, asking for pertinent 'information' on how to enhance their life skills, particularly the skills of negotiation to better equip them to handle the pressures that entice them to participate in risk behaviours. This would in particular, involve activities that develop the confidence and ability to say 'NO' to involvement in risk behaviours in ways that are socially and culturally appropriate. Again, this is particularly pertinent to the older teenage girls who are propositioned by mature and often influential men who use either power or gifts to gain acquiescence.

There is a great need to assist adolescents to recognise the negative effects of these pressures and to give them the life skills necessary to handle them. Such skills should focus on assisting adolescents to be alert to the subtle form of these pressures, and to provide them with the tools that allow them to pause and reflect on the possible negative outcomes if they pursue certain actions. These tools should provide adolescents with socially acceptable ways of disengaging from risk activities. Ultimately this is about equipping adolescents with those skills that enable them to say 'NO' to their peers when being enticed to engage in at-risk behaviour.

It is therefore recommended that age-sensitive, gender-specific programs be developed that recognise the changing beliefs related to maturity levels. The programs for younger adolescents (junior secondary school students) could focus on factual information about HIV and AIDS, while programs for older adolescents (senior secondary school students) could emphasise preparation for handling those age-

specific social pressures such as: dealing with intergenerational sex; attendance at unsupervised parties, avoidance or minimisation of alcohol use, avoidance of drug abuse and making mature and safe decisions in relation to sex. These programs should also foster open discussion about the potential negative effects of peer pressure and the blind desire to secure social acceptance, as well as promote skills of discernment and good judgement.

7.3.5 Taking Responsibility: Government, School Curricula and Community

The implications from both phase one and phase two of the study are that it is the responsibility of elders, community leaders and particularly school teachers, as well as parents, to adopt and execute HIV and AIDS preventative strategies. This means the creation of an environment that is as safe as possible for adolescents and that fosters development of the life skills that they need in order to handle increased social pressures as they transit toward adulthood.

The participants' responses suggested that it was often easier for adolescents to interact with teachers than with parents. Yet they indicated that school curricula in Botswana do not feature classes devoted to HIV and AIDS. It was reported that some school teachers are pro-active and role-play aspects of life skills and ways of declining involvement in sex, and that these can be effective tools in enhancing the adolescents' ability to effectively deal with pressures to be involved in risk behaviours. These kinds of activities could well be considered for expansion and inclusion in a wider curriculum. However, if instituted, a specific HIV and AIDS curriculum needs to be reviewed regularly.

Participants' statements indicated there were significant social pressures to become involved in either sexual activity or situations that foster sexual activity. These situations include pressure to attend parties that press the boundaries, and pressure to be involved in alcohol and drug use. These social pressures increase and change with age and also involve modern means of communication between adolescents, such as the ability to transmit information via video clips. Therefore, in structuring HIV-sensitive curricula, schools need to take account of the changing nature of these issues, including social media. Some participants indicated that the latter focus is missing in current programs.

This thesis strongly recommends that school curricula provide specific class sessions devoted to the personal development of students, including matters involving AIDS and the social skills needed to negotiate matters related to those social pressures related to risk. It is also recommended that schools provide teachers who have undergone professional development courses to teach these sessions, and that class sessions permit students to discuss these matters and hear from their peers.

It is recommended that the government and community agencies continue with their present HIV and AIDS programs, and that in doing so they look at ways of making the counselling centres and clinics more adolescent friendly. Further, it is recommended that the government re-examine policy, laws and the enforcement of laws related to the use of alcohol by minors.

The government and community need to re-examine the situation surrounding

adolescent access to condoms. There is evidence to suggest that access does not necessarily contribute to wider sexual activity and promiscuity hence the government and communities in Botswana could look at possible ways to increase such access.

Participants in the study gave strong evidence that adolescents living in Botswana are keenly driven by the desire to conform to what they consider to be the social norm for adolescents – that is, to participate in those behaviours that 'everybody else' is doing. Therefore, it may be appropriate for a range of programs – promoted by government agencies, media, schools, and local communities – to enable adolescents to be more discerning in their perception of accepted adolescent social norms. The aim is to change the adolescent perception of how people behave in a specified situation. Research has indicated that this is possible (Cialdini, Kallgren, & Reno 1991).

Finally, participants indicated that many older female adolescents do face additional risk from the desires of certain older men who have the means to command or tempt them into sexual activity. Community-wide conversations about this practice, and police action where this contravenes the law just may contribute to changing this situation.

7.3.6 Overview

Multiple approaches are needed in order to achieve the goal of equipping adolescents with competencies that strengthen their intentions to avoid risk behaviours and promote their skills to handle pressures to engage in such behaviours. These approaches need to explore methods to enhance adolescents' knowledge, strengthen

positive values, reduce internal and external pressures faced on a day-to-day basis and, in particular, increase their negotiation skills. Intervention programs need to be gender and age sensitive and public campaigns should consider adopting a behaviour-change orientation. The government needs to take strong action against situations that permit intergenerational sex. Finally, it is apparent from this study that the Botswana Government and community leaders need to lead out in open, frank and adolescent-inclusive discussions relating to community attitudes towards HIV and AIDS reduction, including the strategies to be employed to reduce infection rates and facilitates adolescent access to condoms.

7.4 LIMITATIONS OF THE STUDY

The first limitation relates to the sample. Participants in the study were secondary school students from the city of Gaborone. This means that adolescents who were not attending secondary school were not represented and potentially those from regions beyond Gaborone. However, many adolescents from outlying regions of Botswana do come into the city for secondary education and so there would be a degree of representation of adolescents from distant regions in the sample. Nevertheless, it means that care must be taken in generalising these findings to all adolescents in Botswana.

Secondly, care does need to be taken in generalising from the decision-making model detailed in chapter 5. This study did not explore the antecedents relating to personal, moral and cultural beliefs that certainly would have had an influence on the participants' perceptions of risk. Future research studies on such antecedents would

add value to understanding how such beliefs influence adolescents' perceptions of risk.

Thirdly, while the study aimed at an examination of behaviour related to HIV infection, ethics considerations (particularly the requirements of the Ethics Committees involved) meant that participants in the study could only be questioned about their perceptions of the behaviours of others rather than seeking the participants' descriptions of their own behaviours. This kept the description of behaviours at 'arm's length' and meant that a degree of care needs to be involved in reading the interpretations and conclusions reached in the study.

7.5 STRENGTHS OF THE STUDY

This study combined the complementary strengths of both qualitative and quantitative procedures in data-gathering. Collectively, a wide range of procedures was used in generating data. These procedures included interviews, focus groups, reflective narrative writing and responses to a questionnaire. In both research phases standard forms of analyses were employed. Further, a total of 216 participants were involved in phase one of the study and 593 respondents provided usable results to the questionnaire (phase 2). These are substantial numbers and contribute to a degree of robustness in the results and conclusions.

