

UNIVERSITY OF SOUTHAMPTON

FACULTY OF HUMAN AND SOCIAL SCIENCES

Division of Social Statistics and Demography

**The role of parents in promoting sexual health among young people in
South Africa**

by

Nontsikelelo Manzini

Thesis for the degree of Doctor of Philosophy

March, 2017

UNIVERSITY OF SOUTHAMPTON

ABSTRACT

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**THE ROLE OF PARENTS IN PROMOTING SEXUAL HEALTH AMONG YOUNG PEOPLE IN
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Debates on risk avoidance have continued to emphasise the role of communication with parents, partners and peers to promote safer sex (Widman *et al.* 2014). However, one of the most challenging issues in understanding adolescent sexual behaviour is the absence of communication in sexual relationships as well as the kind of information young people receive from their parents. A better understanding of parent-child communication can be helpful in identifying and developing HIV and STI prevention interventions for young people, with the parents becoming a significant contributor in the sexual education of their children.

The overall research objective was to establish the role of parents in promoting sexual health among young people in South Africa and to gather information on how best parent-child communication can be enhanced. Using triangulation methods four objectives were considered: (i) to investigate the extent of parent-child communication and factors associated with parent-child communication; (ii) to determine whether parent-child communication about sexual and reproductive health issues helps to reduce risky sexual behaviours?; (iii) to understand the context through which parent-child

communication takes place within South Africa; and (iv) to review selected interventions and programmes on parent-child communication so as to recommend improvements for developing other interventions.

Findings show that parent-child communication in South Africa is high with parents reporting more communication than their children. General topics were discussed more by adolescents whereas parents reported more discussions on sexual risk topics. Age, gender and ethnicity were statistically significant. Mothers, daughters, older adolescents and non-Africans were significantly more likely to have discussions on parent-child communication. Parent-child communication was significant by gender and ethnicity but not age.

With regards to sexual behaviour and parent-child communication, a general finding for males and females for the three parent-child communication scales (global, sexual risk and general communication) and ever had sex was non-existent, except among females where parent-child risky sexual communication was positively correlated with ever had sex. Age was a significant variable for both males and females in all the communication topics. On the contrary, the relationship between the three communication scales and risky sex was significant for sexual risk communication and general communication. Both males and females were less likely to engage in risky sex if they had discussed sexual risk and general topics. Even after all the controls were considered, the relationship between sexual risk communication and risky sex remains statistically significant except for males.

The qualitative results showed that even though young people would like to receive information from their parents, this was rare. However, both parents and adolescents believed that parents were the best source and thus interventions to promote such conversations were necessary. Indeed, this is shown by the review of interventions and programmes on parent child communication, whereby the involvement of parents promoted communication and thus further research should be undertaken to enhance existing programmes and identify strategies that will promote parent-child communication.

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DECLARATION OF AUTHORSHIP

I, Nontsikelelo Manzini

declare that this thesis and the work presented in it are my own and has been generated by me as the result of my own original research.

The role of parents in promoting sexual health among young people in South Africa

I confirm that:

1. This work was done wholly or mainly while in candidature for a research degree at this University;
2. Where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated;
3. Where I have consulted the published work of others, this is always clearly attributed;
4. Where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work;
5. I have acknowledged all main sources of help;
6. Where the thesis is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself;
7. None of this work has been published before submission but was presented at the following conferences:

Manzini, N., Hinde, A., McGrath, N. and Manda, S. (November, 2015), Perspectives of parents and adolescents on sexual and reproductive health communication in South Africa: Implications for sexual and reproductive health, interventions presented at the 7th Union of African Population Studies conference, 30 November 4 December, Irene, South Africa

Manzini, N., Hinde, A., McGrath, N. and Manda, S. (July 2015), Parent-child communication on sexual and reproductive health in South Africa: Implications for HIV policy intervention presented at the 10th Annual Population of Southern Africa conference, 8-10 July, Durban, South Africa

Manzini, N., Ingham, R., Pettifor, A. and Rees, H. (September, 2003) The role of parent-adolescent communication on the sexual behaviour of young people in South Africa, Paper presented at the British Society of Population Studies Annual Conference, University of Bristol, Bristol, United Kingdom

Signed:

Date: 13/03/2017

Acknowledgements

This project has been one of the longest projects I have embarked on and therefore thank God that I have made it thus far. I strongly believe that this was the plan for my life, no matter how long it took.

My gratitude also goes to my former supervisors. Profs Roger Ingham and Monica Magadi, who began the journey with me and my current supervisors Dr Andrew Hinde, Professors Nuala McGrath and Samuel Manda who led it to completion. Thank you all for your guidance. Dr Hinde travelled the road with me the longest and thus a special thanks goes to you. Your belief in seeing this thesis to the end spurred me on. I can never thank you enough for your support in every way that you did. I would also like to acknowledge Professor Zoe Matthews for the comments during the upgrade, which helped in shaping the quantitative chapters. I am also grateful to Professor Zoe Matthews for being available to be my internal examiner after so many years and Professor Martine Columbine as the external examiner, who saw to it that the thesis was enhanced and completed.

Thank you to the Reproductive Health and HIV Research Unit for giving me the lovelife data for my quantitative chapters. I would also like to acknowledge Ms Lindiwe Mbhele who assisted with the qualitative data collection. Many thanks to the recruitment team for the focus group participants and further thanks goes to all the research participants and transcribers. Thank you also to the University of Southampton Faculty office for their administrative support. A special thanks goes to the University of the Witwatersrand School of Public Health and Medical Research Council Bio Statistics Unit for providing me with office space and resources when I needed to work from home.

I would also like to extend my gratitude to Professors Julian May and Jenni Smit. Thank you both for everything. During the different phases of my studies, the following people reviewed some of the Chapters. Dr Chiweni Chimbwete, Dr Mags Beksinska, Ms Thabang Kaneli, Professor Akim Mturi, Ms Cassandra Nyathi, Mrs Sibusisiwe Makhaya, Mrs Sibusisiwe Sehodi and Professor Audrey Pettifor. Thank you so much to all of you for the roles you played.

I received enormous emotional support and encouragement from various people. A special thanks goes to Ms Valerie Sewell. I never had to worry about where I would stay when I needed to return to the UK. Financial support for the MPhil was provided by the Andrew Mellon Foundation.

Thank you to Prof Julian May. I received a local PhD grant from HIVAN at the University of KwaZulu- Natal for the qualitative fieldwork. Thank you to Professor Eleanor Preston-White. The South African Medical Research Council provided funding for my return ticket and subsistence in the UK for my Upgrade and funded the last phase of my PhD. I am highly indebted to Dr Thabi Maitin and her team for the National Health Scholarship. Without this funding, I would not have been able to return to full-time study. Thank you to my former employer, Statistics South Africa, in particular, thank you to Mr Pali Lehohla for the support and giving me time off to resume my studies full-time and to Dr Maletela Tuoane-Nkhasi for your relentless support and encouragement. Thank you to my long-time friend, former classmate and colleague come boss, Dr Sandile Simelane for the encouragement and supporting me especially during the final leg of my PhD.

To my family, thank you all for your support both financially and emotionally. My siblings, my husband Njabulo, my in-laws and the rest of the family-Made, Manzini and Nxumalos, thank you for your prayers. Thank you to all my friends for the well wishes.

To my dearest son, Ntandoyenkosi, it was not easy when I had to live without you for a year, but I thank God that we survived. Last but not least, my utmost gratitude goes to my mother-my best friend Gugu Thandeka Made. You have been my number one supporter since childhood. I thank God for you and for being such a huge blessing in my life. I have been blessed more than I can ever imagine and thank you that you continued to believe in me to reach the end of the road and not giving me the option to quit. This topic remained dear to me because our relationship helped me navigate through life's journey. My friends never understood why I spoke to you about everything but it helped me, because I knew that you had my best interests at heart. Ngiyabonga Made, Nkomonde, Mzila katha!

Definitions and Abbreviations

ACASI	Audio Computer-Assisted Self-Interviewing
AIDS	Acquired Immune Deficiency Syndrome
AGYW	Adolescent girls and young women
ANC	Antenatal care
ART	Antiretroviral therapy
ASRH	Adolescent Sexual Reproductive Health
ASSA	Actuarial Society of South Africa
CDC	Centre for Disease Control
CHAMP	Collaborative HIV Adolescent Mental Health Program
CS	Community survey
CSE	Comprehensive Sexuality Education
CSG	Child Support Grant
DOH	Department of Health
EA's	Enumeration Areas
EC	Emergency Contraceptive
FGDs	Focus Group Discussions
FLE	Family Life Education
FTFI	Face-to-Face Interviewing
GDP	Gross Domestic Product
HIV	Human Immunodeficiency Virus
HSRC	Human Sciences Research Council

IEC	Information Education Communication
IHSP	Integrated School Health Policy
KZN	KwaZulu-Natal
LO	Life Orientation
NAFCI	National Adolescent Friendly Clinic Initiative
NASRHRF	National Adolescents Sexual and Reproductive Health and Rights Framework
NDoH	National Department of Health
NEETs	Not in employment education or training
NIMH	National Institute of Mental Health
NSP	National Strategic Plan
NYP	National Youth Plan
PETPB	Parent-Based Expansion Theory of Planned Behaviour
PHC	Primary Health Care
PPASA	Planned Parenthood Association of South Africa
RHRU	Reproductive Health and HIV Research Unit
SALDRU	South Africa Labour and Development Research Unit
SANAC	South Africa National AIDS Council
SASA	South Africa Social Security Agency
SATZ	South Africa Tanzania Project
SDB	Social Desirability Bias
SRHR	Sexual Reproductive Health Rights
Stats SA	Statistics South Africa
STDs	Sexually transmitted diseases

STIs	Sexually transmitted infections
TB	Tuberculosis
TTI	Triadic Theory of Influence
UNAIDS	The Joint United Nations Programme on HIV/AIDS
UNESCO	United Nations Education, Scientific and Cultural Organisation
UNFPA	United Nations Population Fund
UNFPA-DFID	United Nations Population Fund-Department for International Development
WHO	World Health Organisation
WRHI	Witwatersand Research and HIV Institute
Y-Centres	Youth Centres
YMCA	South Africa Young Men's Christian Association
YMCA ARH	South Africa Young Men's Christian Association Adolescent Reproductive Health
YP	Young People
YFS	Youth Friendly Services

Chapter 1: Introduction

The first chapter is an introduction to the thesis providing a general background on the burden of disease among young people. This section is followed by the significance of the study, highlighting the role of parents in promoting sexual health among young people. A discussion on how adolescent sexual and reproductive health and rights have been addressed follows. The research aims and objectives and questions are outlined. An organisation of the rest of the chapters in the thesis are presented and the definition of terms.

1.1 Background

Over the years, adolescence has been regarded as a period of good health with most countries recording low levels of mortality among adolescents (Patton *et al.* 2016). As a result, few attempts have been made to understand their health needs and health risks that persist into adulthood (Mokdad *et al.* 2016; Patton *et al.* 2016; Patton *et al.*, 2012; Patton *et al.* 2009). In low and middle income countries reproductive maturity during adolescence brings about increased risks for sexually transmitted infections (STIs) including the Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) and maternal mortality (Patton *et al.* 2009). By 2015, there was an estimated 36.7 million people living with HIV in the world (Joint United Nations Programme on HIV and AIDS, [UNAIDS], 2016a). Sub-Saharan Africa accounted for approximately 69% (25.5 million) of the global total. South Africa had the highest proportion of people living with HIV (18%), thus making it one of the countries with the highest number of people living with HIV in the world. In 2016, there were 7.03 million people estimated to be living with HIV in the country (Statistics South Africa [Stats SA], 2016a). This is almost an additional 1 million in four years from the 6.4 million estimated by the Human Sciences Research Council (HSRC) in 2012.

Expanded access to HIV treatment has led to more people living longer as seen in the mortality decline and improvements in life expectancy. For example, life expectancy rose by a remarkable 8.4 years in the last decade (2006–2016) in line with the rapid roll out of antiretroviral therapy (Stats SA, 2016a). The 2016 mid-year population estimates

show that life expectancy at birth in South Africa without HIV was estimated at 65.2 years for males and 72.3 years for females. With HIV, life expectancy was estimated at 59.7 years for males and 65.1 years for females (Stats SA, 2016a).

Of the total world population living with HIV in 2015, 18.6% (6.8 million) were young people aged 15–24 years (UNAIDS, 2016b). It is therefore not surprising that globally, in 2013, the leading cause of death for adolescents aged 10–14 years was HIV and AIDS (10.4%). Mother to child transmission has been linked to HIV in the first 10 years of life, whilst sexual transmission has been attributed to HIV acquisition in later years. Sex differentials revealed HIV and AIDS (7.5%) was the leading cause of death among females aged 10–24 years and among males of the same age road injuries (18.3%) were the leading cause of death. Self-harm was the second leading cause of death for both males and females in 2013 (7.8% and 7.4%, males and females respectively) (Mokdad *et al.* 2016).

Age differentials were observed among females with HIV and AIDS accounting for 11.6% of deaths in the 10–14 years age category and self-harm was the leading cause of death among youth 15–24 years (9.8% and 8.1%, 15–19 years and 20–24 years, respectively) (Mokdad *et al.* 2016). In 2013, unsafe sex was the second leading risk factor for death after alcohol use for ages 15–19 years and 20–24 years in 2013 (Mokdad *et al.* 2016). These statistics point to a growing need to focus on HIV and AIDS among young people; especially females.

Despite increases in life expectancy and declines in mortality, new infections have not abated. In 2015, there were 2.1 million new HIV infections. Of these, sub-Saharan Africa comprised nearly 65% (1.4 million) (UNAIDS, 2016a). What is more disturbing is that South Africa accounted for 18% of new HIV infections, making it the number one ranked country in the world with respect to HIV incidence (UNAIDS, 2016a). According to the 2012 HIV Prevalence, Incidence and Behaviour Survey there were 400 000 new infections in South Africa. It is for this reason that Shisana *et al.* (2014) note that the existing transmission dynamics in South Africa may result to an under achievement in the 50% reduction of new HIV infections by 2016. Further compounding the problem, is that a high percentage of 2015 new HIV infections in sub-Saharan Africa occurred in adolescent girls and young

women (AGYW) who accounted for one in four (525 000) infections (UNAIDS, 2016a). While adolescent boys and young men (10–24 years) are also at risk, in most sub-Saharan countries, their HIV incidence is much lower in comparison to females of the same age. The UNAIDS (2014) suggests that females' susceptibility is due to early sexual debut and large-age disparity relationships that are associated with unsafe sex and low usage of condoms. Additionally, violence discrimination, exclusion and gender based inequalities have been attributed to the increased vulnerability of adolescents girls aged 10–19 years and young women (MDG monitor, 2016).

South Africa has lagged behind when it comes to reducing new infections of HIV, especially in young women. Such news comes at a time when efforts to curb the HIV pandemic in the country have been widespread. On 24 June 2016, the then Deputy President of South Africa, Mr. Cyril Ramaphosa, launched an ambitious national campaign to prevent HIV among AGYW - She Conquers. The campaign is intended to respond to the unacceptably high rate of new HIV infections among AGYW in the country. In South Africa, the predominant mode of HIV transmission among young people is through sexual intercourse (Karim and Karim, 2010). In order for a country to achieve its sustainable development goal number three of ensuring good health for all at all ages and the demographic dividend (a window of opportunity for rapid economic growth), investments in health and education need to be made. Several interventions aimed at improving adolescent sexual and reproductive health behaviour in South Africa have been implemented in schools, communities, media, peer education and health facilities but the role of parents in the sexual socialisation of their children has not been fully explored, particularly interventions involving both the parents and children.

Effective parent-child communication on sexual and reproductive health and rights is considered to be one of the myriad of approaches by which to promote safer sexual behaviour among young people. A review on *HIV prevention for South African youth: which interventions work?* by Harrison *et al.* (2010) showed that of the eight interventions reviewed, four targeted secondary schools, four included adolescents over 15 years, and two targeted out of school youth. In doing so, these interventions excluded younger adolescents and those out of school. In South Africa alone, of the 10.2 million individuals aged between 15 to 24 years in 2013, one-third were not in employment, education or

training (NEETs) (Oosthuizen and Cassim, 2014). This could be one explanation why new infections increased for the age group 20–24 years. It also shows that those aged 15–19 years that were not in school, were disadvantaged as they did not have access to comprehensive sex education offered in schools.

Further, although schools may be better equipped to be conveyors of sex education, it cannot be expected that teachers change values or behaviours in the short run. On the other hand, families provide the opportunity for clarifying values and influencing behaviour change among youth. In addition, the school system may be restrictive in that young people may only be taught what the schools subscribe to. For example, some schools may focus on abstinence only messages, while ignoring the fact that some young people may be sexually active and may require other preventative efforts. However, if parents were better equipped to communicate with their children about general and sexual issues, they would develop their decision making skills at a much younger age and by so doing enable them to avoid negative health outcomes by the time they initiate sex.

Eisenberg *et al.* (2004) note that sexuality is a sensitive and difficult subject and many parents lack role models for educating and socialising their children about sex. Accordingly, the gap between initiation of life skills education in the schools and the sexual debut of young people, barriers associated with provision of sex education in the schools illustrate that parents have an additional role to play in the socialization of their children. Pattman and Chege's (2003) study conducted in Botswana, Kenya, Rwanda, South Africa, Tanzania, Zambia and Zimbabwe noted that the teaching of life skills in classes is also affected by the gender dynamics and class dynamics and therefore called for interventions that address the differences in gender. Though they suggested that peer educators were the appropriate mechanism, they acknowledged that the sustainability of training outsiders and providing continuous support in the schools is limited.

1.2 Significance of the study

The challenges faced by young people in accessing sexual and reproductive health information and services through the avenues mentioned above have led to the call for new strategies to complement existing ones and to expand on the options available to young people. Debates on risk avoidance have continued to emphasise the role of communication with parents, partners and peers to promote safer sex (Widman *et al.* 2014). However, one of the most challenging issues in understanding young people's sexual behaviour is the absence of communication in sexual relationships as well as the kind of information young people receive from their parents. A better understanding of parent-child communication can be helpful in identifying and developing HIV and STI prevention interventions for young people, with the parents taking on a leading but not sole role in providing the sexual education of their children. In other words, parent-child communication is not just about information provision but also includes alternative ways in which it can affect adolescent sexual health such as giving advice about situations in the children's lives, responding to questions, and providing a more stable and secure home environment. Many studies have shown that "when parents affirm the value of their children, young people more often develop positive, healthy attitudes about themselves" (Advocates for youth, 2018). As Apsy *et al.* (2007, p.451) point out that the role of parent and child communication can be through values communication, whereby parents were identified as the source who most influenced adolescents' sexual decision-making. Further the authors note "that the content of the talk as well as the perceived support provided by parents may also mitigate the impact of parent and child communication on youth sexual activity". Wamoyi *et al.* (2010, p.3) also maintain that "parents/carers of young people influence their sexual behaviour through interactions and communication of expectations".

The role of parents in promoting sexual health among young people in South Africa has attracted a lot of attention among several scholars (Dindili 2014; Soon *et al.* 2013, Zimmerman 2011; Lebesse *et al.* 2010; Phetla *et al.* 2008; Ngobese and Dlamini 2002). Increasingly, globally, family members-particularly parents-have been invited to become sexuality educators so as to strengthen and broaden the sources of information available to young people. In a study conducted by Mturi (2015) among young unmarried women

in South Africa, the author reported that the teenage pregnancies among the participants were due to lack of information on sexual and reproductive health. The author further states that this could be because the life orientation programme offered in schools may be ineffective. This observation is against the backdrop of a life skills programme that was introduced 15 years ago in secondary schools (Rutenberg *et al.* 2001). As such, Mturi argues that it is incumbent to “find ways to improve parent-daughter communication on sexual matters earlier in life to avoid girls falling pregnant” (Mturi 2015, p.1).

One of the major challenges faced by parents globally is that they lack accurate information to provide to their children (Eisenberg *et al.* 2004). This, however, highlights the need for parents to be better equipped to discuss sexuality issues with their children. As Kirby and Miller noted, “it is far less controversial to help parents communicate their own values to their children, and hopefully to decrease sexual risk-taking behaviour, than to provide abstinence-only education, to teach sex or HIV education that discusses condoms and other forms of contraception, or to provide condoms or contraceptives through public institutions such as schools” (Kirby and Miller 2002, p.93).

Further impelling the promotion of studies in parent-child communication on sexual and reproductive health matters is the paucity of data on sexual socialisation in the family. Sub-Saharan African cultures have traditionally relied on the extended family of aunts, uncles, elders, sisters and grandparents to provide this (Botchway 2004; Chimbwete 2001; Makiwane 1998). The role of these relatives has diminished because of social and economic factors such as urbanisation (Makiwane 1998; Wilson *et al.* 1994). In addition, the role of parents as sexuality educators has become more important because the age at sexual debut before age 15 has increased (Shisana *et al.* 2014) and yet reliance on the education system seems to suggest that initiation of life orientation in schools may not be sufficient for young people.