7.6 UNIQUE CONTRIBUTIONS OF THE STUDY

This study does make a unique contribution to the knowledge surrounding adolescent behaviours that relate to HIV infection in Botswana. Prior studies in Botswana were limited to the stated intentions of the participants in the study. One of the significant

contributions of this study relating to adolescents perceptions of HIV and AIDS issues in their community, is that it went beyond an exploration of the participants' intentions to an indirect exploration of adolescent behaviour. This permitted an examination of the participants' perceptions of risk of HIV infection along with their perceptions of those factors contributing to involvement in risk behaviours, and weighting these factors in a regression relationship. The result was a decision-making model that describes the reframing process that, for many adolescents, degrades and destroys their initial intention to refrain from activities that put them at risk of HIV infection. Consideration of this model leads to an array of recommendations for future action.

7.7 DIRECTION OF FURTHER RESEARCH

Based on the findings of this study several suggestions are made relating to future and further studies in the area of prevention of HIV and AIDS among adolescents in Botswana.

1. Because this study was limited to adolescents living in Gaborone, future research could therefore seek possibilities of accessing adolescents residing in other parts of Botswana. Such extended studies would provide a more complete picture of adolescent perceptions and behaviours in relation to HIV and AIDS.
2. Future studies could also explore perceptions of children (before age 12) and young adults (those beyond 18 years of age). Data gathering from these two age-groups would require totally different methods. However, research among young adults (assuming anonymity and informed consent) would permit a more direct examination of personal behaviour than the methods used in this study. Further,

such studies could include data about retrospective risk behaviours from those who are HIV positive or who have AIDS.

3. While this study accessed secondary school students only, there are many out-of school adolescents who are part of the Botswana society. Future studies that also include their involvement would enhance understanding of these issues.
4. There are many players involved in issues pertaining to HIV and AIDS prevention. At least, this includes teachers, parents, community leaders and significant others in contact with adolescents living in Botswana. Studies that include the exploration of their opinions, perceptions and roles in the lives of adolescents are needed to generate a greater understanding of adolescent behaviour in these contexts.
5. Longitudinal studies are needed to test the two-stage nature of the decision-making pathway model presented in this study. Long-term studies would be ideal for future research to identify the nature of those factors that influence changes in perceptions, beliefs and behaviours in relation to HIV and AIDS.

7.8 CONCLUSION

Adolescents living in Botswana perceive that their peers are at great risk of contracting HIV and AIDS and see a role for all significant players including, the government, parents, teachers and the adolescents themselves. In order to be effective, these plans and strategies must be based on up-to-date information garnered from those who are potentially susceptible to the disease – the adolescents. This study provides such information.

This study has confirmed that sexual activity, multiple sexual partnerships, non-use of condoms and intergenerational sex involving adolescent females are the four major behaviours that place adolescents living in Botswana at risk of contracting HIV and AIDS. Because of the high rate of HIV infection in Botswana, indulging in these practises will continue to undermine efforts to reduce the HIV infection rate among adolescents in Botswana.

This study developed a two-stage model that describes the reframing of an initial intention among adolescents to refrain from behaviours that place them at risk of HIV infection. The first stage describes the formation of the initial intention. This initial intention is influenced by the accumulation of accurate information, the positive effects of religious, moral and cultural beliefs, a sense of the severity of HIV and AIDS, coupled with a belief that all adolescents are potentially susceptible to infection. The second stage describes the nature of internal and external pressures that degrade or have the potential to degrade the initial intention. The effects of the reframing process are described in the five-step decision process.

The study has reaffirmed the findings of others that adolescents have a tendency to see themselves as invincible. This study found that respondents tended to transfer their personal vulnerability and that of their close friends to the impersonal crowd of adolescents out there. This has the potential to weaken their initial intentions to avoid at-risk behaviours and increases their chances of HIV infection. Parents, teachers, government programs and the communities in Botswana need to make concerted efforts to ensure that all adolescents accept a realistic view of the virus and the effect

of infection. This process needs to start at a tender age, even before children enter their teen years, and continue through adolescence into young adulthood.

The reframing stage model suggests a range of implications that give rise to realistic strategies aimed at encouraging adolescents to protect themselves from the effect of the virus. These strategies should be employed, where relevant, by the government, schools, communities, families and individual adolescents. The key to these strategies is an understanding and acceptance of responsibility. The responsibility to limit and ultimately defeat the scourge of HIV and AIDS must be embraced by all relevant stakeholders: the government, institutions, churches, schools, communities, families and the adolescents themselves.

This study recognises the conflict between the moral and ethical implications of making condoms available to adolescents in a land where having sex, as a minor, is illegal. This study urges all stakeholders, including the policy-makers, parents, teachers, traditional and community leaders and adolescents in Botswana who are involved in the battle against HIV and AIDS, to frankly discuss the issue of condom accessibility to adolescents in the light of the prevention of HIV and AIDS among adolescents.

In summary, this study argues that in order to achieve the goal of reducing adolescents' involvement in at-risk behaviours there is a need to consider both the initial framing and reframing stages of their decision-making process. With respect to the initial framing stage there is a need to explore methods that enhance adolescents' knowledge, strengthen positive values and increase their perception of their own

susceptibility to HIV and AIDS. With respect to the reframing stage there is a need to establish programs that enable adolescents to recognize how internal and external influences impact their thinking and behaviour, and also, to develop their life skills, in particular their negotiation skills, to enable them to more effectively deal appropriately with these influences. Further, an effective HIV and AIDS reduction program must include involvement from the Government, the schools, the parents and most importantly, take cognizance of the voice of these adolescents.

While it is clear from the data that these adolescents acknowledge that they are part of the adolescent HIV and AIDS problem, they also acknowledge that they can and are willing to be part of the solution. The use of prevention strategies that consist of only formal information campaigns, fear based communication and religious/cultural traditions have not generated the results necessary to deal with the present HIV and AIDS situation. Previous research, however, has clearly established that community social norms influence community behaviours (Shultz, P. et al., 2007). In particular, adolescents use their perceptions of peer norms to modify their own behaviours. This would suggest there is a need to have these adolescents' as the face of marketing and information campaigns for HIV and AIDS prevention programs, rather than only use impersonal slogans and the face of unconnected 'others' for information distribution. Such approaches along with the use of peer-to-peer formal and informal education strategies would be the first step in generating an additional set of peer norms, supporting positive HIV and AIDS reduction practices.

Peer norm perception modification could both strengthen these adolescents' initial intention to refrain from activities that put them at risk of contracting HIV and AIDS

and increase their resolve to not deviate from this decision during the reframing stage of the decision-making process. The face of the adolescents themselves can, and should be, part of the solution.

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Appendix 1: Training template for research assistants.