Research on risk avoidance has emphasised the role of parent-child communication on sexual and reproductive health as a means of promoting safer sex. This approach has been largely generated from concepts arising from sexual socialisation and sexual developmental theories. It is argued that, within the family context, parental behaviour and attitudes are critical in the socialisation process (Miller *et al.* 1999). According to

Weinstein and Thornton (1989, p.563) “characteristics of the family provide the setting in which sexual attitudes, expectations, values, and behaviour are transmitted and formed”, thus the family is still the environment in which socialisation occurs for the majority of young people. Accordingly, “family-based interventions to reduce adolescent sexual risk behaviour by improving parent-child communication present attractive alternatives to individual-level interventions with adolescents” (Hutchinson *et al.* 2003, p.99). Jaccard, Dodge and Dittus (2002, p.10) note that “such interventions teach parents how to communicate with their adolescents about sex and birth control and help parents acquire information and skills that make them more effective at helping their children avoid unintended pregnancy or sexually transmitted disease. In this approach, parents are viewed as change agents who are or who can become valuable sources of information and advice”.

Studies documenting the relationship between sexual risk-taking and parental relationships have often found that adolescents who have good relationships with their parents are more likely to delay sexual activity, use contraception when they do become sexually active and less likely to become pregnant than their peers who did not have a close relationship with their parents (Lukolo and Van Dyk 2015; Markham *et al.* 2010; Hutchinson 2002; Blum, Beuhring and Rinehart, 2000; Jaccard, Dittus and Gordon, 1996). Blake *et al.* (2001), suggest that the quality of parent-child communication about sex and sexuality is a strong determinant of adolescents' sexual behaviour. They argue that the extent and manner of parental involvement in the lives of their children is critical in avoiding high-risk sexual activity. Further, the authors point out that “children whose parents talk with them about sexual matters or provide sexuality education or contraceptive information at home are more likely than others to postpone sexual activity and when these adolescents become sexually active, they have fewer sexual partners and are more likely to use contraceptives and condoms than young people who do not discuss sexual matters with their parents, and therefore are at reduced risk for pregnancy, HIV and other sexually transmitted diseases (STDs)” (Blake *et al.* 2001, p.52).

It is against this background that parents and caregivers need to be involved as part of a broader strategy in promoting sexual and reproductive health among young people. The role that parents play in influencing their children's behaviour can be twofold: First

specific discussion between parents and children about sex as a means to improve young people's knowledge and secondly greater communication and better relationships in general between parents and children may lead to lower levels of risky sexual behaviour.

1.3 Policy environment on adolescent sexual and reproductive health and rights

South African National AIDS Council (SANAC), has a National Strategic Plan (NSP) on HIV, STIs and TB for 2012–2016. One of the goals of the plan is to achieve zero new HIV and by reducing new HIV infections by at least 50% using a combination of prevention approaches. Specific indicators targeting youth include the reduction of HIV prevalence among women and men in ages 15–24 years. The objectives relating to family involvement are communicated through sub-objective 1.5: retention of young people in school to reduce vulnerability to HIV infection, as well as providing post-school education and work opportunities. Part of this would include “educating parents and caregivers to encourage intergenerational conversations with young people on sex and sexuality will be prioritised. This includes education for learners and parents on gender norms and transformation” (SANAC 2012a, p.36). A new plan effective in 2017 was published in March 2017.

Whilst the 2012–2016 plan forms the basis for HIV prevention, several mechanisms were introduced prior to its inception and following its establishment to address the high rates of HIV and AIDS and unwanted pregnancies in South Africa. In line with the 1994 Cairo agreement, a National Youth Commission was established in 1996 by the Office of the President to draw attention to the needs of young people (Dickson-Tetteh and Ladha 2000), leading to the development of the National Youth Health Action Plan. Some of the key issues outlined in this plan comprise health promotion strategies appropriate to both young men and women, with an emphasis on healthy lifestyle habits and behaviours and in promoting total wellness; access to health and rehabilitation services by young men and women and the provision of ‘youth friendly’ health services; issues associated with high-risk activities such as substance and alcohol abuse; violence and ‘unsafe’ sexual behaviour; addressing customary practices and the impact on and dangers these create for the health of young people; and the establishment of community support structures

for young people who require support pertaining to health, including preventive measures. In addition, specific strategies pertaining to HIV and AIDS awareness and education, ensuring access to condoms and HIV testing and counselling services are outlined. Similarly, the plan of action addresses issues on teenage pregnancy, school attendance and youth health (Dickson-Tetteh and Ladha 2000).

Following this Bill was the white paper on the Transformation of the Health system in 1997. Further efforts to improve the policy environment for adolescents were made in 1998, where the Department of Health developed policy guidelines for adolescent and youth health (Department of Health 1999). Intervention strategies were identified, including the promotion of a safe and supportive environment, which includes relationships with families; social norms and cultural practices; mass media; accessibility of key opportunities and commodities; and policies on providing information, building skills, counselling and ensuring access to services. Subsequent interventions that were established took the form of reproductive health service provision, such as the National Adolescent Friendly Clinic Initiative (NAFCI), Planned Parenthood Association of South Africa (PPASA) Adolescent Reproductive Health services; as well as education through the Youth Commission's National Youth HIV/AIDS programme, National Life Skills training and peer education, media campaigns-Soul City, SoulBuddyz, Take Five-and the Beyond Awareness campaign, Better Life options and the South Africa Young Men's Christian Association (YMCA) Adolescent reproductive health program (Dickson-Tetteh and Ladha 2000).

As time has evolved and challenges persist, new policies have been developed to improve young people's sexual and reproductive health and rights. Most of these strategies formed the backbone of a multi-dimensional initiative focusing on the sexual and reproductive health of South African adolescents aged 12–17 years. This initiative worked under the auspices of loveLife, which was a consortium between the Department of Health (DOH), the Reproductive Health and HIV Research Unit (RHRU), the Planned Parenthood Association of South Africa, Advocacy Initiatives, and the Health Systems Trust. In 2009, the campaign ended and loveLife became a fully-fledged organisation

Chapter 1

pursing youth development issues. The main activities of the then initiative included projects to promote awareness and education, development of services, outreach and institutional support and the monitoring and evaluation of these projects. Over the last decade, on the one hand various HIV communication programmes have been implemented with loveLife and Soul City existing for a longer period and having a wider coverage among youth (79.1% and 75.3%, respectively in 2008) (Johnson *et al.* 2010). Most of these programmes have used mass media including television, radio and print. On the other hand, the NAFCI and PPASA are no longer in existence, RHRU changed its name to Wits Reproductive Health and HIV institute (WRHI) and some of these initiatives have been terminated. Others have been implemented as youth friendly services in public health facilities.

Since 2007, young people from age 12 have access to contraceptives without parental consent as promulgated by the Children's Act 38 of 2005 (Government of South Africa 2007). More recently, the Integrated School Health Policy (IHSP), the National Youth Policy (NYP) 2015–2020 and the National Adolescent Sexual and Reproductive Health and Rights Framework (NASRHRF) strategy 2014–2019 have been developed (Government of South Africa 2015a; Government of South Africa 2015b; Department of Health and Department of Basic Education 2012). The integrated school health policy targets school learners on provision of health education and promotion, learner assessment and screening and on-site health facilities. Since it is mainly focused on school going children it will not be discussed in this chapter (Department of Health and Department of Basic Education 2012), whereas other policies have also considered young people that are out of school.

The National Youth Policy (NYP) 2015–2020 was published in April 2015 (South Africa Government 2015a). The policy has identified 15 priorities with health, girls and young women, HIV and AIDS forming part of these (Government of South Africa 2015a). This policy was a follow up to the National Youth Policy 2009-2014. One of the areas the NYP 2015–2020 seeks to promote is health care and combating substance abuse among youth. With regards to sexual and reproductive health and rights the policy states that the “sexual and reproductive health and rights of young people should be supported by

both schools and the family to enable youth to have access to necessary information, to seek health care when necessary and to practice positive behaviours” (NYP, p.20). It further states that “families and communities should be skilled and capacitated so that they are able to talk to adolescents about SRH freely and confidently using their home language” (p.20).

In February 2015, the National Adolescent Sexual and Reproductive Health and Rights Framework (NASRHRF) strategy 2014–2019 was published. One of the areas of focus is the role of family and community in promoting the sexual and reproductive health and rights (SRHR) of adolescents by “building the skill and capacity of the family and community to communicate to adolescents on their SRHR with freedom and with confidence especially in local language” (Government of South Africa 2015b, p.34). The framework has identified as priority number 4 “creating effective community support networks for adolescents through strengthening and scaling community networks supporting adolescents and capacitating them along with parents and caregivers; securing participation of stakeholders and involving young male adolescents in SRHR programming; as well as creating platforms that promote gender equality and socialisation among adolescents” (Government of South Africa 2015b, p.31). More recently, the national health promotion policy and strategy 2015-2019 was launched (National Department of Health [NDoH], 2015). One of their target audiences are youth and “encourages health promoters to address risky sexual behaviour, including multiple sexual partners, sex without a condom, and the consequences of unwanted pregnancies” (NDoH 2015, p.16).

Although the above policies were created to improve the sexual and reproductive health and rights of young people in South Africa, a review by Beksinska, Pillay and Smit (2014, p.677) found mixed results and concluded that “youth still faced barriers when accessing health care.” Despite that an enabling legal and policy environment for young people to realise their SRHR exists in South Africa, challenges still prevail. Some of these might be due to the implementation of the policies, where for example service providers are not ‘youth friendly’, which becomes a barrier for young people to access services. Additionally, there are social, cultural and structural factors which prevent young people

from adopting protective behaviours. Further, the nature of most interventions requires individual effort and efficacy, yet the environment that one lives in could also affect one's behaviour, whether it is the family, school, community or Church. Therefore, behaviour change requires collective action of personal, social and environmental factors. Additionally, knowledge alone does not translate to behaviour change. Similarly, the provision of services does not necessarily lead to utilisation of those services. Accordingly, there is still a need to strengthen interventions and to identify models that will curb risky sexual behaviour among young people. A detailed discussion on the implementation challenges are discussed in the analytical chapters.

1.4 Research aims and objectives

1.4.1 Research objectives

The overall research objective is to establish the role of parents in promoting sexual health among young people in South Africa and to gather information on how best parent-child communication can be enhanced. There are four main objectives. Using quantitative data (i) to investigate how much parent-child communication there is and what factors are associated with parent-child communication; (ii) to determine whether parent-child communication about sexual and reproductive health issues helps to reduce risky sexual behaviours; and using qualitative analysis (iii) to understand the context through which parent-child communication takes place within Durban, South Africa; and (iv) to review selected interventions and programmes on parent-child communication so as to recommend improvements for developing other interventions.

Specific broad objectives for each of the analytical chapters are as follows:

Chapter 4 aims to;

- Investigate the patterns of communication between parents and adolescents and
- Determine the factors that facilitate or inhibit communication on sex and related topics between parents and adolescents, from both the parents and teenagers perspectives.

Chapter 5 aims to;

- Examine the association of parent-child communication with sexual behaviours. The focus will be on: ever had sex, age at first sex, condom use in past 12 months, partners in past 12 months.

Chapter 6 aims to;

- Assess the social and cultural factors influencing parent-child communication in Durban;

Chapter 7 aims to;

- Review existing interventions and recommend strategies aimed at promoting parental involvement that are culturally sensitive.

1.4.2 Research questions

Triangulation methods were used to provide a comprehensive picture on parent-child communication in South Africa. This was also aimed at providing cross-validation of data across methods. The bulk of the thesis uses secondary data from the 2001 loveLife nationwide survey and the qualitative phase employs focus group discussions, in-depth interviews and key informant interviews conducted by the researcher. Further information on the data collection methods will be discussed in subsequent chapters related to the aims of the study.

Specific research questions for the analysis are as follows:

Chapter 4

1. To what extent is parent-child communication taking place and what is spoken about? How does it differ by gender, population and age group?
2. Who talks to whom- who do teenagers talk to and who do parents talk to?
3. Is there a consensus in the reports given by parents and teenagers about communication?
4. What influence, if any, do socio-demographic factors have on parent-child communication?
5. Does exposure to the loveLife campaign increase communication between parents and adolescents?

Chapter 5

Specific research questions for the analysis are:

1. Is parent-child communication associated with lower levels of sexual risk behaviours among adolescents?
 - a. Are young people who communicate with their parents' more likely to have initiated sex?
 - b. Are young people who have discussions with their parents less likely to be involved in risky sexual behaviour?
2. Does the content of communication influence sexual behaviour-global communication, sexual-risk communication and general communication?
3. What influence if any do socio-demographic factors have on the relationship between parent-adolescent communication and sexual risk taking behaviours?

Chapter 6

1. What socio-cultural factors are associated with parent-child communication in Durban, KwaZulu-Natal?

Chapter 7

1. Do interventions and programmes aimed at improving parent-child communication meet their objectives?

1.5 Structure of the thesis

The thesis is divided into eight chapters. The remainder of this thesis is as follows:

The second chapter presents a background on South Africa and information on sexual risk behaviours among young people. It also includes the theoretical framework and the conceptual framework. The Chapter further explores the linkages between the theoretical framework and the conceptual framework. The third chapter presents an overview of methods and data sources and also provides a description of the research journey taking into account reflexivity and the research questions in the temporal context.

Chapter four is on parent-child communication and begins by providing an explanation on the contribution of the chapter, followed by a discussion on the socialisation of young people in South Africa and the need for studies on parent-child communication.

Thereafter, the significance of the study is discussed and the aims and research objectives of the chapter. This is followed by a review of previous studies on parent-child communication on sexual and reproductive health. The review focuses on the extent of parent-child communication, to whom teenagers talk, congruence between reports of parents and children as well as a review on factors associated with parent-child communication. The methodology section is then discussed and data and measures used for analysis are presented. A descriptive analysis is presented on parent-child communication among youth and their parents by showing patterns of parent-child communication and the factors associated with parent-child communication controlling for selected socio-demographic variables (age, gender, population group, residence, education, wealth status, living arrangements, schooling status, and household size) are presented using linear regression methods. The chapter concludes with a discussion of the findings.

Chapter five explores the relationship between parent-child communication and sexual behaviours of young people in South Africa. The chapter begins with a background to the study and then follows with a section that discusses the contextualisation of sexual behaviour among South African youth. Hereafter, the significance of the study and the policy relevance are addressed. A review of studies on parent-child communication and sexual behaviour is conducted in Western, Eastern and African settings and gaps in the literature are identified. The analytical sections present findings using bivariate analysis and logistic regression. In this chapter analysis was based on associations between three types of communication (global, sexual and reproductive health and general communication) and two types of sexual behaviour (ever had sex and risky sex). The chapter ends with a section focusing on the discussion and conclusion.

The sixth chapter provides the socio-cultural context in which parent-child communication on reproductive health takes place using qualitative techniques. This chapter begins with a brief introduction. The study aims and objectives are presented followed by the research questions. The literature review on qualitative studies undertaken on parent-child communication on sexual and reproductive health is presented and also identifies how the current study improves on the knowledge base.

Chapter 1

The results from the focus group discussions and in-depth interviews are presented followed by limitations, discussion and a conclusion.

Chapter seven reviews the interventions and programmes aimed at promoting parent-child communication in South Africa and whether these have achieved their objectives. The analysis is based on key informant interviews and also reviews published material on the studies.

Lastly, chapter eight is the summary and conclusion and provides programmatic implications for further research.

1.6 Definition of terms

Parent "A person who is one of the progenitors of a child; a father or mother. Also, in extended use: a woman or man who takes on parental responsibilities towards a child, e.g. a stepmother, an adoptive father; a protector, guardian" (Oxford English Dictionary, 2015)

Caregiver "A parent, foster-parent, or social services professional, who provides care for an infant or child" (Oxford English Dictionary, 2015).

Adolescents "Young people between the ages of 10 and 19 years"(World Health Organisation-http://www.who.int/topics/adolescent_health/en/). However, in this thesis the group has been disaggregated into two groups for comparison: younger and older adolescents. In the quantitative research younger adolescents are those aged 12–14 years old and the older adolescents are those aged 15–17. In the qualitative research younger adolescents are defined as adolescents aged 10–14 years and older adolescents refer to those aged 18–19 years old.

Young people The WHO defines young people as between 10 and 24 years old and this study uses the same definition (WHO, 2011, p.1).

Communication "The exchange of meanings between individuals through a common system of symbols" (Communication, 2008) cited in Champagnie 2011. Further, Kumi-Kyereme *et al.* (2007) define communication as "interactions and discussions that parents, other adults and peers have with young people on issues that are of interest or

pertinent to one or both parties involved, as well as the content, nature and timing of action” (2007:135).

General Communication: In the context of this thesis, general communication refers to the four topics asked in the survey: that is teenagers’ dreams and aspirations, teenagers’ friends and the things they do together, things that are going on in the teenagers’ lives and alcohol and drugs.

Global communication refers to both general and sexual risk communication. It is the sum of the thirteen communication topics: the four general topics (teenagers’ dreams and aspirations, teenagers’ friends and the things they do together, things that are going on in the teenagers’ lives and alcohol and drugs) and nine sexual risks communication topics (sexual assault, sexual abuse, contraception and avoiding pregnancy, relationships between men and women, deciding when you’re ready to have sex, risks of unprotected sex, dealing with pressure to have sex, HIV/AIDS and someone you are dating) discussed in the quantitative survey.

Parent-child communication “Can be defined as the exchange of meaning between a father, mother or guardian and child” (Champagnie, 2011, p.10).

Sexual-risk communication refers to sexual assault, sexual abuse, contraception and avoiding pregnancy, relationships between men and women, deciding when you’re ready to have sex, risks of unprotected sex, dealing with pressure to have sex, HIV/AIDS and someone you are dating.

Comprehensive sexuality education (CSE) According to UNFPA (2014, p.10), “CSE is curriculum-based education that aims to equip children and young people with the knowledge, skills, attitudes and values that will enable them to develop a positive view of their sexuality, in the context of their emotional and social development”.

Sexual socialization “is often described as the process by which knowledge, attitudes, and values about sexuality are acquired” (Ward, 2003,p.348).

Life orientation “is the study of the self in relation to others and to society. It applies a holistic approach. It is concerned with the personal, social, intellectual, emotional, spiritual, motor and physical growth and development of learners, and the way in which

these dimensions are interrelated and expressed in life” (Department of Education, 2003, p.9).

Sexual health refers to “a state of physical, emotional, mental and social well-being related to sexuality: not merely the absence of disease, dysfunction or infirmity. Sexual health requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence. For sexual health to be attained and maintained, the sexual rights of all persons must be respected, protected and fulfilled” (World Health Organization, 2006, p.5).

Reproductive health is “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes. Reproductive health therefore implies that people are able to have a satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so” cited in <http://www.choiceforyouth.org/information/sexual-and-reproductive-health-and-rights/official-definitions-of-sexual-and-reproductive>.

Note

The following are used interchangeably in the thesis:

- Parents/caregivers: a broad definition of parents is used to refer to biological parents and caregivers. In this thesis reference to caregivers will only be mentioned when it is necessary to distinguish between the biological parent and the guardian.
- Adolescents/young people
- Sexual and reproductive health education/sexuality education/ sexual socialization/life orientation
- Sexual and reproductive health communication/ communication about sexuality issues/ HIV and sexual health communication.

Chapter 2: Study setting, theoretical and conceptual frameworks

Chapter two comprises background information on the profile of youth and adult population. This is intended to begin setting the scene for the survey that was analysed and to give trends in the socio-demographic characteristics of young people and adults in South Africa. It is followed by a review of HIV and AIDS and young people, which puts into context how young people in South Africa are exposed to sexual risk taking and therefore are at increased vulnerability to HIV and AIDS. The last two sections of the Chapter provide the theoretical framework used to inform the analytical chapters and the conceptual framework used in some of the analytical chapters.

2.1 Profile of South Africa

South Africa is a country situated on the tip of the sub-Saharan Africa continent as shown in Figure 2.1. The country is bordered by the Indian Ocean on the southeast and by the Atlantic Ocean on the southwest. In addition, it is surrounded by Namibia in the northwest, Botswana and Zimbabwe in the north. Mozambique and Swaziland surround it in the northeast and Lesotho lies within the South African landscape bordered by the provinces of Eastern Cape, Free State and KwaZulu-Natal. South Africa has a land area of about 1.2 million square kilometres. It has nine provinces: Western Cape, Eastern Cape, Northern Cape, Free State, KwaZulu-Natal, North West, Gauteng, Mpumalanga and Limpopo (www.gov.za 2016). Gauteng is the largest in population size and is densely populated but very small in land size (www.gov.za 2016). Gauteng is the economic hub of the country and is the home to the administrative capital City of Tshwane (formerly Pretoria) (www.gov.za 2016). Another key province is Western Cape as it hosts the city of Cape Town, which is the legislative capital where parliament is situated (www.gov.za 2016).