<u>This Guideline has been provided to assist you as a research assistant in conducting focus groups.</u>

These guidelines have been adopted from tips of conducting focus groups from www.omni.org/doc/focusgroups/toolkit Accessed on November 22, 2010 OMNI Institute is a social science research firm based in Denver, Colorado. OMNI has developed guidelines which assist researchers to conduct focus groups. The following guidelines as stipulated by OMNI have been adopted for the purposes of the current study:

There are several important things that research assistant need to be aware of when conducting interviews and facilitating focus group discussion the following guidelines that need consideration

Voluntary Participation

Students must agree to participate in the research of their own free will. Written consent from them as well as from their parents or caregivers is mandatory.

It is essential that participants understand that their participation is voluntary and that there are no consequences for refusing to take part in the study or to answer specific questions
.
We must explain the nature of the study openly and honestly and in a way that is understandable to the participant.

It is our responsibility to ensure that the participant understands the nature of the research, the purposes of the research, and the fact that they may withdraw from participation at any time.

It is helpful to make sure that there is adequate time to answer any questions that an individual may have before and during the focus group.

Should individuals look confused or withdrawn, it is a good idea to ask them if they have any questions before proceeding.

If an individual does not want to talk further about a topic, then we must respect this.

We must communicate how information obtained during the focus group discussion will be used.

Confidentiality

We must agree to keep personal information that is revealed to us confidential. This means that we cannot share the specific contents with anyone except another research assistant or the researcher on the project. This also means that we cannot share any information that would allow another researcher or outsider to know who participated in the study.

We must explain how confidentiality will be protected. Since we will be using ID numbers not names, we must explain that only you will know their ID number and only other researchers in this study will have access to their information. No information will be publicly reported that would identify them as a participant in the study.
Respect for People's Rights, Dignity, and Diversity

We must respect the rights, dignity and worth of all people.

In our work, as researchers we must be respectful of the rights of others to hold values, attitudes, and opinions that differ from our own.

We as researchers must strive to advance and protect the public good through our work.

Participants as Experts

Participants are being invited to participate in focus groups because they are viewed as possessing important knowledge about their personal beliefs, gender-related expectations, and cultural beliefs we hope to learn.

Let participants know that we are there to learn from them.

Expressing this to participants helps to establish a respectful appreciation for valuable contributions that they will make to the study.

Your Role as the Facilitator

We will need to let participants know that we are part of a team that is conducting research.

This formality communicates to participants that their participation is important.

Recognizing and Appreciating Participants for their Time and Contributions

This is one of the most important things you can do to help create rapport. Remember to thank participants for their time and participation. Let them know that the information they have shared is valuable for this project.

Listening Skills

Good listening is key to conducting focus groups that will result in the collection of useful information. Being a good listener means being an "interested" listener. This is done by demonstrating that you are paying attention to what participants are sharing, staying neutral or impartial, and practicing appropriate silence.

Listen Carefully to Participants

Active listening allows you to probe effectively and at appropriate points during the focus group. Active listening involves not only hearing what someone is saying, but also noticing body posture and facial gestures (i.e., any changes in nonverbal behaviour) that might provide cues as to the appropriate or necessary ways to engage participants.

Show Participants You Are Listening

Show participants that you are listening to what they are saying. Signs that you are paying attention may include leaning forward slightly, looking directly at participants while they are speaking, or nodding at appropriate times. Such behaviours not only indicate that you, as the facilitator, are more engaged, but also help maintain the engagement of the participants, themselves.

Looking away, yawning, or frequently checking your watch will most likely make participants feel that you are not listening. If participants suspect that you are not listening to them with great care, they may take their role of sharing expert knowledge less seriously and, therefore, may not elaborate or provide much detail with their answers.

The Importance of Neutrality during the Interview

While showing participants that you are actively listening and interested in what they are sharing, you will also want to remain as neutral or impartial as possible, even if you have a strong opinion about something. Use phrases such as "Thank you. That is helpful." Comments such as "I can't believe it!" or "You really think that?!" are not appropriate remarks for a facilitator to make, because they infer your opinion and impose judgment on the participant, which will shut down discussion.

Using Probes and Asking Clarifying Questions

Probes and clarifying questions are an important part of interviewing and have two main purposes: to help clarify what an interview respondent has said and to help get more detailed information on topics of interest. Probes allow the interview respondent to provide more than just a one-sentence answer to the questions you ask.

Examples of Probes

Some good examples of probes used to help clarify what an interview respondent has said include:
"Please tell me (more) about that…"
"Could you explain what you mean by…?"
"Can you tell me something else about…?"
An example of a probe that you would not want to use is:
"So you're telling me that …….. Right?"

Guiding Principles for the Group

At the beginning of a focus group, it is helpful to let everyone know about some ways to make the group proceed smoothly and respectfully for all participants. One way of smooth running of discussions in to lay down some ground rules and the following as some of such rules.

Our ground rules

• Only one person talks at a time.
• Confidentiality is assured. "What is shared in the room stays in the room."
• It is important for us to hear everyone's ideas and opinions. There are no right or wrong answers to questions – just ideas, experiences and opinions, which are all valuable.
• It is important for us to hear all sides of an issue – both the positive and the negative.
• It is important for women's and men's ideas to be equally represented and respected.

These ground rules may be presented to the group, and displayed throughout the discussion, on a flip chart page or hung on a wall in a clearly visible location.

In addition to these ground rules, which have been established prior to the focus group, it is important to invite participants to establish their own ground rules or guiding principles for the discussion. Once the above ground rules have been presented, it will be important to ask participants if they have anything to add to the list.

The note taker should add these to the flip chart page.

When reading the Questions

A few suggested techniques are:
• Repeat the question – repetition gives more time to think.
• Pause for the answer – a thoughtful nod or expectant look can convey that you want a fuller answer.
• Repeat the reply – hearing it again sometimes stimulates conversation
• Ask when, what, where, which, and how questions – they provoke more detailed information
• Use neutral comments – "Anything else?"

Other Tips for Guiding the Discussion

In focus groups, it is not uncommon for a few individuals to dominate the discussion. Sometimes in mixed gender groups, one gender may tend to speak more than the other. To balance participation, and ensure that every participant has an opportunity to contribute to the discussion, you might consider the following strategies:

- Address questions to individuals who are reluctant to talk
- Give nonverbal cues (look in another direction or stop taking notes when an individual talks for an extended period).
- Intervene, politely summarize the point, then refocus the discussion.

Minimize Pressure to Conform to a Dominant View Point

When an idea is being adopted without any general discussion or disagreement, more than likely group pressure to conform to a dominant viewpoint has occurred. To minimize this group dynamic, the facilitator should probe for alternative views. For example, the facilitator can raise another issue, or say, "We have had an interesting discussion, but let's explore other ideas or points of view. Has anyone had a different experience that they wish to share?"