Figure 2.1: Map of South Africa



Source: <http://buzzsouthafrica.com/wp-content/uploads/political-south-africa-map.gif>

In 2016, there were 55.6 million people, 51.0% of the population were females and 49.0% were males. A large proportion of the population is under the age of 15 (30.0%) (Stats SA 2016b). Africans accounted for 80.7% of the population; Coloured people comprised 8.7% of the population, while Indian/Asian and White people make up 2.5% and 8.1% respectively (Stats SA, 2016b). The 2016 community survey results show that most people live in Gauteng province with 13.4 million people and contributed to 24.1% of the national population and the least populated province is Northern Cape with a population of 1.19 million people (2.1%) (Stats SA 2016b). In 2016, the life expectancy at birth without AIDS in South Africa was estimated at 69.0 years. It was 65.2 years for males and 72.3 years for females. The life expectancy at birth with AIDS is lower and was estimated at 59.7 years for males and 65.1 years for females, whilst the total life expectancy was estimated at 62.4 years. The infant mortality rate was 33.7 deaths per 1000 live births in 2016. The total fertility rate was 2.43 and the population growth rate from 2015 to 2016 was 1.19 (Stats SA 2016a).

According to the Stats SA (2016c), the real Gross Domestic Product (GDP) growth was estimated at 1.3% for 2015. Employment figures show that 26.6% of the population were unemployed between April and June 2016 (Stats SA, 2016d). However, youth

unemployment was more dire, with 37.5% of youth aged 15–34 years unemployed at the end of the second quarter of 2016 (Stats SA 2016d). The situation was worse among those aged 15–24 years (65.2% among 15–19 and 52.2% among 20–24 year olds). Further analysis on unemployment shows that 31.2% of the youth aged 15–24 years were not in employment, education or training (NEETs). Almost 50% (48.9%) of those aged 20–24 years were NEETS. African and Coloureds had higher proportions of young people who were NEETs. Women surpassed men, with over 50% of African and Coloured women in NEET compared to less than 50% among males. In 2016, young people (10–24 years) accounted for about 29% of the total population (Stats SA 2016b). This high proportion translates to a large number of young people transitioning into adulthood facing the perils of HIV and AIDS. Young people are at their formative stages, where health and social issues of sexuality, pregnancy, contraception, educational attainment, employment, age-disparate relationships, cultural doctrines of male and female sexuality and gender based violence become of primary importance.

2.1.1 Profile of young people and adults in South Africa

This section is important because the data collection for the survey was undertaken in 2001 and the qualitative fieldwork was done in 2006. Therefore trends analysis of young people and adults for 2001 and more recent data collection periods (2011 and 2016) provide a snapshot on the demographics and how these have changed over time. The socio-economic demographics play a critical role in providing context to the population under study. In this section, a brief discussion on how the loveLife campaign was introduced is discussed as this will allow the reader to better understand the campaign and its main objectives.

2.1.1.1 Profile of young people

The mid-year population estimates for 2016 showed that there were approximately 15.0 million people aged 10 to 24 years in South Africa (about 28.4% of the total population) (Stats SA 2016a). Table 2.1a in Appendix A on page 315 demonstrates trends in the number distribution of the socio-demographic characteristics of young people based on the results from two censuses (Census 2001 and Census 2011) and the 2016 community

survey (CS 2016). Table 2.1a shows that the number of young adolescents (10–14 years) declined between 2001 and 2011, with 5.1 million young adolescents in 2001, decreasing to 4.6 million in 2011. However, the number increased to 5.2 million in 2016, increasing with 100 000 more adolescents compared to fifteen years ago. It can be deduced from these trends that mortality played a role in the declining numbers of this young population between 2001 and 2011.

The number of older adolescents in the 15–19 year age group did not change much over the fifteen year period. There were approximately 5.0 million 15–19 year olds in 2001 and 2011. In 2016, the number increased slightly to 5.1 million. Contrary to the adolescents, the number of youth (20–24 years) increased consistently between 2001 and 2011 (4.3 million [2001] to 5.4 million [2011]) but experienced a slight decline to 5.3 million in 2016. Overall, the profile shows a change in the age structure over the years with more young people in the economically active age group (20–24 years) relative to the economically dependent age group (10–14 years). The number distribution shows that while adolescents (10–14 years) accounted for the majority of young people in 2001, they were surpassed by age group 20–24 years in both 2011 and 2016.

Table 2.1b in Appendix B on page 317 shows the percentage distribution of young people from 2001 to 2016 by socio-demographic characteristics. Gender differentials show that in 2001 and 2016, females accounted for a higher proportion of young people in all age groups, whereas in 2011, males dominated the youngest and oldest age groups (10–14 years and 20–24 years, respectively) and females were more than males in the 15–19 year age group. With regard to population group, black Africans were the majority (over 80%) in all the age groups throughout the three observation periods, followed by the coloured population group (8.0% to 9.2%), white population group (5.6% to 7.1%) and the Indian/Asian population group which ranged between 1.9% and 2.6%.

Marital status shows that a majority of young people had never been married and this is expected in these age groups. The proportion of never married declined with age, depicting a slightly lower proportion of those aged 20–24 years never married compared to those under 20. In 2016, there were 56.9% of 10–14 years who were never married.

However, this proportion should be interpreted with caution considering that 41.7% of 10–14 year olds had other/unknown marital status. It can be deduced from previous results that the other and unknown belongs to the never married category hence 98.6% of 10–14 years were not married in 2016. A proportion that is reflective of the status of adolescents.

With regards to educational attainment, the majority of adolescents' 10–14 years had attained some primary education in 2001 (77.1%). However, a drop was observed in 2011 (70.0%) and a further decline in 2016 (49.0%). For the 15–19 year old age group, the majority had attained some secondary school and increased from 59.9% in 2001; to 69.4% in 2011 and 83.5% in 2016. Among those aged 20–24 years, educational attainment was mostly incomplete secondary education suggesting that for the survey/census years (2001–2011), this age group experienced low levels of high school completion. For example, 41.6% of 20–24 years had incomplete education in 2001, compared to 2011 and 2016 (40.4% and 40.3%, 2011 and 2016 respectively). Those with completed secondary education were 31.9% in 2001; 39.3% in 2011 and 43.8% in 2016. Needless to say, the figure remains low given that less than 50% of respondents in the age group had completed secondary schooling. Given that the average age of completing high school is 19 years (with 12 years of schooling), one would expect that at age 20 secondary schooling would have been completed and thus may suggest that there may be high drop-out levels in secondary school.

When considering employment status, which is only applicable to young people over age 14 years, the results show that for all the years with information on employment status (2001 and 2011), the majority of 15–19 year olds were neither employed nor unemployed (over 75%), but could have still been in school. Those employed constituted 13.1% of the adolescent population (15–19 years) in 2001 and 19.4% in 2011. Among the 20–24 year olds, the percentage unemployed was highest in 2001 and 2011 (42.3% and 37.6%, 2001 and 2011 respectively). Education and employment figures for 20–24 years paint a bleak picture for South African youth, largely because not completing high school makes them less marketable and thus it is not surprising that unemployment levels in these groups are high.

Information on household size was only available in the census years 2001 and 2011 and revealed that in 2001 over 10% of 10–19 year olds lived in households with four or more people, whilst over 10% of those aged 20–24 years lived in households with two or more people. In 2011, the proportion of adolescents with at least 10% were found in three or more households and the 20–24 year olds with at least 10% were found in a household size with more than one person. In essence, younger adolescents resided in bigger households compared to those aged 20–24 years old. In terms of geographic distribution, there were more adolescents (10–19 year olds) residing in KwaZulu-Natal for all three observation periods, whilst those aged 20–24 years lived in Gauteng.

When considering the cohort effect of the young people, we note that those aged 10–14 years in 2001 and therefore aged 20–24 years in 2011, increased from 5.1 million young adolescents in 2001 to 5.4 million 20–24 year olds in 2011. This suggests growth, which could be attributed to population growth from in-migration. It is clear from the two intercensal periods that males and females increased. Similarly, when one considers the cohort effect between 2011 and 2016 for 15–19 years in 2011 and 20–24 years in 2016, again there is an increase from 5.0 million to 5.3 million. Therefore, in 5 years there was an increase of 300 000 in this age group. Again a depiction of in-migration. Indeed, this can be expected as South Africa attracts many sub-Saharan students for tertiary education.

2.1.1.2 Profile of adults in South Africa

Table 2.1c in Appendix C, on page 318 presents the number and percentage distribution of the population aged 18 years and above in South Africa for the years 2001 to 2016. The profile shows that the adult population in South Africa was 35.8 million in 2016, an increase from 8.4 million in 2001. In all the years females accounted for over half of the adult population in South Africa. Black Africans accounted for a higher proportion of the adult population (over 75%) in all three years, followed by the white population group, with a population of about 10% or more in each year.

Marital patterns show that marriage in South Africa remains low, as the highest proportion of adults was never married. In 2001, 43.5% of the adults reported never been married. The proportion of never married adults increased throughout each

census/survey period confirming that marriage is becoming less common in South African society. This is further supported by trends among those married, where the percentage decreased consistently over time (38.2% in 2001, 34.6% in 2011 and 30.7% in 2016).

Comparisons of the educational attainment across the inter-censal period indicate that the highest proportion of adults had some secondary schooling, followed by those who had completed secondary school. Patterns show low levels of higher education among adults ranging from 8.0% to 11.3%. However, the proportion of those with no schooling declined over the three years from 16.9% in 2001 to 8.0% in 2011 and reaching a low of 6.7 % in 2016. Overall patterns show that more adults have been completing secondary education. In 2001, 20.3% of the adults had completed secondary education, and increased to 27.7% in 2011. There were 35.2% of adults who had completed secondary education in 2016.

Employment status shows that although there are more people employed, levels remained low given that employment was below 50%. For example, the proportion of employed adults increased from 34.7% in 2001 to 38.8% in 2011. No information is available for 2016. Household size was asked in 2001 and 2011 and in both years the household size had the highest proportion with four individuals (15.3% and 15.8%, 2001 and 2011 respectively).

Gauteng remained as the most populous province for all the years followed by KwaZulu-Natal. The proportions in Gauteng ranged from 24.3% to 25.2%, whilst for KwaZulu-Natal these were from 17% to 20.2%. The least populated province was Northern Cape with less than 2.5% of the population residing there. Over the years, KwaZulu-Natal and Free State provinces lost population over time with KwaZulu-Natal declining from 20.2% to 17.8% and Free State from 6.2% to 5.0%. These declines might be attributed to mortality in the provinces or migration to other provinces. The 2001 census showed that 62.0% of the population lived in urban areas. In 2011, urban dwellers constituted 68.0% of the adult population in South Africa.

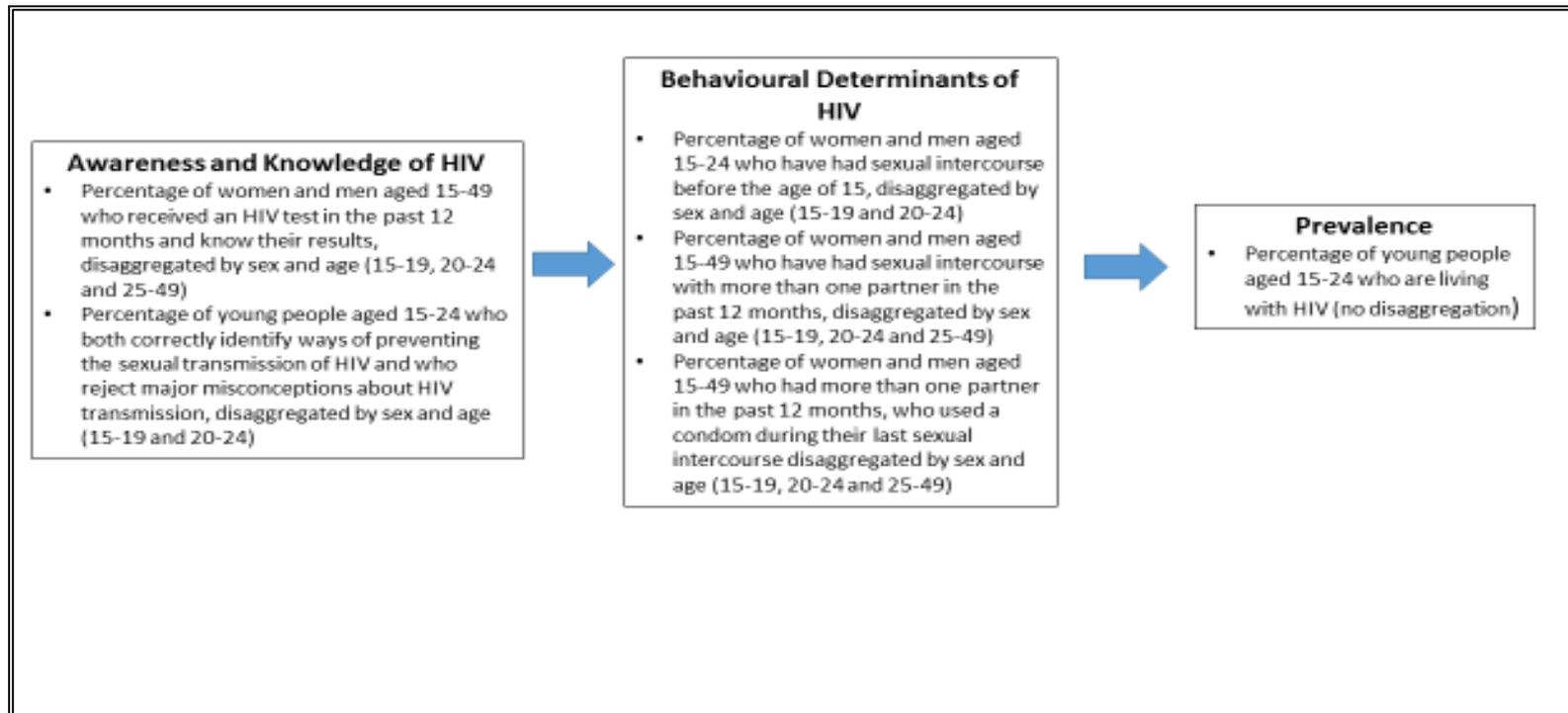
2.2 HIV and AIDS and young people in South Africa

Sexual risk behaviours place adolescents at risk of unplanned pregnancies, HIV infection and other sexually transmitted infections (STIs). Sexual risk behaviours include but are not limited to early sexual debut (Pettifor *et al.* 2009), inconsistent use or non-use of condoms, sexual coercion, unprotected anal sex, multiple and concurrent sexual partners (Shisana *et al.* 2014; Peltzer and Matseke 2013; Mchunu *et al.* 2012), transactional sex (Leclerc-Madlala, 2013; Jewkes *et al.* 2012; Hunter, 2002) and age-disparate sex (Shisana *et al.* 2014; Mungoni and Mangold 2013). Some of these risk behaviours have been identified by the Joint United Nations Programme on HIV/AIDS, [UNAIDS] (2014) to reduce the sexual transmission of HIV in the general population. Therefore, for any programme or intervention to succeed, certain indicators need to be targeted so as to measure their impact. These indicators are based on three areas in which HIV can be reduced: determinant factors which include knowledge levels, behavioural factors on HIV and impact factors on HIV prevalence and incidence.

The indicators reviewed are presented in Figure 2.2 on page 28 and focus on the reduction of HIV and AIDS among 15–24 year olds. The mechanism in which young people may be at risk of HIV may be depicted in the following manner: Awareness and knowledge of HIV and the type of behaviours that they embark on. With regard to awareness and knowledge of HIV transmission, young people would need to have an understanding of how HIV is transmitted. On the one hand, it is expected that when young people have knowledge, it might lead to adoption of safer sex behaviours. For example, using condoms may be informed by the understanding that these provide protection from HIV or because they are aware that the partner might be at risk of HIV, or they themselves might be at risk of acquiring HIV and thus would want to mitigate the risk of transmission by using condoms. How they apply the knowledge they have to the sexual behaviour may either be detrimental or protective to them. On the other hand, adolescents and young people who do not know how HIV is transmitted are also at risk, since they will not have the knowledge to influence their sexual behaviour as the power to act is determined by knowledge and agency.

A second trajectory shown in Figure 2.2 pertaining to awareness and knowledge which can influence prevalence is knowledge of their status and their partners' status. It is expected that HIV testing will reduce the spread of HIV between partners. If both partners are positive then this allows them to reduce re-infection by engaging in protective behaviour, such as using condoms and treatment for prevention in the form of antiretroviral treatment (ART) to decrease the risk of HIV transmission. If the couple is sero-discordant (where one partner is diagnosed as HIV positive and the other partner diagnosed as HIV-negative), then it will be important that the couple adopt prevention strategies that will reduce HIV transmission between them. These include among others ART, condoms, Pre Exposure Prophylaxis (PrEP) and Post Exposure Prophylaxis (PEP). PrEP requires HIV negative people who are at risk of acquiring HIV to take a pill every day. The pill is known as Truvada (Centre for Disease control [CDC], 2016). Whilst the CDC (2016, n.p), defines PEP as "the use of antiretroviral drugs after a single high-risk event to stop HIV seroconversion. PEP must be started as soon as possible to be effective—and always within 72 hours of a possible exposure". Lastly, HIV testing becomes very important for negative couples to test regularly and to adopt behaviours that will reduce further exposure to HIV.

Figure 2.2: Reducing sexual transmission of HIV in the general population



Source: UNAIDS, 2014

2.2.1 Trends in HIV prevalence and incidence

The National Strategic plan (NSP) of TB/HIV and Malaria South Africa 2012-2016 states as its primary goal a reduction of new infections by at least 50% (South African National AIDS Council [SANAC] 2012a). Consequently, the NSP has identified HIV prevalence among men and women aged 15–24 years as a core indicator to curb the HIV epidemic through behavioural interventions. This will be done through monitoring trends in HIV prevalence in young ages in order to assess the progress in reducing new infections (SANAC 2012a: p.63). It is therefore important that some background on the sexual risk behaviour of youth in South Africa is provided to give insight into the sexual and reproductive health of youth in the country. This sets out the foundation for better understanding the sexual risk behaviour of young people and will help in identifying which behaviours put young people at more risk and can be used to better inform future programmes on HIV prevention and risky behaviour among young people in South Africa.

2.2.1.1 HIV prevalence 2002–2012

Table 2.1 shows HIV prevalence among 15–24 year olds in South Africa from 2002 to 2012. The table shows that HIV prevalence among youth increased from 9.3% [7.3–11.2] in 2002 to 10.3% [8.7–12.0] in 2005, but has declined since 2008. In 2012, it was estimated at 7.1% [6.2–8.1], which was slightly lower than the prevalence of 8.7% [7.2–10.4] in 2008.

Table 2.1: HIV prevalence among 15–24 years, 2002–2012

Year	N	%	95% CI
2002	2 099	9.3	(7.3–11.2)
2005	4 120	10.3	(8.7–12.0)
2008	3 617	8.7	(7.2–10.4)
2012	5 890	7.1	(6.2–8.1)

Source: Table 3.9 (Shisana *et al.* 2014)

2.2.1.2 HIV Incidence

HIV incidence among 15–24 year olds has declined over time in South Africa (See Table 2.2). Between 2002 and 2005 HIV incidence among all youth declined from 2.8% [1.7–4.2] to 2.3% [1.2–3.5] for the inter-survey period 2005–2008 and declined further to 1.5% [0.8–2.3] during 2008–2012 (Sishana *et al.* 2014). Much of the decline was observed among females who show a 60% reduction between 2002–2005 and 2008–2012. This is a huge improvement in HIV incidence among youth in countries most affected by HIV.

Table 2.2: HIV Incidence among 15–24 years in South Africa 2002–2005, 2005–2008 and 2008–2012)

Age group	2002–2005		2005–2008		2008–2012	
	%	95% CI	%	95% CI	%	95% CI
15–24						
Males	0.6	(0.1–1.6)	1.4	(0.5–2.3)	1.0	(0.4–1.6)
Females	5.3	(3.6–7.1)	3.5	(2.1–4.9)	2.1	(1.2–3.1)
Total	2.8	(1.7–4.2)	2.3	(1.2–3.5)	1.5	(0.8–2.3)

Source: Table 3.31 (Shisana *et al.* 2014)

Despite this huge decline in HIV incidence among females, the difference in HIV acquisition between males and females aged 15–24 years continues and was two times higher among females than among males in 2012 (Shisana *et al.* 2014). The differential among younger females aged 15–19 years increased from three times higher in 2008 to eight times more likely for females to be HIV positive compared to their male peers in 2012 (Shisana *et al.* 2009; 2014). This suggests that the HIV pandemic among females remains a huge concern in the fight against HIV prevention. Recent evidence from Dellar, Dlamini and Abdool Karim (2015) reiterates these findings and shows that 30% of all new HIV infections in South Africa were among adolescent girls and young women aged 15–24 years old. This is further compounded by the fact that young women seroconverted 5–7 years earlier than their male counterparts.

2.2.2 Behavioural Determinants of HIV

One of the reasons for the huge discrepancy in HIV incidence between young men and women is that females are having sex with older sex partners rather than with their male counterparts (Shisana *et al.* 2014). This has been the character of the epidemic among youth and is illustrated by the trend for inter-generational sexual relations among 15–19 year olds, where 10.0% had partners that were five years or older in 2005 and increased to 15.0% in 2008 and further to 20% in 2012. Among females, the trend is more pronounced, increasing from 19% in 2005 to 28% in 2008 and to 34.0% in 2012 (Shisana *et al.* 2014; 2009). It is clear from these figures that young females are having sex with partners five years or older than them and the proportion has increased over time, thus a cause for concern. For example, in 2012 the HIV prevalence among females aged 15–19 years old who had sex with partners that were five years and older was 11.0% compared to 9.3% among females with partners within five years (Shisana *et al.* 2014). However, studies by Harling *et al.* (2014) and Balkus *et al.* (2015) did not find an association between age disparate partnerships and HIV acquisition.

Other studies have also attributed the high incidence and prevalence of HIV among females to the heightened vulnerability of girls posed by contextual factors such as social norms, gender inequality and the socio-economic environment (Monasch and Mahy 2006). Gender based violence and intimate partner violence have also contributed to exacerbating the vulnerability of girls to HIV infection (Jewkes *et al.* 2006). Recent evidence from Fladseth *et al.* (2015) among HIV positive patients in a rural setting in KwaZulu-Natal, South Africa found that younger women with more equitable gender norms were more likely to use a condom at last sex compared to their peers with male dominant norms. This illustrates that when there is agreement (represented by higher scores) between partners on matters related to violence, sexual relationships, domestic chores and daily life and reproductive health issues then condom use at last sex becomes possible among young women who are HIV-positive. Notwithstanding, a study by Hallman (2015) in KwaZulu-Natal has also identified the environment in which young people live and how it might impact on their daily lives. Her findings suggest that “with age, girls areas shrink and tend to become smaller and quite unsafe, whilst boys’ spaces expand and contain a mixture of both safe and unsafe spaces” (Hallman, 2015, p.288). This therefore is suggesting that the environment in which young females are growing

becomes less protective as they grow because of the increasing risk to violence.

The UNAIDS (2015, p.13) report on fast tracking the end of the HIV epidemic in Africa has highlighted the importance of empowering young women and girls. The report highlights that this group is left behind and cites seven core reasons for the increased vulnerability of young women and adolescents:

“(1) inadequate access to good-quality sexual and reproductive health information, commodities and services, in some measure due to age of consent to access services; (2) low personal agency, meaning women are unable to make choices and take action on matters of their own health and well-being; (3) harmful gender norms, including child, early and forced marriage, resulting in early pregnancy; (4) transactional and unprotected age-disparate sex, often as a result of poverty, (5) lack of opportunity or lack of material goods; lack of access to secondary education and comprehensive age-appropriate sexuality education; (6) intimate partner violence, which impacts on risk and health-seeking behaviour; (7) violence in conflict and post-conflict settings”.

It is therefore important to understand the sexual behaviours that put young people at risk of acquiring HIV and AIDS, teenage pregnancy and other sexually transmitted infections in South Africa.

2.2.2.1 Sexual Debut before age 15

The situation analysis of adolescent sexual and reproductive health and rights in South Africa highlights that there has been a significant proportion of sexually active adolescents below the age of 16 (Government of South Africa, 2015b). According to the second and third national youth risk behaviour surveys among grade 8 to 11 learners with samples of at least 80% aged 14–18 years old, 5% aged less than 13 years or younger and just over 10% in ages 19 years or more, at least 38% [35.0 - 40.1] of all the learners had ever had sex in 2008, a proportion which only declined to 36% [33.9 - 38.7] among learners in 2011 (Reddy *et al.* 2013; 2010). In 2008, 13% [11.3 - 14.1] of all the learners had had sex before they were 14 years of age compared to a national prevalence of 12% [10.8 - 13.3] in 2011. The 2012 HIV prevalence survey found that 11% [9.1–12.6] of young

people aged 15–24 years old had sex for the first time before the age of 15. This is a slight increase from previous surveys (2002–2008) where sexual debut before age 15 was estimated at less than 10%. In 2002 sexual debut before age 15 was estimated at 5% [3.8-6.5], and in 2005 it was 8% [7.2-9.9] and increased to 9% [7.1-10.1] in 2008 (Shisana *et al.* 2014).

Throughout the three national surveys, young males had higher proportions of initiating sex earlier compared to females and the magnitude was wider in 2012 where 16.7% of males aged 15–24 years reported that they had initiated sex before age 15 compared to 5% of females (Shisana *et al.* 2014). The median age at first sex has varied across surveys perhaps because of the nature of the data collection methodologies, analysis and study locations. For example, in a nationally representative survey conducted in 2005, Shisana *et al.* (2005) found that the median age of sexual debut among young people aged 15–24 years old was 17 years for both males and females. Zuma, Mzolo and Makonko (2011) analysing the same study but utilising survival analysis techniques found the median age at sexual debut to be 18 years for both males and females. The analysis by Zuma, Mzolo and Makonko (2011) showed that rural females had significantly higher hazards of sexual debut compared to rural males. This is in contrast with McGrath *et al.* (2009) finding that the median age was lower for females than males. McGrath *et al.* (2009) using longitudinal data between 2003 and 2007 in rural South Africa, found that the median age at first sex among those aged 12–25 years was 18.5 years for women and 19.5 years for males. Zuma, Mzolo and Makonko (2011) further show that there were no significant differences between males and females in urban areas. On the contrary, Richter *et al.* (2015), using longitudinal data from an urban site in South Africa (SOWETO) measured the median age of sexual debut using survival analysis and found that the median age of sexual debut was 15 years for males and 16 years for females.

Perhaps what can be surmised from these surveys is that males initiate sex earlier in urban areas whereas in rural areas females initiate sex earlier. In a study by Ramlagan and Mabaso (2015), the authors investigated the median age of sexual debut among 15–24 years olds in the three national household based surveys in South Africa conducted in 2005, 2008 and 2012. They concluded that the median age at sexual debut was 18 years for both males and females in the three surveys and that this has not changed

significantly over time (Ramlagan and Mabaso, 2015).

Zuma, Mzolo and Makonko (2011) explained that one of the reasons their results were not consistent with another nationally representative sample by Pettifor *et al.* (2004) where the median age was 16 years for males and 17 years for females could be because of the methodology used to measure the median age. The authors suggest that the variations in the age at sexual debut between their study and Pettifor *et al.* (2004) could be attributed to non-use of survival techniques with input data on ages of the respondents irrespective of sexual experience and depending on applicability on whether respondents recalled the age at first sex. By contrast, Wringe *et al.* (2009) provide a more detailed comparative analysis to explain the variation in age at first sex undertaken in three sites that had carried out three or more rounds of surveys in the same sites in South Africa, Uganda and Zimbabwe. Within site comparisons show that the proportion with unreliable age at first sex was lower for women than men in all three sites. In Manicaland (Zimbabwe) approximately 50% of men had unreliable reporting of age at first sex compared to 30% of women. In Umkhanyakude (South Africa), 43% of men had unreliable reports on age at first sex in contrast to 29% females, whereas in Masaka (Uganda) unreliable reports for men were reported at 50% and 34% among women (Wringe *et al.* 2009). South Africa had the lowest unreliable reports of age at first sex particularly among men whilst among women reports were relatively similar to women in Zimbabwe (29 versus 30%, respectively). The authors argue that social desirability bias (SDB) may contribute to the inconsistent reporting of age at sexual debut. Beauclair *et al.* (2013), suggest that one way of reducing the social desirability bias would be to use Audio Computer-Assisted Self-Interviewing (ACASI) instead of face-to-face interviewing (FTFI) and their results show lower SDB among respondents compared to those interviewed using FTFI methods in Demographic and Health Surveys.

When comparing gender differentials with other countries in sub-Saharan Africa where Demographic and Health Surveys or AIDS Indicators Surveys had been undertaken, of the 24 countries included in the analysis, eight countries had more males initiating sex before age 15 compared to females (Doyle *et al.* 2012). These were Senegal, Kenya, Mozambique, Zambia, Uganda, Lesotho, Namibia and Rwanda. A comparison of the

proportions by sex in the surveys conducted in 2008, show that young males in South Africa had a higher proportion (11.3%) than males in Ghana (4%), Nigeria (6%), and Madagascar (8%) but it was relatively the same for Sierra Leone (11%). Females had a proportion of 8.5% in 2008, which was almost similar to females in Ghana (8%) and lower than the other three countries (Sierra Leone, Nigeria and Madagascar). This comparison shows two things. First that in 50% of the 24 countries reviewed by Doyle *et al.* (2012), females initiated sex earlier than males, in eight countries males had higher proportions than females and in four countries proportions were similar for both males and females. Second that the proportion of South African youth initiating sex before age 15 was lower than the proportion in all but four countries.

2.2.2.2 Sexual intercourse with more than one partner in the past 12 months

The increasing trend towards multiple sexual partners among adolescents has been another concern highlighted in the situation analysis. The 2008 study reported that 52% of the learners (age categories mentioned earlier) had more than one sexual partner in the three months preceding the survey and the proportion increased to 58% in 2011 (Reddy *et al.* 2013; 2010). Similarly, in the four HIV prevalence surveys conducted between 2002 and 2012, the proportion of sexually active 15–24 year old respondents with multiple sexual partners in the past 12 months increased from 23% in 2002 to 38% in 2012 among males, whilst among females the proportion that had multiple sexual partners was 9% in 2002, 6% in 2008 and 8% in 2012. However, the upward trend in multiple sexual partnerships in the past 12 months among males is not consistent with the trends reported in McGrath *et al.* (2013) and Todd *et al.* (2009), where multiple sexual partnerships declined over time. The study by McGrath *et al.* (2013) found significant declines in the proportions of multiple sexual partnerships for men and women, with decreases among men being three times as much compared to women (1.2% versus 0.4%). The comparison by Todd *et al.* (2009) also shows that multiple sexual partnerships declined in all age groups and in all birth cohorts in the Masaka and Rakai districts of Uganda, Umkhanyakude in South Africa and Manicaland in Zimbabwe. The authors further commented that “in the Manicaland and Umkhanyakude cohorts there was some evidence of a reduction in the reported number of sexual partners in the past 12 months in later birth cohorts, especially among the younger age groups” (Todd *et al.* 2009, p. i78).

Chapter 2

In all the four HIV prevalence surveys undertaken in South Africa, males had higher proportions of multiple sexual partners in the past 12 months compared to females. This conforms to other findings within sub-Saharan Africa (Doyle *et al.* 2012; Todd *et al.* 2009). Further analysis on multiple sexual partnerships by age, show that younger people aged 15–24 years had the highest proportion of multiple sexual partners in the past 12 months compared to the other age groups interviewed in the survey throughout the four surveys (Shisana *et al.* 2014). In 2012, 22% of young people had two or more partners in the past 12 months compared to 11% among 25–49 year olds and 4% among those aged 50 and above (Shisana *et al.* 2014).

Although it is possible to identify the gender differentials of multiple sexual partnerships, it is not clear from the studies above what the mean number of sexual partners was thus the comparative analysis by Todd *et al.* (2009) sheds light on reported number of sexual partners. The authors found that the mean number of sexual partners in the past 12 months was greater than 1 for men aged 15–24 years and less than 1 for women in the same each group, except for women in the Rakai district, thus suggesting a lower number of multiple sexual partners among women as compared to men within the past 12 months.

It appears that the upward trend in multiple and concurrent sexual partnerships can be explained by whether prevention programmes have been seen to impact on young people or not. For example, on the one hand, Maughan-Brown (2013, p.C) stated that “the consistent levels of individual concurrency among Black women and increases among Black men indicate that, overall, this form of multiple partnering has not responded to the HIV/ AIDS epidemic” (Maughan-Brown, 2013, p.C). On the other hand, Onoya *et al.* (2014) noted that multiple sexual partnerships were higher among those who had reported condom use at last sex and among those where having children out of wedlock was accepted by communities. Thus, it would imply that increased condom use and social norms are among the drivers of multiple sexual partnerships among young men or that those with multiple partners are more motivated to use condoms. By contrast, Shisana *et al.* (2014, p.xxxii) attribute the increase in multiple sexual partners “presumably due to a decline in HIV sexual transmission knowledge coupled with reduced

communication campaigns". Therefore the question that arises is whether greater knowledge and availability of condoms allows or drives the escalation of multiple partnerships or whether multiple sexual partnerships happen because of young people's lack of knowledge and the risks thereof. It is important to note that the decreases in multiple sexual partnerships seem to be experienced in the demographic surveillance sites rather than nationally and perhaps it could be argued that there have been focused interventions in these sites which have led to positive behaviour change.

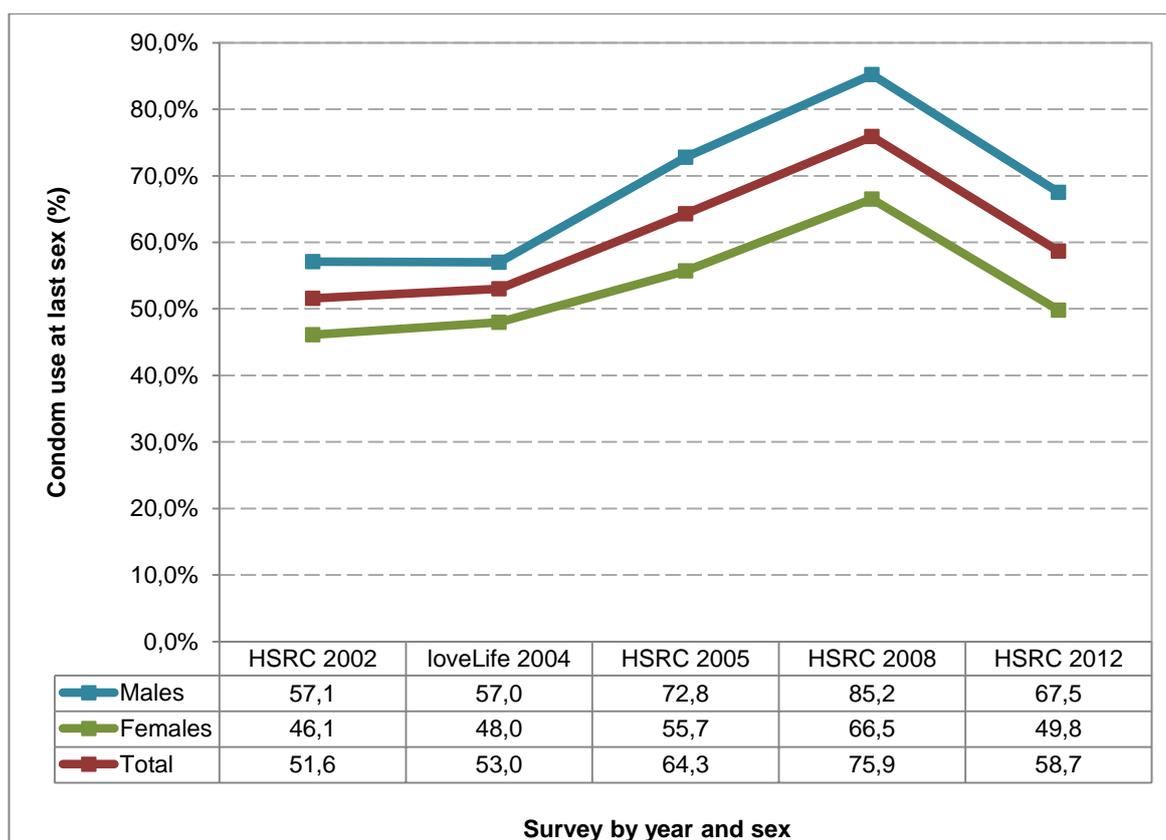
It is also important to differentiate between multiple sexual partnerships and concurrent partnerships. The latter refers to serial monogamy within a given time period (Steffenson *et al.* 2011), whilst concurrent partnerships refer to point prevalence of concurrent partnerships six months before the survey (Eaton, McGrath and Newell, 2012). According to Kelly *et al.* (2012, p.2), "it has been convincingly shown that in two populations in which individuals had the same average number of partners in a given period, HIV spread more rapidly in the population in which the partnerships were concurrent than it did in the population in which sexual partnerships occurred sequentially". In other words, Kelly *et al.* (2012) suggest that when sexual partnerships happen simultaneously or overlap, this fuels the spread of HIV compared to when sexual partnerships are monogamous but occur within a short space of time.

A nationally representative study among youth in South Africa found that concurrency was more common than serial monogamy among young men in South Africa, whilst this was not the case among young women, where levels of concurrency and multiple sexual partnerships were similar (Steffenson *et al.* 2011). However having a partner who had concurrent partners was not associated with HIV infection for men and women in the past 12 months. This finding is similar to a study undertaken in rural KwaZulu-Natal where (Tanser *et al.* 2011, p.253) note that "we were therefore unable to find evidence to support the belief that concurrent partnerships are an important driver of the rate of spread of HIV infection in this hyper endemic setting". That said however, the study by Steffenson *et al.* (2011) found associations when the observation period was reduced to six months; (the point prevalence recommended by UNAIDS). Women who reported more than one current relationship in the six months before the survey were three times more likely to be HIV positive compared to those that did not. Among men, those with

concurrent partners were twice as likely to be HIV positive. However, no association was found between concurrency and HIV among men after controlling for key demographic characteristics (population group, age, residence and education) and risk factors (number of life time partners, condom use at last sex, partner type, age difference, time since last coital debut, age at first sex, ever had transaction sex or coerced sex, experienced genital discharge or ulcer, circumcised (men) and ever pregnant. On the contrary, the association between concurrency and HIV remained positive among women. Although the authors were not able to explain why the relationship between concurrency and HIV remained positive among women, they suggest that “having multiple concurrent partners may place the index case at increased exposure to STI, which in turn can increase risk of HIV acquisition” (Steffenson *et al.* 2011, p.7).

2.2.2.3 Condom use at last sex

Condom use, particularly correct and consistent condom use is another prevention method for unwanted pregnancy and sexually transmitted infections (STIs) including HIV. Crosby *et al.* (2001, p.196) refer to correct condom application as: “opens package correctly; squeezes air from tip; places condom right side up on model, keeps tip pinched while unrolling condom; unrolls condom to the base of the model; condom remains intact; and no visible tears or punctures”, (whereas) consistent condom use is defined as using condoms 100% of the time (Crosby *et al.* 2001). Generally condom use at last sex is higher than consistent condom use as shown in a study undertaken in 2006 among young people. Condom use at last sex was reported to be 62% whilst only 45% of adolescents reported always using a condom in the past 12 months (The Henry Kaiser Family Foundation, 2007). Trend analysis of condom use behaviour shows that on the one hand, condom use at last sex among all respondents increased for both males and females from 2002 to 2008 but declined to 68% amongst males and to 50% among females by 2012, where proportions of young people reporting condom use dropped to proportions even lower than those for 2005 as shown in Figure 2.3 (Shisana *et al.* 2014). On the other hand, consistent (always using a condom) condom use among learners (80% aged 14–18 years) who had ever had sex, increased from 31% in 2008 and was estimated to be 46% in 2012 (Reddy *et al.* 2013; 2010).

Figure 2.3: Trends in condom use at last sex among youth aged 15–24 years

Sources: Shisana and Simbayi, 2002. Shisana *et al.* 2014; Shisana *et al.* 2005; Pettifor *et al.* 2004

Some authors argue that the decline in self-reported condom use may not necessarily be due to an actual decline but rather that respondents have tended to over-report condom use in previous surveys (Lipovsek *et al.* 2010). This view is further supported by Johnson *et al.* (2012) in South Africa. The authors undertook an analysis on the effects of changes in condom usage and antiretroviral coverage on human immunodeficiency virus (HIV) incidence in South Africa using a model based analysis and observed that condom use was exaggerated between 2000 and 2008. The findings were based on the STI-HIV and Actuarial Society of South Africa ASSA 2003 models. The authors suggest that the “over-reporting might be a result of social desirability bias, which may have been enhanced by HIV communication programmes that have heavily promoted condoms as an HIV prevention strategy” (2012, p.8). Despite the decline in condom use at last sex among learners, the upward trend in consistent condom use is encouraging as this is the behaviour that has more impact on the reduction of HIV transmission, if done correctly. However, little is known about correct application of condom use. A survey conducted by the Society for Family Health among 16–24 years olds in 2010 in three major cities:

Johannesburg, Durban and Cape Town found that of the 82% of males who reported condom use at last sex only 13% were able to identify steps correctly for condom use (biznews.com, 2012).

2.2.2.4 Condom use and partner type

In order to better understand the elevated risk on behaviour, it is important to look at condom use in conjunction with partner type information. This is because the risk on behaviour is dependent on both these factors (condom use and partner type) and how they interact. For example, if condoms are used consistently and correctly, the number of partners becomes insignificant. However, if the partner's sexual history is unknown and no condom is used with that single partner then the risk can also be high for both partners. The study by Gregson *et al.* (2002) in Manicaland in rural Zimbabwe conducted among men and women aged 17–24 years found that consistent condom use was higher in casual relationships compared to regular partnerships. This was more pronounced among women, with 39% using condoms consistently with a casual partner compared to 6% of women using condoms with a regular partner. Amongst men, 51% reported using a condom consistently with a casual partner compared to 32% with a regular partner (Gregson *et al.* 2002). Consistent condom use with a regular partner was also found to be least common in a study conducted by Meekers *et al.* (2005). The study conducted among youth aged 15–24 years old living in Toamasina Province in Madagascar showed that a mere 6% of males and 7% of females reported that they always used condoms in every sexual act with regular partners.