Record the discussion

Ideally, focus group discussions will be recorded using both tape recording equipment, and the hand-written notes of a note taker. Hand-written notes should be extensive and accurately reflect the content of the discussion, as well as any salient observations of nonverbal behavior, such as facial expressions, hand movements, group dynamics, etc. The note taker should monitor tape recording equipment and may also play a key role in keeping track of time.

Difficult situations may arise during your focus group. The following are some examples of common situations that can occur and what you can do in each of these situations.

What do I do if someone is dominating the conversation?

Focus groups, ideally, allow researchers to collect the opinions and ideas of a variety of people. If someone is doing a lot of the talking, however, this may prevent others from contributing their thoughts, and limits the usefulness of the focus group. It is important to notice when this is happening and do what you can to try to make sure that other people have the opportunity to say things, even if they seem reluctant at first or insist that what is being said by others reflects what they would have said. It is important to have people say things in their own words as much as possible. If someone is dominating the conversation, you might want to respectfully acknowledge their contribution, and thank them, saying something like, "I really appreciate your comments." Then make direct eye contact with other people and ask something like, "I'm very interested in hearing how other people are feeling about this issue" or "It's very interesting to get a variety of perspectives, and I would like to hear from other people as well."

What do I do if girls and boys are participating at different levels, i.e., boys are speaking up more than girls or vice versa?

This situation is very similar to the one highlighted above, in which a few people are dominating the conversation to the exclusion of others. So, you may be able to apply many of the same strategies. Often, if there is inequality in how much men or women are participating, it is the women who speak up less and the men who speak more, though it is possible for the opposite to occur, as well.

It is vitally important that both men's and women's voices be heard, and there are two sets of strategies for trying to deal with this situation. One set of strategies focuses on encouraging men to participate less and the other focuses on encouraging women to participate more. If men are dominating the conversation, respectfully thank a man who has just spoken, then suggest that it would be great to hear from some of the women present, as well. If women seem to be participating less, try to make a lot of eye with women, and even ask individual women direct questions.

Are people feeling uncomfortable about talking?

This typically occurs at the beginning of a focus group and is less likely to occur when focus groups start with an icebreaker or the facilitator is able to set a comfortable tone and put people at ease in the beginning. If, however, this continues to be an issue during the focus group, you may need to back up and do a little work to make people feel more comfortable. Talk about easier topics, things that you think participants may be more familiar with or comfortable talking about, or, perhaps, things that you know are particularly interesting to them. This may help the participants begin to feel more comfortable talking in a group setting.

When participants begin to provide information that may be considered personal and confidential.

At times discussions in a focus group may prompt a participant to begin giving information which may be considered personal and confidential. To protect such participants the study takes three approached to this question

1. The study aims to prevent disclosure of personal sexual activity by asking only generic questions.

2. If a student in the focus group context chooses to provide a personal example of actual sexual activity in the group situation, you as a research assistant will immediately use standard techniques of protective interrupting i.e. draw the child back to the generic nature of the discussion and away from disclosure of personal details by interrupting mid sentence by saying " at the moment we are talking about what if a person…and not details of personal experience" The child can be referred to the counselling and guidance teacher for private discussion at the conclusion of the group discussion.

3. If a student in an interview context chooses to provide an example of actual sexual activity, you as the interviewer will pass the conduct of the interview over to the counselling and guidance teacher who will be present during the discussion or interviews.

Qualities of an Effective Focus Group Facilitator
Roles and Responsibilities:

- Keep participants focused, engaged, attentive and interested
- Monitor time and use limited time limited time effectively
- Use prompts and probes to stimulate discussion
- Use the focus group guide effectively to ensure all topics are covered
- Politely and diplomatically enforce ground rules:
    - Make sure everyone participates and at a level that is comfortable
    - Limit side conversations
    - Encourage one person to speak at a time
- Be prepared to explain or restate questions
- Diffuse and pre-empt arguments
- After the focus group, work with the note taker to complete the Debrief

Discussion Tool immediately after each focus group.

To facilitate the debriefing discussion, review the notes of the discussion, discussing areas that seemed particularly important or salient given your knowledge of the research questions.

Effective Facilitators:

- Have good listening skills
- Have good observation skills
- Have good speaking skills
- Can foster open and honest dialogue among diverse groups and individuals
- Can remain impartial (i.e., do not give her/his opinions about topics, because this can influence what people say)
- Can encourage participation when someone is reluctant to speak up
- Can manage participants who dominate the conversation
- Are sensitive to gender and cultural issues
- Are sensitive to differences in power among and within groups

Appendix 2: Interview starter questions for phase one of the study.

Interview Questions

Note to the participants



- **As a participant you have the right to withdraw from participation at any time.**
- **Confidentiality and anonymity is a highest priority of the researcher. You as a participant you are not required to write your name or give your name during the interview**
- **Please let me also inform you that the interviewers as well as your counselling and guidance teacher have signed a confidentiality agreement that they will not share any information in this meeting to anyone else.**
- **For any question, you have the right to say "no response" "Next" or I do not want to answer that Questions.**
- **At any point you as a participant have the right to stop the interview and privately meet with the counselling and guidance teacher, who is the impartial person and is present in this meeting. Especially when you feel discomfort.**
- **The interviews will be audio recoded. However if for any reason you do not wish to have your responses recorded, please let the interviewer know and the recorder will be turned off.**

<u>Section 1</u>

8. Gender
9. How old are you?
10. What class are you doing?
11. What tribe are you?
12. What work does your mother do?
13. What work does your father do?
14. What is your father's highest level of education?
15. What is your mother's highest level of education?

Section 2

Thank you for participating in the first section of this interview remember

- **As a participant you have the right to withdraw from participation at any time.**

- **Confidentiality and anonymity is a highest priority of the researcher. You as a participant you are not required to write your name or give your name during the interview**

- **Please let me also inform you that the interviewers as well as your counselling and guidance teacher have signed a confidentiality agreement that they will not share any information in this meeting to anyone else.**

- **For any question, you have the right to say "no response" "Next" or I do not want to answer that Questions.**

- **At any point you as a participant have the right to stop the interview and privately meet with the counselling and guidance teacher, who is the impartial person and is present in this meeting. Especially when you feel discomfort.**

- **The interviews will be audio recoded. However if for any reason you do not wish to have your responses recorded, please let the interviewer know and the recorder will be turned off.**

16. In your view, how do people become infected by HIV/AIDS?
17. Estimate how many young people your age will become infected by HIV/AIDS before they are 24 years of age? 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
18. Is it inevitable that all young people will become infected with HIV/AIDS?
19. In your view, how can young people avoid HIV/AIDS infection?
20. How can the Botswana Government help young people to avoid HIV/AIDS infection?
21. What is the difference between HIV/AIDS and other sexually-transmitted diseases?