Similar trends have been observed in South Africa, with condom use less common with regular partners than with casual partners. For example, in the study by Chimbindi *et al.* (2010) conducted in KwaZulu-Natal among 15–24 year olds in 2005, consistent condom use was 40% less likely among regular partners compared to casual partners. Gender differentials showed an odds ratio of 0.73 among females (0.52-1.03) compared to 0.60 (0.44-0.81) among males suggesting that consistent condom use declined among females with a regular partner. These findings are similar to those from the *Stepping Stones* baseline survey conducted among youth aged 15–26 years from 70 villages in Eastern Cape Province, where 23-26% of all condom users had used condoms consistently

with the main partner in the past 12 months. Condom use was higher with a casual partner than a main partner, with 62% of youth aged 15–19 years and 66% of youth aged 20–26 years. It is clear from these findings that condom use with regular partners is lower because of the norms and belief systems that define a regular partnership.

Another behavioural indicator that is considered in HIV prevention is the percentage of young people aged 15–24 years who have had sex in the last 12 months and used a condom at last sex with a non-marital, non-cohabiting (NMNC) partner of all youth surveyed. In Zambia, on the one hand results from the sexual behaviour surveys conducted from 2000 to 2009 show that condom use at last sex with NMNC declined consistently among males (12.8% in 2000 to 9.7% in 2009), whereas among females condom use at last sex with NMNC declined from 2000 to 2003 (6.0% to 5.8%) and then increased from 2005 to 2009 (3.7% and 4.9%, respectively). However, proportions remained low for both groups in 2009, particularly among females. These low levels in this sexual behaviour survey are a contrast to those observed in the Demographic Health Surveys (DHS), where the percentage of those who reported using a condom at last sexual intercourse with a non-marital and non-cohabiting partner in the past 12 months increased between 2001 and 2007. Among adolescent women aged 15–19 years, the proportions increased from 30.2% in 2001 to 36% in 2007, whilst among adolescent men increases were larger from 32.5% in 2001 to 42.1% in 2007 (Kothari *et al.* 2012).

Similar trends were evident in Burkina Faso. Kirakoya-Samadoulougou *et al.* (2016) noted an increase for both 15–19 year old males and females and among 20–24 year olds for the periods 1998–1999 and 2010. For example, in 1998–1999 condom use at last sex with NMNC was 38.6% for girls aged 15–19 years and 52.6% in 2010, whilst among the same age group among boys, condom use at last sex increased from 45.3% in 1998–1999 to 67.6% in 2010. The trends in Burkina Faso, point to the direction that would be expected with interventions aimed at promoting condom use at last sex among young people. Generally most countries in sub Saharan African have seen increases in condom use at last sex with a non-marital and non-cohabiting partner. However some countries have seen reversals in the behaviour. These include Ghana (2003–2008) and Uganda (2000–2006). Information on South Africa remains scant.

2.2.2.5 HIV testing

There has been growing attention paid to HIV testing and how it opens up doors to care and treatment for HIV-positive people and reducing the spread of HIV among both negative and positive people. Shisana *et al.* (2005, p. xli) state that “there is a need to promote HIV testing widely as it will contribute immensely to both primary and secondary prevention as well as serve as an entrée into seeking treatment for opportunistic infections and ARV therapy (in the case of advanced HIV infection)”. Idele *et al.* (2014, p.S149) state that globally young people know where to get tested but few know their HIV status and “yet this is a critical step toward access to HIV care and treatment”. The authors’ further show that less than a third of adolescents in sub-Saharan Africa had tested for HIV and received their results between 2008 and 2012. In South Africa, HIV testing has increased over time. In April 2010, a national HIV counselling and testing campaign to mobilise all South Africans to get tested for HIV and to know their status was launched, The campaign had the aim of testing 15 million individuals from 12 years and older by the end of June 2011 (SANAC, 2012b).

Among young people, MacPhail *et al.* (2009) found that only 32.7% of sexually active females aged 15–24 years had tested for HIV in 2003. The proportion was lower among sexually active males with only 17.7% having tested for HIV. HIV testing was reported to be 64.1% in 2008 and increased to 80.5% in 2011 among females aged 18–24 years who had ever had sex. Among males who had ever had sex, HIV testing increased from 31.4% in 2008 to 47.7% in 2011 in the same age group (Peltzer and Matseke, 2013). It is clear that HIV testing among young men is still low but high among young women. Peltzer and Matseke attribute this to the fact that women have different health seeking behaviours than men and are more likely to seek medical help. Additionally, “women are also likely to seek HIV testing during pregnancy and it was found to be the highest predictor of HIV testing uptake in women” (Peltzer and Matseke, 2013, p.1018).

McGrath *et al.* (2013) also observed that risky sexual behaviour in rural KwaZulu-Natal decreased among men and women in the era of antiretroviral therapy (ART), with condom use at last sex increasing and fewer men and women having multiple sexual

partnerships and concurrent partnerships during the observation period (2005–2011). Thus, the authors note that “the increase in HIV testing could be partially motivating the observed protective changes in sexual behaviour at the population level” (McGrath *et al.* 2013, p.2467). Whilst HIV testing has been on the increase among young people, accessing care and treatment remains low. Kurth *et al.* (2015, p.23) note that “access to HIV testing and to antiretroviral therapy among youth remains a concern globally”. This is also reiterated by Idele *et al.* (2014). They argue that about a third of girls in Eastern and Southern Africa have ever had an HIV test and received their results. Although this is higher than boys (20%), it still remains low. In addition, the authors state that the increasing number of AIDS-related deaths among adolescents and the limited studies that exist demonstrate that adolescents do not have access to ART (2014, p.S150). In South Africa, access to HIV testing has been on the rise. By contrast, the systematic review undertaken by Tromp *et al.* (2014) on the utilization of ART for HIV-infected people in South Africa showed that young people were amongst those less likely to access ART. The authors state that “young people face more barriers to treatment” (Tromp *et al.* 2014, p.14). This therefore makes it difficult to link positive young people to services.

Determinants of HIV

2.2.3.1 HIV Knowledge

Efforts to address HIV remain a public health and development priority and this has led to increased exposure to HIV communication. Exposure to HIV and AIDS communication in South Africa is high. Shisana *et al.* (2009, p.58) defined reach as “having heard or seen at least one component of the communication programmes - for example, a radio advertisement, and/or television programme and/or other components”. In 2012, 82% of persons aged 16–55 years were reached (Johnson *et al.* 2013). The extent to which programmes have reached young people is also high but declined from 94% in 2009 to 87% in 2012 (Johnson *et al.* 2013; 2010). Despite this high coverage of behaviour change communication campaigns among 15–24 year olds, there has been a decline in the correct knowledge about prevention of sexual transmission of HIV declining from 66.4% in 2005 to 42.1% in 2008 and a further decline to 29.0% in 2012 (Shisana *et al.* 2014; 2009). This trend in knowledge levels shows a very steep decline and it raises the

question on whether education among young people is non-existent or whether programmes aimed at increasing knowledge have failed. A further comparison of the questions asked on accurate knowledge in 2008 and 2012 showed no change in knowledge (29%). Questions asked in 2005, 2008 and 2012 were “*Can a person reduce the risk of getting HIV by using a condom every time they have sexual intercourse? Can a person reduce the risk of HIV by having fewer sexual partners? Can AIDS be cured? Can a healthy-looking person have HIV? Can a person get HIV by sharing food with someone who is infected?*”(Shisana *et al.* 2014, p.93). Thus the abovementioned questions are comparable in all the three years. The authors argue that two key points should be considered when interpreting the data. These are that “the knowledge about HIV transmission and prevention indicator is index-based on correct identification of ways to prevent sexual transmission of HIV as well as on correct rejection of major misconceptions about HIV transmission” (Shisana *et al.* 2014, p.93).

It has also been argued that, while many young people may have the knowledge to prevent unwanted pregnancies and HIV infection, they may lack the necessary skills to negotiate safe sex. This is further perpetuated by the gender-dynamics that are prevalent in South African society (Pettifor *et al.* 2013; Jewkes *et al.* 2010; De Janes, 2009). A study conducted in 2011 as part of the evaluation of the loveLife programme among 18–24 year olds found that 74% of the female respondents fell pregnant due to lack of knowledge. Further, 55% of these respondents reported that they got pregnant due to a lack of understanding of the risks involved. In addition, 71% of the female respondents indicated that they did not understand how pregnancy happens or did not think about risks involved in engaging in unprotected sexual intercourse (Mchunu *et al.* 2012). The authors lament these findings: apart from young people engaging in risky sexual behaviour, the lack of knowledge among 18–24 year olds seems rather perplexing considering the various interventions that have been invested in South Africa including the Life Orientation programme in schools which was introduced in all grades from 2000. Further, such findings are indeed confusing because 18–24 year olds are much older, hence would expect them to know how to prevent a pregnancy. However, one also needs to recognise the role of defensive response bias where respondents might be resorting to lack of knowledge for the consequences of their action particularly at their age.

Notwithstanding, it would appear that implementation of the life skills programme have not yielded the results of empowering students for various reasons. Scott-Sheldon *et al.* (2013, p.7) note that “multiple socio-demographic, cultural and social challenges have impacted and affected the implementation quality of the Life Orientation programme”. For example, in one pilot study undertaken in Gauteng by Bhana *et al.* in 2004, close to 90% of learners reported having had lessons on sex, sexuality and HIV/AIDS, whereas all the principals in the 18 schools reported that learners in all grades had lessons on these topics. Prinsloo (2007) also conducted interviews in four provinces (namely Gauteng, Limpopo, Free State and Western Cape) and concluded that “the different provincial departments as well as the district offices have made it their task to train and support teachers to implement these programmes effectively. The quality and quantity of the training and support are not always as successful as intended but although the present problems are many and varied they are not insurmountable” (Prinsloo, 2007, p.169). Scott-Sheldon *et al.* (2013, p.7) also mention that “among educators teaching safer sex practices other than abstinence presented moral challenges”.

Whilst it is important to understand the educators’ perspective, the learner perspective can also provide insight into the effectiveness of the life orientation (LO) programme. Jacobs (2011, p.221) concluded that “there is some evidence that LO as a subject may not effect as much meaningful change in the attitudes and behaviours of the learners as was anticipated”. Further she argued that “many learners seem to view LO as unnecessary, boring and irrelevant and that her study provided some evidence that LO does not succeed in accomplishing its aims, as laid out in the National Curriculum Statement”(2011, p.213). In the analysis by Scott-Sheldon *et al.* (2013) they found that students preferred the role-plays to the didactic curriculum. However, there was insufficient time to undertake role-plays, therefore making the curriculum less interesting to learners. Based on these findings, it can be argued that the effect of LO is not only dependent on how educators implement it but also how it is received by the learner. This illustrates that awareness and knowledge does not always lead to behaviour change. Thus the view by Beyers (2013, p.551) that “in theory, the life orientation curriculum should empower youth for their lives. However, in practice, we need to address the inconsistent

implementation, the content taught as well as the limited time spent on sexuality education nationwide”.

Since campaigns and services cannot be expected to assist directly in skill development, it has become increasingly important that, during the transition to adulthood, schools, health facilities, communities, families and peers play a significant role to help shape young people’s attitudes, skills and behaviour. As highlighted in a policy document “decisions young people make about sexuality, the behaviour they engage in, and the values and attitudes they hold are shaped by their physical and social environments, their life histories and personal qualities” (Department of Welfare, 1998, p.24). The national report on factors associated with teenage pregnancy in South Africa published in 2014 proposed, as one of the recommendations to curb teenage pregnancies, the provision of support and training to parents and caregivers on how to communicate matters on sexuality; and the publication of resource materials in English and local languages for parents and caregivers on how to communicate sexuality education to their children (Department of Social Development, 2014).

2.3 Theoretical framework

2.3.1 Background

The current study used triangulation methods to better understand the role of parents in promoting sexual health among young people in South Africa. The methods of analysis included secondary data analysis, focus group discussions, in-depth interviews, and key informant interviews. For the qualitative research, a theoretical framework was used to inform the research. The study used the bio-ecological systems theory (BST) of human development developed by Bronfenbrenner (1995). Bronfenbrenner defined a range of different environments that might impact on a child’s development. The theory considers the child’s own individual characteristics and how these interact with other ecological factors. These include the microsystem, mesosystem, exosystem, macrosystem and chronosystem. Figure 2.4 on page 52 shows the different social contexts that may influence a child’s behaviour and development as presented by Bronfenbrenner (1995). The microsystem is the one closest to the child and includes structures such as parents,

school and friends, which have a direct impact on the child's well-being. Within this layer, the home environment is perhaps the closest environment which can have a huge influence on a child's development (Kumi-Kyemere *et al.* 2007). Thus, parent-child relationships are important at this stage. For example, it is expected that where there is more parental or guardian interaction, the child will adopt safer sex practices.

2.3.1.1 Microsystem

Pilgrim *et al.* (2012, p.6) explain the microsystem as “the complex relationship between the adolescent and the immediate environment, such as the relationship between parent–adolescent communication about sexual behaviours and the resulting behaviours of the adolescent”. For instance, the authors found that the quality of parent-youth communication was negatively associated with the risk of sexual activity. The review showed that when the quality of parent-youth declined, the sexual risk increased. Again, it is expected that when young people communicate with their parents about sexual and reproductive health issues, they will find it easier to negotiate condom use with their partners. Thus supporting the view by Jones *et al.* (2011, p.129) that the family is a highly influential microsystem in terms of sexual socialization. This influence comes in the form of parental beliefs about sex and parental communication of sexual values (Jones *et al.* 2011).

Another aspect in this system points to how parents can influence their children's behaviour through monitoring their whereabouts, what they are doing and who they spend time with. DiClemente *et al.* (2007, p.893) noted that “adolescents who perceive that their parents or parent figure knows where they are and who they are with outside school or work are substantially less likely to engage in sexual risks behaviours or have an STD”. The school also becomes a strong determinant for protecting young people. Studies conducted in South Africa have shown that keeping young people in school is protective and HIV peaks from age 18–24 years (Harrison, 2010).

During adolescence, factors beyond the family become increasingly important as adolescents construct their identities (Kotchick *et al.* 2001). Peers become a central point of reference during adolescence as adolescents develop their identities in terms of belief and value systems (Kotchick *et al.* 2001). Peers who also form part of the microsystem play a vital role as children progress through adolescence and youth. The attitudes and

behaviours of peers can have both positive and negative influences on an individual's sexual behaviour (DiClemente, Salazar and Crosby, 2007). Positive influences include adopting protective behaviours such as abstaining or using condoms, while negative influences include peer pressure to indulge in risky sexual behaviours due to perceived peer norms (DiClemente, Salazar and Crosby, 2007). Dekeke and Sandy (2014) reiterate that peer pressure may influence young people to experiment sexually even if they are not ready, as such, resulting in negative consequences such as unsafe sexual practices, unwanted pregnancies, contracting sexually transmitted infections and HIV infection.

Caicedo and Jones (2014) focus on the role of neighbourhood, family and peers on Colombian adolescents. They lament that adolescents from poor communities have a higher likelihood of spending more time outside of home and having increased opportunity to associate with deviant peers. Caicedo and Jones (2014) cite the involvement and supervision of parents from affluent communities as crucial in deterring delinquent behaviour. Although Crawford and Novak (2002) also concur with this finding, they also highlight that the positive impact of parents on young people's behaviour is dependent on the parenting style. If children perceive parental control as excessive, they may become rebellious and more likely to engage in risky behaviours. This inter-relationship of adolescents and peers represents the mesosystem layer in Bronfenbrenner's bio-ecological systems theory (Bronfenbrenner, 1995). Dhalewardikar (2014) highlights the important role positive parenting plays in adolescents' selection of less deviant peers, lower dependence on peers for information regarding sexual activity and decreased intention to engage in risky behaviours. Dekeke and Sandy (2014) on a study of adolescents in Enemay district in Ethiopia found that about 82.9% of the respondents indicated peers and friends as good sources of information on sexuality and HIV/AIDS. However, adolescents' knowledge was found to be unsatisfactory. According to the study adolescents who experienced peer pressure and had sexually active friends were more susceptible to engaging in risky sexual behaviours.

Peers who participate in similar conventional institutions such as church group activities as their parents and peers have a lower propensity to engage in risky behaviours (Dekeke and Sandy 2014; Edwards, Fehring and Jarret, 2008; Manlove, Logan and Ikramullah,

2007; Crawford and Novak, 2002). Church groups are another aspect of adolescents' microsystem that can exert social controls on adolescents' behaviours (DiClemente, Salazar and Crosby, 2007). In their study Kristen and Richard (2009; cited in Dekeke and Sandy 2014) suggest that adolescents with strong religious affiliations are more likely to adhere to religious doctrines such as not engaging in sexual behaviours prior to marriage. The study by Dekeke and Sandy (2014) found that religion was one of the factors that increased age at sexual debut. The study recommended strengthening of attachments to churches and Sunday schools to enhance interconnectedness of parents and their children. Edwards, Fehring and Jarret (2008) asserts that the protective nature of religion against early sexual debut and risky sexual behaviours does not only emanate from strong religious affiliation and frequent church attendance but also social networks with peers that also have strong religious affiliation.

Accessibility of reproductive health information and services are also reflected in the microsystem and become important during adolescence as adolescents start to experiment sexually (Idele *et al.* 2014). However, a significant proportion of adolescents in sub-Saharan Africa are not aware of their HIV status, with surveys conducted between 2008 and 2012 revealing that only a third of adolescent girls (15–19 years) have ever had an HIV test where they also received the results of the test (Idele *et al.* 2014). In their study Idele *et al.* (2014) also highlight that in Southern African countries, female adolescents start to have increasing levels of HIV prevalence during adolescence than their male counterparts. The study contends that this situation is attenuated by the fact that HIV related deaths of adolescents increased by 50% between 2005 (71 000) and 2012 (110 000) in comparison to a 32% decline in the rest of the other age groups and also adolescents' HIV prevention knowledge is very low. International Organization of Medicine [IOM] and National Research Council [NRC] (2011) posit that adolescents' access to health services is influenced by availability, quality, cost, quantity and variety of health services. In 2006, South Africa adopted the National Adolescent-Friendly Clinic Initiative (NAFCI) in order to improve accessibility, appropriateness and quality of health services for young people.

Otwombe *et al.* (2015) conducted a study on health-seeking behaviours among adolescents in SOWETO township in South Africa, using a cross-sectional survey of 830 adolescents aged 14–19 years for the years 2010 to 2012. According to the study, 27% of

the participants reported using health care services in the six months preceding the survey. The study argues that a low proportion of health care services adhered to the NAFCI standards and suggests that uptake of services could be improved by increasing school-based health services. Some of the reasons put forward for not accessing health services were the inadequacy of public health services in meeting adolescents' needs, perception that services were not separated from adults and lack of knowledge about the health services offered and their location. A similar study among 12–19 year old adolescents in Burkina Faso, Ghana, Malawi and Uganda in 2007 found that social stigma was the most common barrier to accessing sexual and reproductive health services (Biddlecom *et al.* 2007a). Miet (2011) underscores the importance of affordability, confidentiality, central location and youth friendly staff in optimizing young people's access to health services and for health services to have a significant impact of their sexual decisions and behaviours.

2.3.1.2 Mesosystem

The second system is an overlap between systems. The mesosystem involves interactions and linkages between structures in the microsystem. It is a system of microsystems (Bronfenbrenner, 1995). For instance, there can be connections between the school and parents and therefore the influence they might exert on the child would be intertwined. This would be a case in point where sex education is offered by the school and the child also discusses what they learnt at school with their parents. In this system the school and parents may influence each other thus playing complementary roles and can both influence the child's behaviour. As Pilgirm *et al.* (2012) note the existence of parent-teacher (e.g. family-school) interactions that may foster positive behaviours in the adolescent.

2.3.1.3 Exosystem

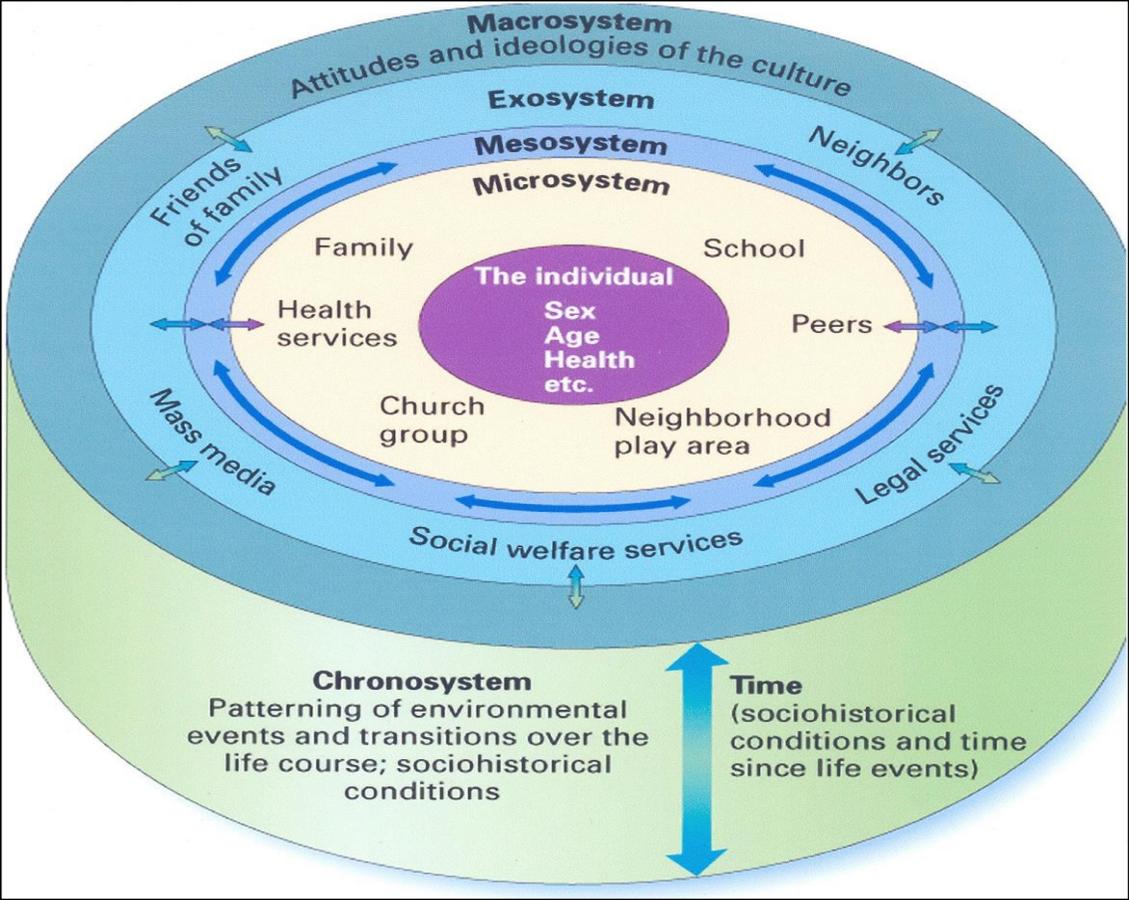
The third system of exosystem refers to the social structures in society and whilst these may not be directly linked to the child, these may have a positive or negative influence on the child. This might be how community structures and spaces shape adolescent behaviour. Where there is community disorganisation a child might be impacted

negatively and similarly where there are no opportunities for schools and employment this would also affect that child negatively (Kaufman *et al.* 2005). Additionally the media can improve on communication between parents and the children by encouraging parental communication between the child and their parents or guardians. There are a few media programmes that can also enable families to discuss sexual and reproductive health matters. On the other hand, an absent parent/caregiver or limited interaction between the parent-child due to work commitments can affect the child negatively. Thus, DiClemente, Salazar and Crosby (2007) suggest that placing work-based parenting programmes can be one way to resolve how the exosystem can impact on parents. Bogart *et al.* (2013) found that the *Let's Talk!* Work-based intervention programme in Cape Town had beneficial effects on parent-child communication.

2.3.1.4 Macrosystem

In the fourth layer, which is the macro system, cultural values, customs, laws and the political system come into effect. In the South African context there were traditional practices that young women and men were exposed to, aimed at sanctioning adolescent sexual behaviours. However, with modernization, these might have been eroded. In some communities there is now a revival of these traditional practises to delay sexual debut. Such practices include virginity testing.

Figure 2.4: Bronfenbrenner’s bio-ecological systems theory (1995)



Source: Bronfenbrenner 1995

2.3.1.5 Chronosystem

In the last layer the Chronosystem takes into account how relationships have evolved over time. The advent of HIV has impacted family structures over time. The composition of families has changed with children being raised by non-biological parents. Accordingly, how they interact with their caregivers may also have an impact on their behaviour. There might also be changes in the messages communicated on sexual and reproductive health. Before the advent of HIV, adolescent issues were mainly around unwanted teenage pregnancies. Nowadays, there is more to worry about such as unprotected sex, teenage pregnancies and multiple sexual partners. Therefore, addressing these sexual and reproductive health and rights of adolescents requires more innovative approaches to these complex behaviours.

In summary the bio-ecological systems theory according to Ndiaye *et al.* (2013, p.255) is “organized into five bi-directional systems: microsystems (the inner layer including the direct impact on the individual), the mesosystem (linking elements in the microsystem), exosystem (the indirect impact of society/community), the macrosystem (the furthest layer encompassing norms, beliefs, and culture), and chronosystem (addressing the impact of time and changes)”.

2.3.2 Improvement of the bio-ecological systems theory

Although Bronfenbrenner (1995) helps one to understand how different systems interact and influence human development, I propose that the bio-ecological systems theory (BST) is extended using the theory presented by Hutchinson and Wood (2007) Hutchinson and Wood (2007) extend the theory of planned behaviour by incorporating Bronfenbrenner’s ecological theory and put emphasis on the role of the parents. As such, propose a Parent-based Expansion Theory of Planned Behaviour (PETPB). According to Hutchinson and Wood (2007), quoted in Hutchinson *et al.* (2012, p.28) the PETPB “acknowledges that adolescents are significantly influenced by the family system, particularly by parenting behaviours such as relationship quality, parent- child sexual communication and supervision and monitoring (p.28). The authors further note that in the PETPB, family interventions that aim to improve relationship quality, parent-child communication, supervision and monitoring may have an indirect impact on adolescents’ sexual risk beliefs and behaviours, thus potentially reducing their risk for HIV and other sexually transmitted infections (p.28). Hutchison and Wood (2007) view “parents as the primary socialising agents of their children

and as such, might be the single most important influence in the lives of children and adolescents” (p.28). In explaining the theory, they argue that “individual adolescents are viewed as nested within multiple systems, including the family, community, and larger society. Of these systems, the family is seen as one of the most proximal and important influences of adolescent sexual risk behaviour” (p.28). Hutchinson and Wood (2007) then further state that norms and expectations from communities, schools and the larger society, and even the historical context, may exert a distal influence through their effects on the beliefs of parents or the adolescents themselves. Thus, they argue that the macro level influences are seen to be external in the PETPB.

2.3.3 Adaptation of the bio-ecological systems theory using the Ecological model for an enabling environment for shaping adolescent sexual and reproductive health

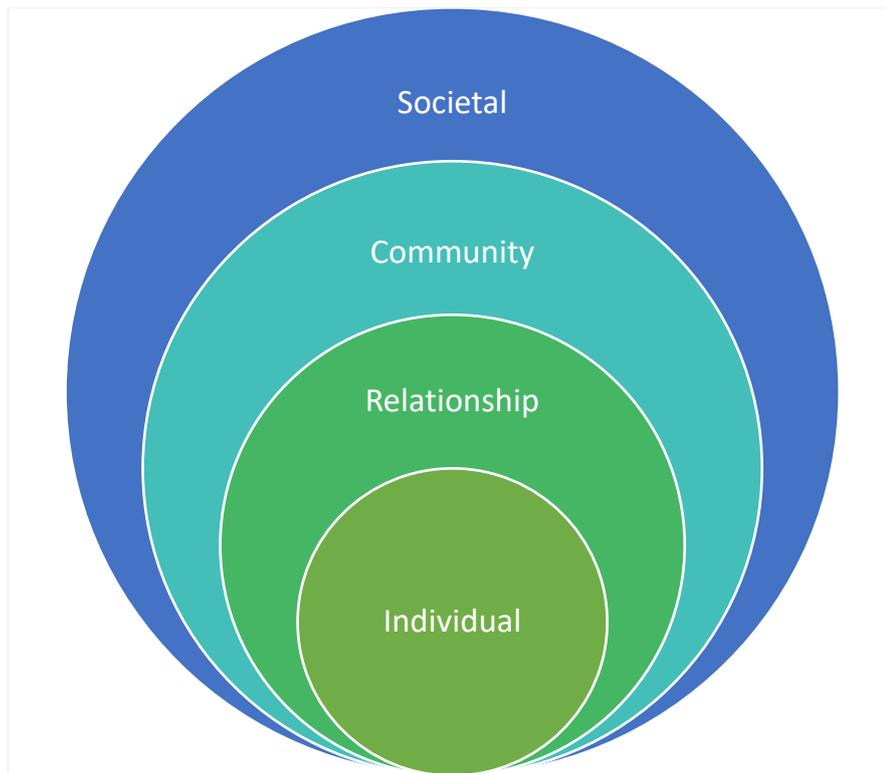
The ecological framework by Svanemyr *et al.* (2015) was developed to better understand interventions aimed at promoting adolescent sexual and reproductive health. The framework by Svanmeyr *et al.* (2015) is a theory based framework designed specifically for addressing adolescent sexual and reproductive health (ASRH) at many levels. The framework is rooted in the BST and is thus one of many frameworks (e.g. Blum *et al.* 2012) that were developed using the BST. As noted in section 2.3.1 Bronfenbrenner (1995) defined a range of different environments as contextual influences on human behaviour. These include the microsystem, mesosystem, exosystem, macrosystem and chronosystem. Accordingly, Svanmeyr *et al.* (2015) proposed interventions that work at multiple levels and provide clarity by identifying examples of promising programmatic interventions. Svanemyr *et al.* (2015) categorise the current evidence of programmes that create enabling environments for sexual and reproductive health according to the levels of an ecological framework which includes individual, social, cultural, political and economic factors and inequalities.

They argue that these “factors increase adolescents’ vulnerability to sexual risks such as unsafe sex, sexual coercion, early pregnancy and pose risks to their access to SRH information”(p.S7). This is further supported by Mmari and Sabherwal (2013), who note that “research on risk and protective factors often use an ecological model, which recognizes that each person functions within a complex network of individual, family, school, and community contexts that affect their capacity to avoid risk and maintain health “(p.S66).

Accordingly, the SRH and rights of adolescents can be addressed with the involvement of “parents, community members and policy makers”(p.57). Building an environment that enables individuals to change, requires interventions that work at multiple levels. Figure 2.5 on page 56, shows the circles of influence that should be developed to help adolescents improve their sexual and reproductive health. These four levels are individual, relationship, community and society.

At the individual level, Svanemyr *et al.* (2015) propose that interventions that promote the economic empowerment of girls, creating safe spaces for adolescent girls and schooling hold promises to improving the lives of adolescent girls and young women. Economic empowerment programmes are those programmes that focus on micro credit as start-up capital and cash transfers to reduce poverty among young girls and women and provide them with access to money in order to curb transactional sex. Creating safe places for adolescent girls refers to improving the environment in which young girls are able to obtain information on sexual and reproductive health as well as to be able to discuss and express their concerns with family members and adults in their communities without fear or judgement. The models of safe spaces are based on the premise that girls safety can be ensured if they build assets and are connected to a network that is able to improve their circumstances. The third focus on the individual level refers to keeping girls in school. Svanemyr *et al.* (2015) argue that education has been found to be associated with better sexual and reproductive health outcomes including among others increased contraceptive use, reduced age of marriage, reducing number of births and increased use of health services.

Figure 2.5: Ecological Model for an enabling environment for shaping adolescent sexual and reproductive health



Source: Svanemyr *et al* 2015

In the second level, Svanemyr *et al.* (2015) posit that relationships which consist of parental engagement, partner-oriented programmes and mentoring and positive role modelling are essential for promoting sexual and reproductive health behaviour in adolescents. The role of parents and the extended family in imparting sexual and reproductive health information and development of young people remains important though it is often found to be limited particularly in African settings, where barriers to communication about sexuality remain. Consequently, the authors call for interventions that provide support to parents in order to develop their skills in communicating with their children. The authors further argue that this would possibly improve on the content of discussions as well as raise awareness on socio-cultural issues that pose challenges in communication about sexuality.

Another relationship aspect that the authors propose is that of focusing on partner oriented programmes. Adolescents can be coerced into sex by partners or potential partners (especially around the time of sexual debut). Communication with sexual partners can, however, play a protective role in sexual activity, as it increases the possibility of negotiation about sex, and may increase the use of condoms. A third tenet to the relationship level in improving the enabling environment for adolescents are peer led programmes, which the authors emphasize can be negative or positive in adolescent development and socialization. Thus, adolescents whose peers engage in sexual activities might also be pressurized to emulate their friends. Peer education has been found to vary with some youth benefitting and others not benefitting from their peers. The last component of the relationship that Svanemyr *et al.* (2015) espouse is that of mentoring and positive role modelling, where programmes tend to emphasise the provision of positive role models and mentors to improve sexual and reproductive health and to promote goal setting so as to achieve education, work and reduce fertility. The authors argue that “mentors can be a critical social capital to lessen girls’ health and economic risks”(p.S12). In essence, they propose that young girls who are exposed to role models may develop leadership skills and other skills that would help them navigate their adolescence and prepare them for adulthood, hence having a better transition and experience.

The third environment that is proposed by Svanemyr *et al.* (2015) is the community level, which encompasses mobilisation of adults and community leaders and working with boys and men to promote gender-equitable norms. With regards to community mobilisation, the authors argue that this “can foster intergenerational communication in support of Adolescent Sexual Reproductive Health (ASRH)” (p.S13). They further purport that when communities engage in public education efforts, they learn about ASRH issues in culturally sensitive ways and therefore increase the prospects of attitudinal change (p.S13). Thus, Svanemyr *et al.* (2015) call upon interventions that increase such engagements. In addition, adolescent and sexual reproductive health can be improved by addressing ‘unequal and harmful gender norms’ such as masculine behaviours that “perpetuate sexual and health risks, violence and unequal decision making in relation to girls and women” and feminine tendencies that render girls and young women to submissive roles and prevent them from asserting themselves in their sexual relationships” (p.S13). Further, the authors

call upon attending to community norms that “promote homophobic and stigmatize same sex relationships” (p.S13).

The fourth and final level in the framework on enabling environments suggested by Svanemyr *et al.* (2015) are interventions at the societal level, which include promoting laws and policies and their implementation and media campaigns and large-scale communication programmes. With respect to promoting laws and policies they argue that countries need to have policies in existence that promote ASRH but should also be aligned to other international instruments, which espouse human rights including ASRH. They continue to emphasise that the existence of policies alone is not sufficient but need to be implemented through political will and resource allocation so as to meet the needs of ASRH. In terms of media and large scale communication programmes these are important in “raising awareness and motivating discussions about ASRH issues” (p.S12) and can have more coverage as there are different platforms that can be used to reach adolescents.

There are several parallels between the BST and the ecological framework. In the thesis, the BST is used in Chapter six as an approach to identify the socio-cultural factors that influence parent-adolescent communication. In Chapter six, the results from the parents and children interviews and focus group discussions provide implications for possible interventions. These programmes can be developed using the ecological framework by Svanemyr *et al.* (2015). Further, the framework can also be used in Chapter seven to inform future research on programmes on parent-adolescent communication. It is for this reason that the theory and framework are used to complement each other rather than use one or the other.

2.4 Conceptual framework

This framework is used to explain the quantitative and part of the qualitative component of the research study. The framework was adopted from Miller (2002), Kirby (1999) and Hovell *et al.* (1994b) and modified to show pathways of how parent-child communication may influence adolescent sexual risk behaviours. The relationship between parent-child communication and sexual risk-taking behaviours can be influenced by several factors. Jaccard, Dodge and Dittus (2002) point to how *audience, source* and

context variables can influence message variables. The authors refer to *source* characteristics as demographic characteristics of parents such as gender, ethnicity and religion. For this study, gender, age and the population group of the parents comprise source variables. The relationship between source variables and communication suggests that parents' characteristics may determine whether communication with the adolescent takes place or not, therefore affecting behaviour. *Audience* characteristics refer to the demographic characteristics of young people. For example, Jaccard, Dodge and Dittus (2002) note that age, ethnic group and sex of the adolescent are key variables in understanding parent-adolescent communication. *Context* variables refer to variables which are not traits of the individual such as socio-economic variables but are acquired during life, such as education, marital status, wealth, living arrangements and geographical settings. The term *context* variables, describes individual-level variables which may vary in a non-regular way over the life course (unlike age, which varies in a regular way, and sex and ethnic group which are fixed). In South Africa, education depends not just on age. Prior to 1994, access to education in South Africa was driven by Apartheid policies which created huge inequalities. Inequalities are also perpetuated by the type of education that one has received, that is, whether one has attained education in the private or public system. With regards to marital status again, not everyone gets married and thus your marital status in the context of South Africa can be a determinant of one's living circumstances. Even when one is married, husbands might live away from their families and thus affects the living arrangements and relationships. For example, according to Sibanda (2011) "the emergence of new social structures outside the family altered traditional dimensions of life formerly managed within the unit. These new social structures include schools, factories, the mass media, and government programs that have had a bearing on how certain family functions shifted to public social institutions and structures" (p.482).

In Figure 2.6 on page 64, five coloured arrows are shown. The blue colour shows the analysis undertaken in Chapter four. The figure shows that parent-child communication can be influenced either by the characteristics of the child or those of the parents/caregivers. The extent of communication is measured for parents and adolescents by their age, gender and population group. These differentials are important as they can help understand the frequency of the topics discussed and the type of content that is discussed. Thus there can be direct links between communication and the audience and source variables. For example, parents of younger adolescents may choose to have or avoid discussions on

Chapter 2

sexual communication; this is tested in Chapter four by comparing parent-child communication by age group. The same can be said between Africans and non-Africans with non-Africans expected to report more discussions compared to Africans. Again, Chapter four provides some description in this regard. Differences between males and females are also considered. The literature review that follows provides evidence on how communication between mothers and adolescents is common compared to fathers and adolescents. The content being discussed can also be influenced by the demographic characteristics. As such, Chapter four also explores the differences in the type of information discussed between parents and their children.

The second part of Chapter four considers the factors that are associated with parent-child communication. In this section, the influences of context variables are taken into account. Context variables for adolescents include place of residence, province of residence, wealth status and living arrangements, whilst for parents these include marital status, work status, education attained, wealth status, household size, place of residence, province, relationship to the adolescent and number of children. Context factors may enhance or dissuade communication. In Chapter four these variables are used as exploratory variables to predict parent-child communication. How these factors influence parent-child communication are discussed in detail in the literature review section.

In Chapter five the audience and context variables of the adolescents are used to predict the relationship between communication and sexual behaviour of young people. These are shown by the brown arrows in Figure 2.6. The influence on behaviour is not straightforward. There are several mechanisms that have been identified in the relationship between parent-child communication and sexual behaviour. First, the literature shows that quantity, frequency and timing of communication can have an influence on the child's sexual behaviour (Babalola, Tambashe and Vondrasek, 2005). Beckett *et al.* (2010, p.35) note that parents can play a role by "educating and talking to youth about sexuality and reinforcing safer HIV-related and pregnancy prevention behaviours". For example, if a child receives information on sexual and reproductive health, she/he may delay sexual activity. In the event she/he starts to have sex they might have information to seek services and use contraception and condoms to protect themselves from falling pregnant and acquiring sexually transmitted infections. However, it has also been found that parent-child communication might not happen before adolescents initiate sex, but

that once the parent has observed that the child has initiated sex then the discussion takes place. Thus some results have shown a positive relationship between parent-child communication and adolescent sexual behaviour. Indeed, Biddlecom *et al.* (2009, p.78) argue that “the positive association between parental communication about sex-related matters and adolescents’ sexual activity in Malawi and Uganda could be due to discussion after parents had learned that such activity had occurred—the proverbial closing the stable doors after the animals have left”. Therefore when communication occurs after sexual initiation, parents provide information the child did not have before the behaviour took place which would be in the form of advice to reduce further sexual acts or to provide information to reduce the likelihood of a pregnancy and sexually transmitted infections. This advice may be taken or rejected by the adolescent.

Second, it is postulated that when a young person receives information from their parents prior to initiating sex, they negotiate protective behaviours with their partners through strengthening relationships and demonstrating that it is possible to negotiate sexual activity within a relationship. As Kantor (2015, p.199) notes “parents have a critical role to play in helping their adolescents to learn to navigate relationships and to learn values that are needed throughout the life course”. Further, it has been argued that when parents provide sexuality education or contraceptive information at home they are more likely than others to postpone sexual activity and when these adolescents become sexually active, they have fewer sexual partners and are more likely to use contraceptives and condoms than their peers (Blake *et al.* 2001).

The teenagers’ characteristics may influence sexual behaviour in the absence of parent-adolescent communication and the same can be said for contextual factors. However, it is expected that when communication takes place, sexual behaviour outcomes are positive such as delayed sex, consistent condom use, reduction in the number of partners, and condom use at last sex. Parental factors are also considered in Chapter five. For instance, Kirby (1999) suggests that the youth most likely to initiate sex at an early age, fail to use contraception and become pregnant; have parents who have low levels of education, are poor, have been separated or divorced, or have never been married. Similarly the relationship between parent-teen communication and sexual behaviour may be influenced by the parents’ values. Therefore parents who regard open communication on sexual issues as valuable may discuss these topics with the children and thus influencing behaviour. Lastly, analysis of Chapter six is

shown by the arrows in amber. The sources of information can determine what content is discussed. Although the study seeks to understand parent-child communication, the chapter shows several avenues that influence communication and how these are interlinked. Thus the application of the parent-based expansion theory of planned behaviour is applied in the analysis in this chapter.