Section 3

Thank you for participating in the second section of this interview remember

- **As a participant you have the right to withdraw from participation at any time.**
- **Confidentiality and anonymity is a highest priority of the researcher. You as a participant you are not required to write your name or give your name during the interview**
- **Please let me also inform you that the interviewers as well as your counselling and guidance teacher have signed a confidentiality agreement that they will not share any information in this meeting to anyone else.**
- **For any question, you have the right to say "no response" "Next" or I do not want to answer that Questions.**
- **At any point you as a participant have the right to stop the interview and privately meet with the counselling and guidance teacher, who is the impartial person and is present in this meeting. Especially when you feel discomfort.**
- **The interviews will be audio recoded. However if for any reason you do not wish to have your responses recorded, please let the interviewer know and the recorder will be turned off.**

22. Do you believe that the number of HIV/AIDS infections is approximately equal for men and women, or more women infected than men, or more men infected than women? What makes you say this?
23. Is it easier for a teenage boy or a teenage girl to say NO to sex? What makes you say this?

Questions 17, 18 and 19 to be asked to Boys only

24. Give an example of a situation in which teenage boys are commonly asked to engage in sex.
25. Give an example of a situation in which a teenage boy commonly asks a girl for sex.
26. What advice would you give a teenage boy who has just been asked for sex?

Questions 19 and 20 to be asked to Girls Only

27. Give an example of a situation in which teenage girls are commonly asked to engage in sex.

28. Give an example of a situation in which teenage girls commonly ask boys for sex.
29. What advice would you give a teenage girl who has just been asked for sex?

Section 4

Thank you for participating in the third section of this interview please remember

- **As a participant you have the right to withdraw from participation at any time.**
- **Confidentiality and anonymity is a highest priority of the researcher. You as a participant you are not required to write your name or give your name during the interview**
- **Please let me also inform you that the interviewers as well as your counselling and guidance teacher have signed a confidentiality agreement that they will not share any information in this meeting to anyone else.**
- **For any question, you have the right to say "no response" "Next" or I do not want to answer that Questions.**
- **At any point you as a participant have the right to stop the interview and privately meet with the counselling and guidance teacher, who is the impartial person and is present in this meeting. Especially when you feel discomfort.**
- **The interviews will be audio recoded. However if for any reason you do not wish to have your responses recorded, please let the interviewer know and the recorder will be turned off.**

30. Do you know any traditional initiation programs?
31. What do you know about cultural practices in which adults ask sexual favors from teenage boys or teenage girls?
32. Do you know of any cultural practices that put young people at risk of contracting HIV/AIDS?
33. Do you know cultural practices that permit men to have teenage partners outside of marriage?
34. What can you tell me about Nkadzana, Mantsala, Otusira, Xakanaxaamaa, Otusira or Seantlo?

If the participant is not aware of the practices to question 27 skip question 28 and 29
If the answer to question 27 indicate participants knowledge about these practices go to question 28.

35. Are you aware of similar practices in your tribe? If so can you describe it/them even if you don't know its/their name?

36. What do you think about these types of practices, are they right or wrong? Do they place young people at risk of becoming infected with HIV/AIDS? What should the Government do about them? What should the tribe/community do about them? Do they place boys at equal risk of infection with the HIV as girls?
37. The Government has been sending the ABC message for a long time now, in your view, do you think it is working? Why/why not? What should the Government do in future?

Section 5

Thank you for participating in the forth section of this interview remember

- **As a participant you have the right to withdraw from participation at any time.**
- **Confidentiality and anonymity is a highest priority of the researcher. You as a participant you are not required to write your name or give your name during the interview**
- **Please let me also inform you that the interviewers as well as your counselling and guidance teacher have signed a confidentiality agreement that they will not share any information in this meeting to anyone else.**
- **For any question, you have the right to say "no response" "Next" or I do not want to answer that Questions.**
- **At any point you as a participant have the right to stop the interview and privately meet with the counselling and guidance teacher, who is the impartial person and is present in this meeting. Especially when you feel discomfort.**
- **The interviews will be audio recoded. However if for any reason you do not wish to have your responses recorded, please let the interviewer know and the recorder will be turned off.**

38. What is life like for those who are HIV positive?
39. What is life like for those who have AIDS?
40. What is life like for the families of those people who are HIV positive?
41. What is life like for the families of those people who have AIDS?
42. How many people in your school think they might become infected with HIV/AIDS?
    10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
43. How many people in your school think that they will be able to overcome HIV/AIDS infection if they become infected?
    10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

This is the end of the interview.
Thank you very much for participating.

Appendix 3: Focus group starter questions for phase one of the study.

Focus Group Discussion

Thank you for accepting to participate in this group discussion. Here are important things to remember:

- **As a participant you have the right to withdraw from participation at any time.**
- **Confidentiality and anonymity is a highest priority of the researcher. You as a participant you are not required to say your name or give your name during the discussion.**
- **Please let me also inform you that the interviewers as well as the your counselling and guidance person have signed a confidentiality agreement that they will not share any information in this meeting to anyone else.**
- **For any question you have the right to say "no response" "Next" or I do not want to answer that Questions.**
- **At any point you as a participant have the right to stop the discussion and privately meet with the counselling and guidance teacher, who is the impartial person present in this meeting. Especially when you feel discomfort.**
- **The group discussion will be audio recoded. However if for any reason you do not wish to have your discussion recorded please let the interviewer know and the recorder will be turned off.**
- **The discussion scenario presented here are for our discussion purposes only, the names used have just been selected for purposes of discussion.**
- **Please remember that the discussion is not designed to ask you to give personal information or request you to give personal experience. You will see that the scenario presented is intended to ask just for your opinion as situation happen to the young people of the ages of the characters in the scenario.**
- **Before we proceed let us set some ground rules for this discussion (The facilitator will read them from the protocol)**
- **Do you have any questions before the discussion.**

INTRODUCTION

Thabo and Matshidiso are two young people in Botswana. Thabo is 16 years old boy and Matshidiso is 13 years old girl. Both Thabo and Matshidiso live in Gaborone and go to secondary school. Thabo comes from a rural community and goes to a government secondary school. Matshidiso comes from the city and goes to a private secondary school.

For the age range 12 through 14 years the focus groups will be separated into single sex grouping. For 15 years onward the focus groups will be mixed sex grouping

IN YOUR VIEW

7 Are Thabo and Matshidiso at risk of contracting HIV/AIDS?

8 If Thabo is like other Batswana teenage boys, what common situations/practices or behaviors might Thabo be engaging in that places him at risk of contracting HIV/AIDS?

9 If Matshidiso is like other Batswana teenage girls, what common situations/practices or behaviors might Matshidiso be engaging in that places her at risk of contracting HIV/AIDS?

10 If Thabo or Matshidiso becomes infected with HIV/AIDS, would it be the result of their personal choice, or is it inevitable?

11 What is the likelihood that Thabo will become infected with HIV/AIDS before the age of 24 years?
10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

12 What is the likelihood that Matshidiso will become infected with HIV/AIDS before the age of 24 years?
10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

13 What will happen to Thabo if he becomes infected with HIV/AIDS before he is 24?

14 What will happen to Matshidiso if she becomes infected with HIV/AIDS before she is 24?

15 What can Thabo do to prevent being infected with HIV/AIDS?

16 What can Matshidiso do to prevent being infected with HIV/AIDS?

17 Is it OK for Matshidiso to have a child before she is married? At what age should Matshidiso get married?

18 Is it OK for Thabo to have a child before he is married? At what age should Thabo get married?

19 If Thabo is having sex with his girlfriend before they are married and they have a baby, what will happen to Thabo?

20 If Matshidiso is having sex with her boyfriend before they are married and they have a baby, what will happen to Matshidiso?

Thank you!

This is the end of our focus group discussion

Thank you very much for participating.

Appendix 4: Reflective narrative topics for phase one of the study.



Essay Topics

Topic 1

Choose one of the following topics and *write one page*

EITHER

c. Batswana young people **ARE** at risk of contracting HIV/AIDS because ….

OR

d. Batswana young people **ARE NOT** at risk of contracting HIV/AIDS because ….

Topic 2

Choose one of the following topics and *write one page*

EITHER

c. What can/should **Batswana Young People** do to avoid HIV/AIDS infection?

OR

d. What can/should the **Botswana Government** do to help young people avoid HIV/AIDS infection?

Appendix 5: Approval letter from Avondale College for phase one of the study.

Avondale COLLEGE

Office of the Vice-President
PO Box 121
Cooranbong NSW 2265
3 December 2010

Head of Health Research Unit
Ministry of Health
Private Bag 0038
Gaborone
Botswana

RE: Harvey Henderson Application for Approval of Human Research

I wish to advise that, following consideration of a submission by Harvey Henderson, the Avondale College Human Research Ethics Committee has provided ethical clearance for the following project:

An exploration of personal beliefs, gender-related expectations, selected Setswana cultural beliefs and norms, and perceptions of adolescents aged 12-18 in six selected secondary schools in Gaborone, Botswana pertaining to their risk of contracting and preventing HIV/AIDS.

Please contact me if you have any questions about this project.

Kind regards

V. Watts

Dr Vivienne Watts
Vice-President (Research and Administration)

Appendix 6: Approval letter from Botswana Ministry of Health for phase one of the study.

Telephone: (267) 363200
FAX (267) 353100
TELEGRAMS: RABONGAKA
TELEX: 2818 CARE BD



MINISTRY OF HEALTH
PRIVATE BAG 0038
GABORONE

REPUBLIC OF BOTSWANA

REFERENCE NO: PPME 13/18/1 VI (336) 31 January 2011

Health Research and Development Division
Notification of IRB Review: New Application

Harvey Henderson
Plot 49788
Block 5
Gaborone West
Botswana

Protocol Title:

AN EXPLOTION OF PERSONAL BELIEFS GENDER RELATED EXPECTATIONS, SELECTED SETSWANA CULTURAL BELIEFS AND NORMS, AND PERCEPTIONS OF ADOLESCENTS AGED 12-18 IN SIX SELECTED SECONDARY SCHOOLS IN GABORONE, BOTSWANA PERTAINING TO THEIR RISK OF CONTRACTING AND PREVENTING HIV/AIDS.

HRDC Protocol Number:	HRDC 00598
HRDC Review Date:	25 January 2011
HRDC Review Type:	Full Board HRDC
Risk Determination:	Minimal risk

Dear Mr Henderson

Thank you for submitting application form for the above referenced protocol for ethical and scientific review and appraisal. The HRDC met on the 25 January 2011 reviewed and approved the application form pending the following comments that need to be addressed:-

- The focus groups should be age difference because the age groups given do not show much difference in maturity the HRDC proposes that you use ages under 15 and 15 and above there is very little difference between age of 12 and 13, 15 and 16 or 17 and 18.

1

- Include someone from Ministry of Education.
- Provide details for the sampling method of the quantitative study.
- Provide counseling details (provide a list of counselors from each participating school) willing to facilitate in your study.

If you have any questions please do not hesitate to contact Mr. P. Khulumani at **pkhulumani@gov.bw, Tel +267-3914467 or Mary Kasule at mkasule@gov.bw** or marykasule@gmail.com Tel: +267-3632466

Yours sincerely

P. Khulumani
For Permanent Secretary

PERMANENT SECRETARY
MINISTRY OF HEALTH
RESEARCH UNIT
31 JAN 2011
P/BAG 0038
GABORONE
REPUBLIC OF BOTSWANA

Appendix 7: Approval letter from Botswana Ministry of Education for phase one of the study

MINISTRY OF EDUCATION
AND SKILLLS DEVELOPMENT

TELEPHONE: (267) 3901263
FAX: (267) 3975899

Republic of Botswana

Director Regional Operations
South East
Private Bag 00343
GABORONE
BOTSWANA

REO 1/15/2 V (36)

1st November 2011

Harvey Henderson
P O Box 1720
Gaborone

Dear Sir

APPROVAL TO CONDUCT A RESEARCH STUDY

The above matter refers.

This serves to grant you permission to conduct your study in sampled schools around Gaborone to address the following research objectives/questions:

To find out what personal beliefs adolescents hold pertaining to their risk of contracting and preventing HIV/AIDS.

Wish you all the best in your research.

Thank you.

Yours Faithfully

D P Mosienyane
For Director

REGIONAL EDUCATION OFFICE
SOUTH EAST REGION
1-11-02
RECORDS
P/BAG 00343
GABORONE BOTSWANA

Appendix 8: Approval letter from Avondale College for phase two of the study.

Avondale COLLEGE

Office of the Vice-President
PO Box 121
Cooranbong NSW 2265
3 December 2010

Head of Health Research Unit
Ministry of Health
Private Bag 0038
Gaborone
Botswana

RE: Harvey Henderson Application for Approval of Human Research

I wish to advise that, following consideration of a submission by Harvey Henderson, the Avondale College Human Research Ethics Committee has provided ethical clearance for the following project:

An exploration of personal beliefs, gender-related expectations, selected Setswana cultural beliefs and norms, and perceptions of adolescents aged 12-18 in six selected secondary schools in Gaborone, Botswana pertaining to their risk of contracting and preventing HIV/AIDS.

Please contact me if you have any questions about this project.

Kind regards

V. Watts

Dr Vivienne Watts
Vice-President (Research and Administration)

Appendix 9: Approval letter from Botswana Ministry of Health for phase two of the study.