2.5 Linking the conceptual framework to the theoretical framework

In this section, the interlinkages between the ecological framework and conceptual framework are discussed. At an individual level the demographic characteristics of the child are considered at two levels: In Chapter four the association between demographic characteristics and parent child communication are explored and in Chapter five the demographic characteristics are used as controls for the relationship between parent-child communication and risky sexual behaviours. The gender of the child has been studied widely and this will be discussed extensively in Chapter four of this thesis, which looks at the extent of parent-child communication by gender, age and population group of the adolescent. It is expected that communication increases with age, whilst females are more likely to have more communication than males and non-Africans will have a higher propensity to talk about SRH issues than Africans. In the same chapter, factors associated with parent-child communication are also considered for the adolescents' gender and population group, controlling for education status, wealth, living arrangements and place of residence. In Chapter five, the influence of socio-demographic factors was considered in the relationship between parent-adolescent communication and sexual risk taking behaviours.

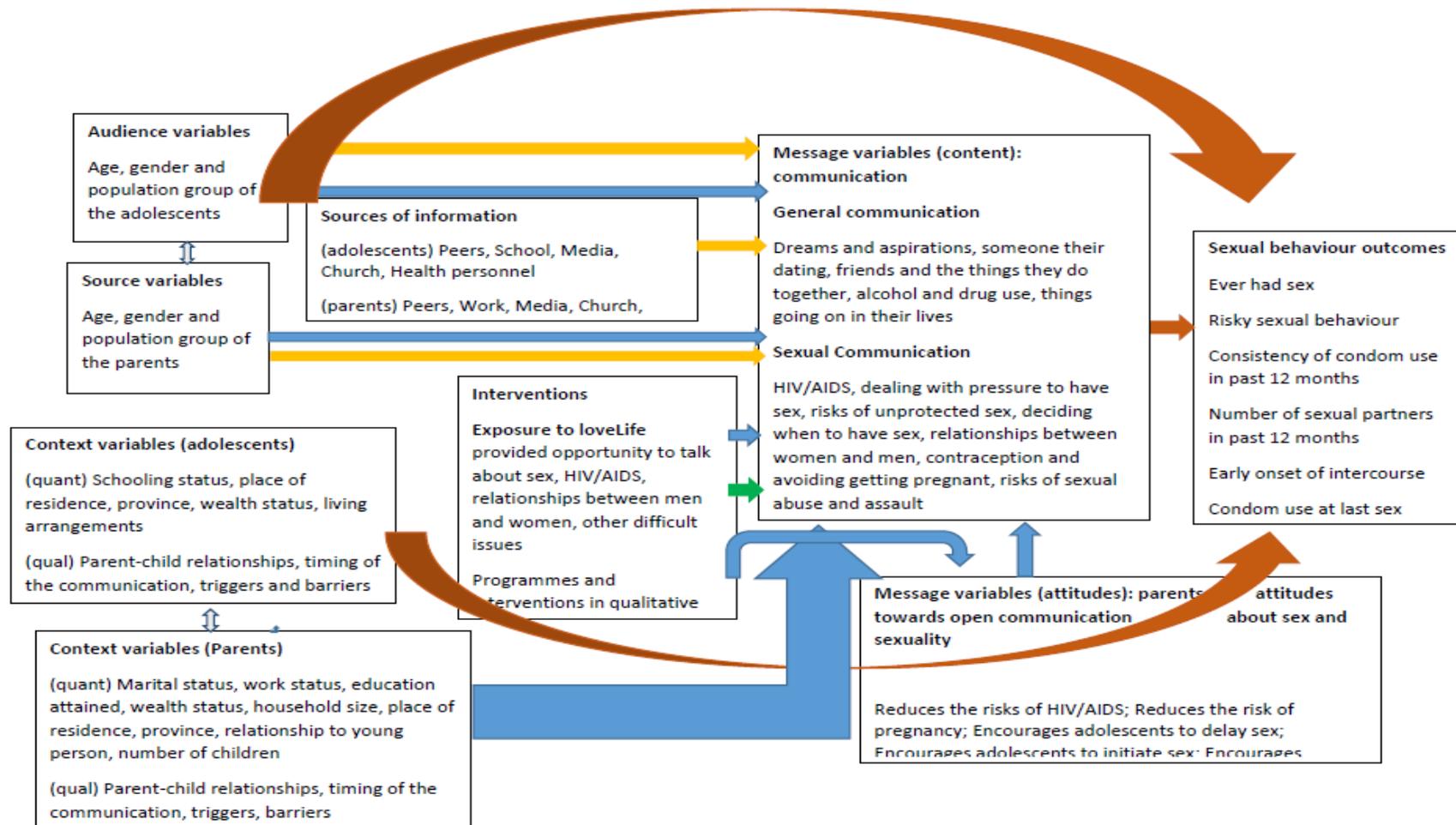
In the context of Chapter four, these socio-economic variables would be seen to have an indirect influence on parent-child communication. It is hypothesised that parent-communication will increase with years of schooling, urban residence, smaller families, and higher levels of income. Additional factors that are considered in the thesis include those of context variables which are parent-child relationships, timing of the communication and triggers and barriers to communication which could have an indirect influence on parent-child communication. These are explored in Chapter six in the Qualitative Chapter.

In the second layer of relationships, the parents' demographic characteristics will be considered, these are also perceived to have a direct influence on parent-child communication. In Chapter four, the extent

of parent-child communication among parents will be explored for gender, age and population group. Similarly, factors related to their gender and population group, controlling for education status, wealth, living arrangements, place of residence, household size, relationship to the young person and number of children will be considered. As was the case with the adolescents, the socio-economic variables are used as confounders and therefore have an indirect influence on parent-child communication. Context variables which include parent-child relationships, timing of the communication and triggers and barriers to communication are additional factors that have an indirect influence on parent-child communication via attitudes and are further explored in Chapter six. In addition, the parent may have a direct influence on parent-child communication as a source of information, whilst schools and peers may influence parent-child communication indirectly as adolescents learn from these sources and then further engage with their parents.

In the third layer, which is the community level the role of the media, church and work are considered as sources of information but might exert an indirect influence on parent-child communication. This is unpacked in chapter six in the qualitative research where different sources of information for the adolescents and the parents are discussed and whether these might trigger communication. The last level considered are societal factors. In this thesis, exposure to loveLife is considered and how it is likely to influence the attitude of parents and encourage communication or not. This relationship is considered in Chapter five, where factors associated with the three types of communication (.i.e. global, general and sexual) are analysed and statements which relate to loveLife are included as a control factor for the three communication scales.

Figure 2.6: Conceptual framework of potential family influences on adolescent sexual behaviour of young people in South Africa



Chapter 3: Chapter 3: Data Sources, Methodology and changing environment of HIV

3.1 Data Sources and Methodology

The thesis is based on three data sources: the 2001 loveLife survey and the qualitative data collection among parents and their children as well as data from the key informant interviews.

3.1.1 2001 Love Life Survey

The study used a probability sampling approach. Using the census enumeration areas (EAs) as a sampling frame, a probability sample of 650 census EAs were selected from 65 magisterial districts. A total of 2 360 households were targeted. Although the sample was self-weighted with respect to racial group, Indians were over-sampled. Two questionnaires were used to collect the data for the study. Both questionnaires were administered in the household. The first questionnaire listed all members of each sampled household and recorded their basic socio-demographic profiles. In addition, information from parent/guardians/caretakers of young people was also collected. The household questionnaire also collected information about the parents' perception of the main concerns of young people, communication about sex and sexuality with their young people and awareness and impact of loveLife. The youth questionnaire collected detailed information about their general lifestyle, awareness and impact of loveLife and sexual health matters. At the household level, the household head was interviewed first. Consent was then requested to interview the young person identified in the household. The questions on communication asked how regularly parents and children discussed certain topics. There were no recall periods. Further details about the 2001 survey can be found in Chapters four and five of the thesis.

3.1.2 Qualitative study on adolescents and their parents and caregivers in Durban

The second data source used in the thesis is primary research conducted by myself (the lead researcher) in the province of KwaZulu-Natal (KZN), eThekweni metro. Two sites were identified in the south west of Durban and were both predominantly rural areas. Further information about these sites is discussed in Chapter six. Data collection in these sites was from June 2006 to September 2006. A qualitative approach was adopted to get a better understanding of the social and cultural factors associated with parent-child communication in South Africa. Focus group discussions (FGDs) and in-depth interviews (IDIs) were conducted with parents and adolescents. All interviews were semi-structured. All interviews were done by the researcher and a note-taker was present in all the interviews. The interviews were also recorded digitally. More details about the research are covered in Chapter six.

3.1.2.1 Reflexivity

The research team consisted of two African females with myself as lead researcher. I am a young black South African urbanized female studying in the United Kingdom (UK) and was working as a senior researcher for the Reproductive Health and HIV Research Unit. Having grown up in Swaziland, there were two distinct features about me that made it clear that I was an outsider in the community. The first is that whilst I have a Zulu surname, my Zulu accent was not typical Zulu. It is a combination of isiZulu and siSwati, so I was one of them but not really one of them. The second distinguishing factor was that since I was studying in the UK, there might have been a perception that I was a *coconut* (a local term used for black people who are deemed to be black on the outside and white on the inside), because whilst the interviews were in isiZulu there were times when I would find myself conversing in both English and isiZulu. So in entering the field, this might have created a hierarchy of some sort between myself and the interviewees. In addition, given that the transcribers who translated the data from isiZulu to English were not part of the data collection process, there were instances where the translations were misunderstood. As the lead researcher, I reviewed all transcripts and listened to the recordings to validate the information. It must also be stated that there were words that could not be

translated from isiZulu to English but great effort was undertaken not to lose the meaning of those words or phrases.

It is also worth noting that whilst the research topic was of particular importance in the context of South Africa and my interest in protective behaviours and interventions aimed at promoting sexual and reproductive among adolescents, it began to also shape my thinking about how the response to HIV in young adults was focused on schools but ignored the role of the family especially parents. In 1998, the Life Skills programme was piloted in KwaZulu-Natal and was rolled out nationally in 2000. However, the growing challenges faced by young people especially in relation to teenage pregnancies and HIV infections, questioned my view on the impact of the life skills programme, which later became life orientation. This was also largely because I attended a high school where Family Life Education was provided at least once a month on a Tuesday afternoon throughout my high school years but there would be a handful of girls who still fell pregnant. Further, as a student of Demography in my undergraduate years, a few girls fell pregnant whilst we were studying about population issues and I wondered why the information on contraceptive use was not applied in ones lived experiences. Thus, the growing question on whether there were other programmes available to complement life orientation.

At the time I began the research there were few studies in South Africa that included parental involvement, hence the study was in itself breaking new ground. At that point I argued that in the absence of the traditional sources of information such as aunts, uncles and grandparents there was a need for parents to start having conversations with their children. Indeed, the 'love them enough to talk about sex' was one of the campaigns by loveLife. Later on, the continued rise in teenage pregnancies and new HIV infections also started to suggest that life orientation alone was not a panacea for improving sexual and reproductive health information among young people. More recently, there has been comprehensive sexuality education in schools but the role of parents continues to be an important strategy in the promotion of adolescent sexual and reproductive health.

3.1.2.2 Recruitment of participants

The recruitment of participants was undertaken by two research assistants: the granddaughter of the farm owner near where participants resided and a school teacher. It is therefore important to acknowledge that these two people had higher standing in their communities. In other words, though consent was given and participation was voluntary, it is not known whether the participants standing in their respective communities may have influenced the recruitment process. Whilst all the documents were shared, it is not known whether there was selectivity in the recruitment of participants.

One of the aims of the study was to recruit males and females. However, the recruitment of fathers was a challenge. Indeed wanting or expecting to recruit fathers by females might have led to the low participation of fathers in the study. In one household where the father was present, he made it very clear that I should speak to his wife. It became clear that the father was not going to discuss topics on sexual and reproductive health with a young girl and this was culturally inappropriate especially in a rural setting. This experience is not unusual as Mtikrakra (2009) interviewed 10 parent-child dyads. Three of the children were girls and seven were boys, but nine of the parents were mothers and only one father was recruited. However, in hindsight I recognise that involvement of males would have been appropriate particularly in a cultural setting like where the research was conducted. Perhaps, it must also be acknowledged that as a young person who grew up in an urban environment my understanding of gender dynamics was limited and indeed it was only after years of experience in the research field that exposure to same sex interviewers improved my knowledge.

3.1.3 Key informant interviews and document review

The third data source used in this thesis is key informant interviews and a review of the documents for the programmes implemented by the service providers. The key informant interviews were conducted with key informants from two interventions and two programmes, which targeted young people and had an element of parent participation to enhance communication with their children. The purpose of the key informant interviews was to better understand how young people communicate with

their parents and also to identify the barriers, so as to recommend strategies to enhance parent-child communication and its impact on adolescent sexual behaviour.

All key informants were sent information sheets in advance by email and were then contacted telephonically to set an appointment for the interviews. Interviews were done either face to face or telephonically. Interviews were conducted mainly in English and lasted approximately 90 minutes.

The topics covered efforts aimed at improving parent-child communication and existing barriers to attracting parents in enrolling in the interventions or programmes. Further, interviews were aimed at establishing whether the interventions or programmes were successful in promoting parent-child communication and whether they had an impact on the adolescents' sexual behaviour. Additional material was acquired for each of the programmes. A review of published evaluations was also undertaken, given that at the time of data collection none of the evaluations had been undertaken. Details of the key informant interviews are discussed in Chapter seven.

3.2 HIV policies and programmes over time and how these influenced the research

In the 1980s and 1990s, the approach towards HIV and AIDS was mainly on behavioural interventions, which focused on abstinence, be faithful and condomise (ABC). These interventions required individual effort. At the time the PhD topic was conceptualised, South Africa was focusing on the ABC approach and with most sexual and reproductive health and HIV education delivered through schools and peer educators. The involvement of parents as sexuality educators was uncommon in developing countries but had begun in the United States and other developed nations (Hutchinson, 2002, Blum, Beuhring and Rinehart, 2000; Jaccard, Dittus and Gordon, 1996. Blake *et al.* 2001; Thornton and Camburn, 1987; Holtzman and Rubinson, 1995; Newcomer and Udry 1985). In 2003, parent-child communication was an under-researched topic in South Africa *let alone* sub-Saharan Africa. Further, while previous studies had documented the associations between parent-teenager communication in the United States and other developed nations, understanding how the content of those conversations affects behaviour and comparison of the reports of teenagers and their parents on communication was lacking.

Few studies had looked at both parent and child perspectives simultaneously with much of the literature focusing on the reports of the teenager only. Furthermore, there was a gender bias with a tendency to consider maternal-child or mother-daughter communication. This was more evident in the South African context where there was a paucity of data on parent-adolescent communication. After recognising the important role that parents play in informing adolescents about sexual and reproductive health issues, loveLife ran the campaign *Love them enough to talk about sex*, which ran between 1999 and 2002 (loveLife and Simunye we are one, 2000). This campaign encouraged parents to talk to their children and used role models such as the former and late President Nelson Mandela and Archbishop Tutu to encourage parents to talk to their children about sex. It was exposure to this campaign that reinforced the desire to pursue this under researched topic. In 2001, loveLife conducted a ground-breaking study, which is still one of the most detailed studies addressing parent-adolescent communication on a nationally representative scale in South Africa. Further, the Planned Parenthood Association of South Africa (PPASA) introduced the Parent Education Programme (PEP), whose aim was to educate parents on sexual and reproductive health and HIV as well as how to talk to their children about sexual issues. Although the life skills programme had been rolled-out in schools nationally in 2000, there was a clear need for the involvement of parents as noted by the PPASA education programme and the *love them enough to talk about sex* campaign.

Whilst there were other prevention strategies such as HIV testing and counselling, Voluntary Medical Male Circumcision (VMMC), Prevention of mother-to-child transmission (PMTCT), Post-exposure prophylaxis (PEP), antiretroviral therapy (ART) as treatment for prevention (TaSP) and pre-exposure prophylaxis (PrEP), vaccine initiatives and microbicides, the topic on parent-child communication gained prominence in the literature and several systematic reviews were undertaken with the majority undertaken in developed countries, especially the United States (US) (Santa Maria *et al.* 2015; Ryan, Roman and Okwany, 2015; Sutton *et al.* 2014; Wight *et al.* 2011; Downing *et al.* 2011). However, work in sub-Saharan Africa also begun with Bastien, Kaluja, and Muhwezi (2011) reviewing the research in sub-Saharan Africa. Indeed the topic grew in South Africa and as early as 2001 the Human Science Research Council together with the University of

Durban-Westville and partners in Chicago and New York piloted the Collaborative HIV Adolescent Mental Health Program (CHAMP) in KwaZulu-Natal (Bhana *et al.* 2010). The purpose of the intervention was to reduce HIV risk behaviours by strengthening family relationship processes, and targeting peer influences through enhancing social problem solving and peer negotiation skills for youths. It is discussed in more detail in Chapter seven. Some of the other studies on parent-child communication that have been undertaken in South Africa are by Gumede, 2015; Lachman *et al.* 2014; Coetzee *et al.* 2014; Leser and Francis, 2014; Soon *et al.* 2013; Zimmerman, 2011; and Phetla *et al.* 2008. Most of these have also considered the role of parent-child communication in the context of HIV and AIDS. A review of these studies is provided in the analytical chapters.

Although there has been an increase of literature in this field in a changing HIV environment, one of the most significant developments in the HIV and AIDS funding programme was the 2003 announcement of President George Bush's President's Emergency Plan for AIDS Relief (PEPFAR), which was an initial five-year \$15 billion initiative to address HIV/AIDS, tuberculosis and malaria in the most affected countries to help save the lives of those suffering from HIV and AIDS around the world. It was during the early years of PEPFAR that the *Parents Matters Program* (PMP) in 2003–2004 was conceptualised in the United States. The programme was then renamed the Family Matters Programme (FMP) and was adapted for use in Kenya from the US evidence-based intervention. FMP has gradually expanded throughout sub-Saharan Africa as countries that experience high burdens of HIV among youth and were funded by PEPFAR requested the programme. In 2011 when I worked for the Society for Family Health (local affiliate of Population Services International), the preparations for introducing the Family Matters Programme were underway. The organisation received funding from the Center for Disease Control and is currently implementing the FMP in six provinces in South Africa. The FMP SA was adapted from "the evidence-based intervention: Families Matter! Program (FMP) based on research conducted in the USA and Kenya on the critical role of parent-child communication about sex and sexuality in the prevention of adolescent sexual risk. While maintaining the core elements and key characteristics of FMP, the South African version of this programme includes components that address the health priorities espoused in a number of policy documents including the HIV and AIDS and STI

National Strategic Plan (2012–2016); The Integrated School Health Policy (2012); and the Policy Guidelines for Youth and Adolescent Health (2001.)” (Soul City, 2015, np).

3.3 Linking research questions in temporal context

In reviewing other surveys conducted in South Africa and programmes on parent-child communication, the 2001 survey and the fieldwork conducted in 2006 among parents and their children has contributed to the continued discourse on parent-child communication. The 2001 survey allowed for the following questions to be asked: To what extent is parent-child communication taking place and what is spoken about? These questions were obtained from selecting the list of 13 questions on how regularly parents and youth discussed specific topics. When compared with surveys collected around the same period, the loveLife survey had a longer list of questions on sexual and reproductive health. The 2002 and 2005 surveys conducted by the Human Science and Research Council collected questions on sex, sexual abuse HIV and AIDS, which also provided information on patterns of communication in families and communities on HIV/AIDS (HSRC, 2004, 2008). The loveLife survey did not only precede these two surveys but the list of questions asked allowed for grouping the questions as reflected in Table 4.1 in Chapter four.

The extent can be measured through frequency and depth but the timing of these questions cannot be established as no question was asked about the time that had elapsed since the communication had taken place. Questions on age, sex of the respondents and the population group from both teenager and parent questionnaires enabled the researcher to answer on how communication differs by gender, population and age group as reflected in Tables 4.2–4.4 of the thesis. Again it cannot be established at what stage of the girl or boy or mother or father the conversations took place. In other words, given how the questions were posed one cannot measure the point in time when this communication took place. For example, one could use age as a measure of the developmental stage of the child. Thus, it can be argued that the survey asked similar questions to 12–14 years and 15–17 years, yet these groups are at different stages. Accordingly, age appropriate questions would have been more suitable. In the same way, the thesis explored questions on who talks to whom- who do teenagers talk

to and who do parents talk to? Whilst the information allows for better understanding of topics discussed, the triggers are unknown. That is whether parents wait for something to happen and then have these discussions. Again for those that have never had any communication, could this be that in 2001 sexual and reproductive health was taboo or was it lack of knowledge, in spite of the increasing prevalence of HIV and deaths due from AIDS. In 2001, already sexual abuse and early sexual activity were identified as risk factors for HIV among adolescents (Brookes, Shisana and Richter, 2004).

In Chapter five, the 2001 survey questions on ever had sex, condom use in the past 12 months and number of partners in the past 12 months were used to answer if parent-child communication is associated with lower levels of sexual risk behaviours among adolescents? The question on ever had sex allows for considering whether early sexual debut occurred, which would demonstrate if adolescents in South Africa were at an elevated risk of HIV and AIDS. Similarly, increased number of sexual partners increases risks of HIV transmission, whilst consistent and correct condom use is protective. These questions were of importance not only in 2001 but continue to be of importance in 2018, where HIV infection in South Africa continues to be largely sexually transmitted. Over time, the questions on condom use have emphasised correct and consistent condom use, whilst questions on the number of partners have distinguished between multiple partners and concurrent partnerships. Thus one needs to recognise that the risky sex measured in chapter five only covers consistency but not correct use. Similarly, multiple partners considered the number but not whether these were overlapping partnerships, which have been found to be more risky than serial monogamy.