Telephone: (267) 363200
FAX (267) 353100
TELEGRAMS: RABONGAKA
TELEX: 2818 CARE BD



MINISTRY OF HEALTH
PRIVATE BAG 0038
GABORONE

REPUBLIC OF BOTSWANA

REF NO: PPME-13/18/1 Vol VII (214) 25 November 2011

Health Research and Development Division

Notification of IRB Review: Amendment

Mr Harvey Henderson
Plot 49788
Block 5
Gaborone West

Dear Mr Henderson

AMENDMENT: AN EXPLORATION OF PERSONAL BELIEFS GENDER RELATED EXPECTATIONS, SELECTED SETSWANA CULTURAL BELIEFS AND NORMS, AND PERCEPTIONS OF ADOLESCENTS AGED 12-18 IN SIX SELECTED SECONDARY SCHOOLS IN GABORONE, BOTSWANA PERTAINING TO THEIR RISK OF CONTRACTING AND PREVENTING HIV/AIDS

Reference is made to the above mentioned protocol amendment application submitted to the Heath Research and Development Committee (HRDC) in the Ministry of Health for review and approval. HRU have reviewed and approved the following amendment on the 22 November 2011.

To confirm/disconfirm the results of Phase 1, allow generalizability from the findings of the study, and provide diversity to the qualitative data collected in Phase 1.

Please note that the amendment will expire together with the initial permit.

Amendments
During the approval period, if you propose any change to the protocol such as its funding source, recruiting materials, or consent documents, you must seek HRDC approval before implementing it.
Please summarize the proposed change and the rationale for it in the amendment form available from the Health Research Division Office (HRDD), Office No. 9A 11 or Ministry of Health website: www.moh.gov.bw or can be requested via e- mail from Mr. Kgomotso Motlhanka, e-mail address: kgmmotlhanka@gov.bw . In addition submit three copies of an updated version of your original protocol application showing all proposed changes in bold or "track changes".

1

Reporting
Other events which must be reported promptly in writing to the HRDC include:
- Suspension or termination of the protocol by you or the grantor
- Unexpected problems involving risk to subjects or others
- Adverse events, including unanticipated or anticipated but severe physical harm to subjects.

Do not hesitate to contact us if you have any questions. Thank you for your cooperation and your commitment to the protection of human subjects in research.

Yours sincerely

P. Khulumani
For Permanent Secretary

MINISTRY OF HEALTH
DEPT OF POLICY PLANNING, MONITORING AND EVALUATION
25 NOV 2011
PRIVATE BAG 0038
GABORONE
REPUBLIC OF BOTSWANA

Appendix 10: Approval letter from Botswana Ministry of Education for phase two of the study

TELEPHONE: 3655473
TELEX: 2944 THUTO BD
FAX: 3972531
REFERENCE E 1/20/ 2 XII (23)



MINISTRY OF EDUCATION
PRIVATE BAG 005
GABORONE
BOTSWANA

REPUBLIC OF BOTSWANA

15th February 2011

To: Harvey Henderson
P.O.Box 1720
Gaborone

RE: REQUEST FOR A PERMIT TO CONDUCT A RESEARCH STUDY

We acknowledge receipt of your application to conduct a research study. This serves to grant you permission to conduct your study in sampled schools around Gaborone to address the following research objectives/questions:

To: Find out what personal beliefs adolescents hold pertaining to their risk of contracting and preventing HIV/AIDS.

It is of paramount importance to seek Assent and Consent from the Department of secondary education, principals as well as teachers you are going to interview, observe as well administering questionnaires. We hope and trust that you will conduct the study as stated in your Proposal and to strictly adhere to the Research Ethics. Failure to Comply, with the above Regulations will result in Immediate Termination of the Research permit.

Please note that this permit is valid for a period of one year effective from 15th February 2011 to 15th February 2012.

You are furthermore requested to submit a copy of your final report of the study to the Division of Planning, Statistics and Research, Ministry of Education, Botswana.

Thank you in advance.

Yours faithfully

K.Mathabathi
For / Permanent Secretary

Appendix 11: The copy of the survey instrument for phase two of the study.



Student Questionnaire

Thank you for helping us today. Many students in Gaborone, Botswana are helping us by completing this questionnaire. By answering these questions you will help us understand more about the factors that lead to the spread of HIV/AIDS and how best we can prevent this disease from spreading among young people.

Your answers are confidential and will be looked at by the research team and no-one else. No one at your school will see your answers.

Take your time to read each question in turn and answer it as best you can.

How to Complete this Form

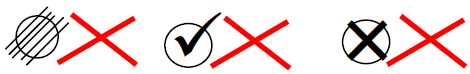
This survey has two parts. The first (Part A) is a series of general information questions and the second (Part B) asks what you think about HIV/AIDS. You need to complete both parts.

Most questions can be answered by shading a circle or writing your answer in the space provided.

- Read each question carefully.
- Try not to change an answer.
- If you do not know or you do not have a personal view on any particular question then skip it and move to the next question.
- Use either a blue or black pen.
- Shade **one** circle only per question.
- When shading the circles, keep within the circle and shade it in completely as shown



- **Do not** use partial shading, ticks or crosses like these:



- If necessary to change an answer mark a cross on the circle of the wrong answer and shade the answer which is correct.
- Do not fold the form.
- Ask the supervisor if you need help.

Remember this survey is voluntary, if in the process of completing this survey you feel like not continuing you can stop at any time without giving any reason to the researcher, the supervisor or your teachers.

Thanks again for being part of this important survey!

1007 10001

Part A: General Information

1. What is your age?
   - ◯ 13 and under
   - ◯ 14
   - ◯ 15
   - ◯ 16
   - ◯ 17
   - ◯ 18 and over

2. Gender?
   - ◯ male
   - ◯ female

3. What class are you doing?
   - ◯ Form 1
   - ◯ Form 2
   - ◯ Form 3
   - ◯ Form 4
   - ◯ Form 5

4. I am living at home with
   - ◯ Mother and father together.
   - ◯ Single parent, mother only.
   - ◯ Single parent, father only.
   - ◯ Relatives/Guardian.
   - ◯ Other ……...

   Please write here

5. Are you a citizen of Botswana?
   - ◯ Yes
   - ◯ No

If you are **not** a citizen of Botswana, what nationality are you?

……..

Please write here

6. What tribe do you belong to?

…… ……

Please write here

7. How long have you been living in Gaborone?
   - ◯ Since birth
   - ◯ Less than 5 years
   - ◯ 6 – 10 years
   - ◯ more than10 years
   - ◯ I do not live in Gaborone

8. How often to you visit your home village (Motse)?
   - ◯ Once in a year
   - ◯ Twice in a year
   - ◯ More than two times in a year
   - ◯ Never

9. How many people are in the home you are living in right now?
   - ◯ Fewer than five people
   - ◯ Six people
   - ◯ Seven people
   - ◯ More than seven people
   - ◯ I live alone at home

10. Which category below is the nearest description to the occupation of your father?
    - ◯ Unemployed and he stays at home
    - ◯ Labourer, cleaner, watchman driver
    - ◯ Carpenter, builder, motor mechanic
    - ◯ Computer programmer, nurse, teacher
    - ◯ Owner of a small company or business
    - ◯ Middle manager, lecturer
    - ◯ Doctor, owner of a big company

1007

10001

11. Which category below is the nearest description to the occupation of your mother?

- ○ Unemployed and she stays at home
- ○ Labourer, cleaner, watchman, driver
- ○ Carpenter, builder, motor mechanic
- ○ Computer programmer, nurse,teacher
- ○ Owner of a small company
- ○ Middle manager, lecturer
- ○ Doctor, owner of a big company

12. What is your father's level of education?

- ○ No schooling
- ○ Primary school
- ○ Secondary school
- ○ University degree
- ○ University masters degree
- ○ PhD
- ○ I do not know

13. What is your mother's level of education?

- ○ No schooling
- ○ Primary school
- ○ Secondary school
- ○ University degree
- ○ University masters degree
- ○ PhD
- ○ I do not know

1007 10001

Part B: What you think about HIV/AIDS.

(Mark <u>one</u> answer for every item.)

		Strongly Disagree	Disagree	Agree	Strongly Agree
14	Most young people of my age are at risk of contracting HIV/AIDS.	○	○	○	○
15	If someone is infected by HIV/AIDS he/she will lose many friends.	○	○	○	○
16	Most young people of my age use alcohol and drugs especially at parties.	○	○	○	○
17	Using alcohol and drugs influences young people to engage in sex and other risky behaviours.	○	○	○	○
18	Young people who come into contact with blood while fighting or helping an injured person are likely to contract an HIV infection.	○	○	○	○
19	Most young people do **<u>not</u>** understand what will happen to them if they contract HIV/AIDS.	○	○	○	○
20	Boys are more at risk of contracting HIV/AIDS than are girls.	○	○	○	○
21	Most young people are involved in unprotected sex.	○	○	○	○
22	Many teenage girls are being forced (or raped) to have sex.	○	○	○	○
23	Most girls are having sexual relationships with men who are older than themselves (Sugar Daddies).	○	○	○	○
24	It is easy for a young person to have access to condoms.	○	○	○	○
25	Boys are more likely than girls to have multiple sexual partners.	○	○	○	○
26	It is ok for a secondary school girl to have a baby before marriage.	○	○	○	○
27	Taking ARV's when you are HIV negative can prevent you from contracting an HIV infection.	○	○	○	○

1007 10001

		Strongly Disagree	Disagree	Agree	Strongly Agree
28	Most of the condoms are out of date (expired) and cannot protect from HIV infection.	○	○	○	○
29	If two people trust each other and have been in a relationship for some time, it is ok to have sex without protection.	○	○	○	○
30	To be popular at school is very important for most young people my age.	○	○	○	○
31	Most members of our society, are good role models on sexual matters.	○	○	○	○
32	Teachers at school are giving enough information to young people about HIV/AIDS.	○	○	○	○
33	It is easy for most young people my age to abstain from sex before marriage.	○	○	○	○
34	Most parents give adequate guidance to their teenage children on how to avoid contracting HIV/AIDS.	○	○	○	○
35	Most HIV infections among young people happen through mother-to-child transmission, not through sexual activity.	○	○	○	○
36	Cultural values that guide moral behaviour among teenagers in Botswana are **not** as strong as they were in earlier years.	○	○	○	○
37	The media (TV, Videos, DVD, Radio) are influencing bad behaviour that places young people at risk of contracting HIV/AIDS.	○	○	○	○
38	Peer pressure is a major contributor to young people being involved in sexual activity.	○	○	○	○
39	Young people are getting enough information to enable them to make right decisions to avoid risky behaviours that may lead to an HIV/AIDS infection.	○	○	○	○
40	The government is doing enough to assist teenagers to avoid HIV/AIDS infection.	○	○	○	○
41	Most teenage girls find it difficult to say "no" to sex with an older respectable person who is like an uncle (Malume).	○	○	○	○

1007 10001

		Strongly Disagree	Disagree	Agree	Strongly Agree
42	People who have HIV/AIDS are living a very normal life because of the treatments the government is giving.	○	○	○	○
43	Most of my friends feel that they could contract HIV/AIDS.	○	○	○	○
44	Girls are more likely than boys to have sexual partners.	○	○	○	○
45	Young people feel important when a person gives them cell phones or airtime, even if it is in exchange for sex.	○	○	○	○
46	Teenagers living in villages are at higher risk of contracting HIV/AIDS than those living in the city.	○	○	○	○
47	Owning a cell phone and airtime makes students popular.	○	○	○	○
48	Students enrolled in private schools are at **less** risk of contracting HIV/AIDS than those going to government schools.	○	○	○	○
49	When a person is infected by HIV/AIDS, society thinks she/he is a disgrace to the family.	○	○	○	○
50	Having more than one wife (polygamy) is a cultural practice in Botswana that places women at risk of contracting HIV/AIDS.	○	○	○	○
51	When using alcohol and drugs, young people feel that they cannot refuse to engage in sex and other risky behaviour.	○	○	○	○
52	When your friends are involved in sexual activity it is **not** easy to say “no” to a request for sex.	○	○	○	○
53	Most of my friends think that boys are **not** man enough if they use a condom.	○	○	○	○
54	Young people are **not** at risk of contracting HIV/AIDS because they know how to use condoms and other protective measures to avoid infection.	○	○	○	○
55	Virginity is **not** desired by most popular girls in school.	○	○	○	○

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		Strongly Disagree	Disagree	Agree	Strongly Agree
56	Girls are more at risk of contracting HIV/AIDS than boys.	○	○	○	○
57	The ABC message (Abstain, Be faithful, Condomise) is effective in assisting young people to avoid infection.	○	○	○	○
58	Most students believe that a girl who walks around with a condom in her bag is morally loose.	○	○	○	○
59	It is ok for a boy to walk around with a condom in his pocket in case he might need to use it.	○	○	○	○
60	Girls have sex with older men because of the money or gifts they get from them	○	○	○	○
61	More girls have multiple sexual partners than boys.	○	○	○	○
62	Most of my friends think that girls are not woman enough if they use a condom.	○	○	○	○
63	The Botswana Government has established enough clubs and organisations that help young people to avoid contracting HIV/AIDS.	○	○	○	○
64	Most young people know how to prevent an HIV/AIDS infection but they choose not to take precautions.	○	○	○	○

Thank you for completing this questionnaire.