The temporality of parent-child communication is better articulated in Chapter six which explores what socio-cultural factors are associated with parent-child communication in Durban, KwaZulu-Natal? In this chapter, triggers of communication are discussed and indeed questions on at what age communication should take place are asked'?. Finally, Chapter seven on whether interventions and programmes aimed at improving parent-child communication meet their objectives, shows how different study designs allow for the measurement of cause and effect or the absence of it. Of course none of the data sources are able to demonstrate causality.

3.4 Linking concepts to the data

The sources of data were both quantitative and qualitative. The 2001 data survey collected information on individual characteristics on age, gender and population group on teenagers, which measure the individual construct in the theoretical framework and audience information in the conceptual framework were found in part A on general lifestyle. These were the first eight questions in the questionnaire. The context variables (teenagers' education status, wealth, living arrangements, and place of residence) within the individual domain are also from the 2001 survey. Each adolescent was asked questions on their socio-demographic characteristics and formed part of the first eight questions. The communication questions were placed at the 10th and exposure to loveLife questions as the 12th.

The domain on relationships in the theoretical framework includes the source variables which are the parent's age, gender and population group and context variables, that is the parents' education status, marital status, wealth, living arrangements, household size, place of residence, relationship to young person and the number of children. All the socio-demographic characteristics come from the 2001 Survey, where specific questions on the parents were asked. In the parents questionnaire, the question on marital status has three options '(Single/Unmarried, Married, Divorce)', the second question was on the Relationship To Teenage Respondent (12–17 years old), the third question was on age and asked five categories, which were then combined into two options: under 40 and 40 and above; household income was the fourth question and the fifth was the number of children in the household aged 12–17 years. The questions on having discussions were seventh. The societal aspect was captured by questions on exposure to loveLife in the 2001 survey and was asked as question 14 to capture beliefs on whether more open communication about sex and sexuality can: Help Reduce The Risk of HIV/AIDS?; Help Reduce The Risk of Teenage Pregnancy?; Encourage Adolescents To Delay Sex?; Encourage Adolescents To Initiate Sex?; Encourage Adolescents To Be More Responsible and Have No Value?

The qualitative research: on focus groups and in-depth interviews also collected information on the various domains highlighted in the theoretical framework. For the Individual and audience constructs, the data collected information on parent-child relationships, the timing of the communication and triggers and barriers to communication. Whilst for parents, the relationship and context variables were covered in parent-child relationships, timing of the communication, triggers and barriers to communication and sources of information including parents, peers and school. Community information was obtained from sources of information, which include the media, church and work. The Key informant interviews, which looked at the various programmes also contribute to the theoretical framework as part of the interventions and programmes on parent-child communication.

Chapter 4: Parent-adolescent communication among South African young people and their parents

4.1 Introduction

This chapter aims to provide patterns of parent-child communication and factors associated with parent-child communication in South Africa. The chapter has six sections: introduction, aims and objectives, previous research, methodology, results and the discussion and conclusion. The introduction section covers a discussion on the sexual socialisation of young people in South Africa. The study aims and research objectives are then presented. The third part of the chapter discusses previous research that was reviewed on the topic on parent-child communication and factors associated with parent-child communication. The fourth section is the methodology section, which outlines data and measures used. The analysis section forms the fifth part and was guided by previous research undertaken mainly in the United States, which is replete with studies on this topic. The last section of the chapter presents the discussion and conclusion.

4.1.1 Contribution of this chapter

The work presented in this chapter is based on the 2001 survey on youth in South Africa. Despite the time lag since the survey was undertaken, the contribution made in this chapter is still valuable. First, because the data set used in the chapter still remains one of the most comprehensive nationally representative surveys undertaken with parents or guardians and their adolescent children, thus enabling analysis on parent-child dyads. One such study was the 2002 National Household HIV Prevalence and Risk Survey of South African Children by Brookes, Shisana and Richter (2004) and the 2005 South African National HIV Prevalence, HIV Incidence, Behaviour and communication survey (Shisana, *et al.* 2005), which interviewed children aged 12–14 year olds and their caregivers on sex, sexual abuse and HIV transmission and prevention. However, these two surveys were limited in terms of scope (questions asked and age group asked). Other studies that have used parent-child dyads in South Africa tend to be selected samples (Bana *et al.* 2014; Lachman *et al.* 2014; Zimmerman, 2011; Bhana *et al.*, 2004) or limited to a particular setting (locality or school) (Gumede, 2015; Coetzee *et al.* 2014; Leser and Francis, 2014;

Soon *et al.* 2013; Zimmerman, 2011; Phetla *et al.* 2008). As such, this did not allow for national representation and thus generalization of findings from these parent-child dyad studies is more restricted.

Further, few studies have made direct comparison between population groups or ethnic groups (Gumede, 2015; Coetzee *et al.* 2014; Zimmerman, 2011, Shisana *et al.* 2005, Brookes, Shisana and Richter, 2004,). Most studies have focused on one ethnic group such as Africans or the coloured population (Dindili, 2014; Zimmerman, 2011) and there has been very little focus if at all on the White and Indian population groups. Therefore this study fills a gap in the literature as it will consider views from all population groups. The importance of addressing the different population groups is that, while sexual risk taking is higher among the Black Africans and Coloureds, there can be lessons learnt from the White and Indian population groups. Culturally and economically, these groups are different and the legacy of apartheid is evident in the behavioural dynamics, but as with other socio-economic issues there can be important lessons from understanding the diversity between population groups.

Another contribution made in this chapter is that the data enables analysis from both the female and male perspectives, from both young people and their parents or caregivers. Generally, most studies only consider the mother-teen perspective (Gumede, 2015; Dindili, 2014; Leser and Francis, 2014, Shisana *et al.* 2005, Brookes, Shisana and Richter, 2004) and do not include the father-teen perspective, yet gender differentials are important in the analysis of communication patterns. This study will allow for an in-depth understanding in the differences in the topics parents discuss with their sons versus daughters. A similar analysis will be undertaken to examine which topics sons and daughters discuss with their mothers versus fathers. Such information is important for the development of programmes as there might be a need to have separate interventions for girls and boys and for mothers and fathers. It must be pointed out that the study will also shed light on a subject less found in research and that is of father-son communication. In addition, the study explores reports of parents and their children and compares differences between these reports. This is done to measure the extent of agreement or disagreement in the reports on communication provided by both parents

and children. Few studies consider the views of both parents and the adolescents. A section in this chapter discusses congruence in more detail.

A further strength of the 2001 survey is that adolescents younger than 15 were included in the sample. This is an exception rather than the rule (Shisana, *et al.* 2005; Brookes, Shisana and Richter, 2004). The inclusion of younger adolescents (12–14) helps to understand the differences in communication behaviour by age of the adolescents 12–14 years versus 15–17 years, thus providing insight into communication patterns between younger and older adolescents and their parents. Studies have shown that the parental influence is seen early in teen years and decreases as the adolescent grows (Kunnuji, 2012). Hence, Igras *et al.* (2014) argue that it is important to invest in younger adolescents as this provides an opportunity to influence the root cause, rather than intervening when the problems have started. Additionally, not much is known about teenagers under age 15. Therefore this data provides information for an understudied group. Similarly, the study looks at the differences between younger parents and older parents. This has not been researched in South Africa and yet it is argued that younger parents are better communicators than older parents (Kunnuji, 2012).

The 2001 survey also collected information from youth in and out of school. This again, allows for further disaggregation and to explore differences between in school and out of school youth. Generally most interventions for young people target in school youth and it is therefore important to highlight and learn differences between these two groups particularly because 12–17 year olds should be in school and thus the vulnerability of those out of school increases and has been documented.

An additional contribution made in this chapter is the inclusion of the socio-economic characteristics of the parents and the adolescents e.g. education, wealth status of the parents and living arrangements and how these might influence parent-child communication.

Despite that this survey was undertaken 16 years ago, it is still one of the few studies that collected detailed information on communication topics ranging from general parent-child communication to specific questions on sexual and reproductive health. Accordingly,

this allowed for the exploration of different types of communication and how these can provide ideas of initiating communication between parents and their children. As such, it advances knowledge on which communication topics promote or inhibit communication between parents and their children. In addition to the list of questions asked and assessed independently, communication scales were considered, which provide insight into a summed measurement of communication as opposed to single items. In doing so, this allows for a better understanding on whether importance should be placed on summing up topics to develop scales or identifying specific topics to enhance communication between parents and adolescents.

The importance of having a wide array of topics cannot be over stated. This is because more recent studies have focused mainly on HIV and AIDS communication. For example, in 2011, loveLife conducted a study in four provinces among 18–24 year olds. The first question asked on communication was *“Who have you ever talked to about HIV/AIDS issues?”* A limitation of this question is that HIV and AIDS issues are very broad rather than specific to how HIV is transmitted. Additionally, only asking about HIV is limiting and it is still important to broaden the focus to other sexual and reproductive health information, particularly because there is a push to integrate HIV/AIDS and sexual and reproductive health services given the overlapping needs, such as high levels of teenage pregnancies and sexually transmitted infections among young people.

Another question asked on communication in the 2011 survey was directed at females and was *“Did any of the following ever talk to you about reproduction (how babies are made)?”* The type of respondents were listed including parents. These measures of communication were not similar to any of the thirteen topics on communication asked in the 2001 survey, nor were the questions asked in 2001 aligned to questions asked in 2011. For instance, The HIV question asked in 2001 was a five-point Likert scale on *“How often do you ask your teenage children/parent about (13 topics)?”* Responses were often, sometimes, hardly ever, never, don’t know and refused.

Other differences that reduced the feasibility of undertaking a comparison between 2001 and 2011 are that: (i) In 2001, data was collected from 12–17 year olds and their parents, whilst in 2011, the survey was among 18–24 years old only. Their parents or caregivers

were not included. (ii) The 2001 survey was a nationally representative sample, whereas in 2011 only four provinces were included Gauteng, Mpumalanga, KwaZulu-Natal and Eastern Cape.

Finally the 2011 survey would not have assisted in answering any of the questions outlined in Chapter 1.

4.1.2 Socialisation of young people in South Africa

The sexual socialization of young people in sub-Saharan Africa has been the role of extended family members or community members through initiation ceremonies (Bredlid, Cheyeka and Farag, 2015; Biddlecom *et al.* 2007b; Barker and Ricardo, 2005; Chimbetwe, 1999; Makiwane, 1998; Kiragu, 1996). However the advent of modernisation and nuclear families has created a gap in preparing young people for a healthy transition into adulthood. Accordingly, the involvement of parents as sexuality educators has become an important strategy in meeting the unmet need of sexuality education among young people. In many societies, parents do not find it easy to talk to their adolescents about sex because they fear that this might encourage them to initiate sex. On the contrary, research has shown that adolescents who have more information about sex are more likely to delay sexual initiation (Seif and Kohi, 2014; Sidze and Difo, 2013; Guilamo-Ramos *et al.* 2012; Nambambi and Mufune, 2011; Antienzo *et al.* 2009; Teitalman *et al.* 2008; Hutchinson, 2002; Blum, Beuhring and Rinehart, 2000; Jaccard, Dittus and Gordon, 1996). The argument raised is that adolescents who have adequate information and support from their parents are more likely to be confident and therefore better equipped to make healthy decisions such as safer sex: condom use, negotiating with partners about using protection, having agency within their relationships and ability to reduce the number of partners. Despite the fact that adults would like their teenagers to know about sexuality and sexual and reproductive health related topics, they often find it difficult communicating about it. Accordingly, interventions aimed at promoting greater communication between adolescents and parents have been implemented. It is also important to note that gender norms contribute a great deal in terms of how parent-child communication takes place. This is further discussed in 4.3.1.1 and 4.3.2.

One of the strategies in South Africa aimed at promoting parent-child communication is the loveLife campaign. This began as a multi-dimensional initiative focusing on the sexual and reproductive health of South African adolescents. The consortium worked under the auspices of loveLife, a collaboration between the Department of Health, the Reproductive Health Research Unit (RHRU), Planned Parenthood Association of South Africa (PPASA) Advocacy Initiatives, and the Health Systems Trust. loveLife was launched in September, 1999 with funding from the Kaiser Foundation and South African Health Department. loveLife's initial aims were to: reduce the HIV infection rate among young South Africans aged 15–20 years old by 50% over the 5 year period (2000–2005); reduce teenage pregnancy, sexually transmitted infections (STIs), and sexual coercion; influence communications and behaviours associated with reproductive health choices and outcomes and to promote positive sexual choices around sexual partnerships, condom use, age at sexual debut, pregnancy, treatment seeking behaviours and HIV risk behaviours (loveLife, 2001a).

When loveLife was launched, the target group was 12–17 years. However, since 2010 loveLife expanded its target group to 19 years old. loveLife uses a combination of commercial marketing and public health techniques to promote a brand driven health lifestyle based on international best practices. One of the cornerstones of this strategy was imbedded in creating more open communication about sex and sexuality and how this is important in delaying the onset of adolescent sexual activity, reducing teenage pregnancy, increasing the use of condoms and reducing the spread of HIV/AIDS and other STIs (loveLife, 2001a). Further, it recognises the role in which parents play regarding adolescent sexual behaviour. One approach that was implemented in the early phase of the loveLife campaign was the “Love them enough to talk about sex” campaign. This campaign used prominent members of society such as Nelson Mandela and Arch Bishop Tutu in adverts encouraging parents to talk about sex with their children. A booklet titled *“Love them enough to talk about sex”* was also available to help parents talk to their children about responsible sexual behaviour and answer questions (loveLife and Simunye we are one, 2000).

Other activities of the loveLife initiative include promoting awareness and education, development of services, outreach and institutional support and the monitoring and

evaluation of these projects. Awareness and education were provided through multi-media platforms such as billboards, television, radio and print media (UNCUT magazine). For development of services, countrywide adolescent services in government clinics were provided under the National Adolescent Friendly Clinic Initiative (NAFCI) and youth centre (Y-centres). Outreach and institutional support include(d) the loveLife games, Y-centres, loveLife train (cease to exist), a call centre for both parents and youth and also a peer education programme implemented by foot soldiers known as ground breakers and volunteers known as Mpinthis (loveLife, 2016). These mainly conduct life skills education and games in schools and in different communities. The loveLife footprint is extensive and remains one of the largest youth intervention programmes in South Africa. The organisation has continued to extend its footprint with a presence on social media platforms such as Mymsta, Facebook and Twitter. A 'please call me' service was also introduced in the late 2000's to increase accessibility to counselling services for those who are unable to call. Other programmes that were introduced were the gogoGetters, Born Free and community dialogues. The dialogues are aimed at increasing relationships between young people, parents and the broader community (loveLife, 2016). Some of the loveLife activities have ceased but games, school and family programmes continue. Between 2012 and 2015, the organisation has repositioned itself to focus on broader issues including reducing HIV infection among young people; reducing teenage pregnancy; keeping young girls in school; and improving employment opportunities for young people (www.lovelife.org, no date).

4.2 Aims and objectives

This chapter will explore the level of parent-child communication among young people and their parents. The study is intended to provide an in-depth understanding of the extent of parent-child communication and topics discussed. Without an understanding of parent-child communication, it is difficult to strengthen parent-child communication interventions or know if it will be useful for parents to be the primary sex educators of their children. The specific research objectives were to examine the extent of parent-child communication; to identify the content of parent-child discussions and to determine the factors associated with parent-child communication from both perspectives. The

findings are then discussed in the context of other studies undertaken to understand parent-child communication and implications for policy. The analysis was guided by previous research undertaken mainly in the United States, which is replete with studies in this area. The conceptual framework has been discussed in chapter two.

Specific research questions for the analysis were:

1. To what extent is parent-child communication taking place and what is spoken about? How do these compare by gender, population and age group of the participants?
2. Who talks to who and about what? To whom do teenagers talk and to whom do parents talk?
3. Is there a consensus in the reports given by parents and teenagers about communication?
4. Does exposure to loveLife increase communication between parents and adolescents?
5. What factors are associated with parent-child communication?

4.3 Previous research

This section focuses on two main areas: patterns of parent-child communication and factors associated with parent-child communication. The sub-topics covered in the domain of patterns of parent-child communication, include the extent of communication, congruence of reports between parents and children's reports; who talks to whom?; and a brief discussion on exposure to loveLife and how it influences parent-child communication. Differentials pertaining to gender, age and population group are also considered in the chapter. The section continues with a brief literature review on factors associated with parent-child communication.

4.3.1 Extent of parent-child communication

Understanding the extent of communication is important because research shows that though most young people say that they would like to receive information on sexual matters from their parents, few have had such a conversation (Shiferaw, Getahun and Asres, 2014; Bhatasara, Chevo and Changadeya, 2013; Sidze and Defo 2013; Izugbara, 2008; Mturi, 2003; loveLife, 2001a; Givaudan *et al.* 1994; Wilson *et al.* 1994). Kirby and Miller (2002) highlights that in the American setting, parents often talk infrequently and inadequately with their children about sexuality because they have considerable difficulty

discussing the subject. Whereas lack of communication about sex in the Americas may be attributed to parents' perceptions that it may increase sexual activity, Mturi (2003) suggests that the lack of communication in most sub-Saharan countries is due to the perception that talking about sex is taboo. This has been reiterated in several studies. For instance, Nduba and Delnessa (2004) found that though young people in the Akaki and Kaliti industrial towns of Tanzania were quite open about discussing sex and wished their parents to do so, the parents on the other hand still held a strong taboo against talking about sexual matters with their children (Nduba and Delnessa, 2004). Similarly, Taffa *et al.* (1999) also conducted a study in Tanzania and concluded that even though adolescents have an incomplete understanding of comprehensive reproductive health, discussion on sexual matters still continues to be a cultural taboo by both the youth and their parents. This finding is supported by Shiferaw, Getahun and Asres. (2014) who conducted a study in North West Ethiopia on adolescents' communication about sex related information with their parents. According to the authors, although 89% of the adolescents viewed communication as acceptable, only 39% reported having parent-child dyads on sexual and reproductive health issues, because it is a cultural taboo in Ethiopia for parents to openly discuss sexual matters with their children (Shiferaw, Getahun and Asres, 2014).

Aside from the cultural taboos, some studies have attributed the lack of communication to insufficient knowledge (Dessie, Berhane and Worku, 2015; Izugbara, 2008; Babalola, Tambashe and Vondrasek, 2005; Rwenge, 2000). In Cameroon, the paucity of communication about sex between adolescents and their parents or guardians was attributed to lack of parental knowledge about sex education and that the traditional education that parents received did not encourage explanation and verbalization about the subject (Rwenge, 2000). Kiragu *et al.* (1996) conducted a national Information, Education and Communication situation survey in Kenya with 1 476 adolescents aged 15–19 years and 2 894 adults aged 20–54 years, to assess communication between parents and their adolescent children. Participants were asked whether they had spoken about selected topics during the year preceding the survey. Their research showed that parents often do not have correct information about reproductive health (for the most part, they themselves did not receive Family Life Education [FLE]). Others were uncomfortable

talking to their children or thought that children were taught FLE in school. On the one hand, Dessie, Berhane and Worku. (2015) attributes low parent-child communication on sexual conduct to limited parental knowledge. On the other hand, their cross-sectional study on a total of 4 559 adolescents aged 10–18 years in Harar, Eastern Ethiopia revealed that lack of communication often stems from the perception of parental knowledge, which may be a reflection of conservative norms and not the parents' actual knowledge. They found that adolescents who perceived sexual information from their parents as insufficient and poor in quality had lower parent-child communication than those who perceived their parents' knowledge as sufficient.

In Zimbabwe, adolescents and gatekeepers felt that there was lack of communication between adolescents and adult family members on issues pertaining to sex and sexuality (Wilson *et al.* 1994). The study also found that when communication did take place it was not direct but rather vague using euphemisms such as “do not play with boys or girls” (Wilson *et al.* 1994). Furthermore, in Zimbabwe barriers that have been identified regarding sexual communication include among others family separation, economic constraints to travel, as well as rivalry and educational and class differences within extended families. As such, the role of sexual socialization now lies with the parents. However, both parents and adolescents in Zimbabwe were reluctant for parents to educate adolescents about sexual matters (Wilson *et al.* 1994). Likewise, Izugbara (2008) explored communication on sexuality between parents and children in rural Nigeria and found that the majority of parents (over 60%) did not communicate with their children on sexual behaviour. A majority of the parents that communicated with their children portrayed sex as immoral, in scary images and used discreet terms; as such conveying confusing, inadequate and inaccurate information to adolescents.

In South Africa, few studies have documented parent-adolescent communication. Those that have considered such communication reiterate findings from previous studies suggesting that there is a very little communication between children and parents. In the 2005 South African National HIV Prevalence, HIV Incidence, Behaviour and Communication Survey, undertaken by the Human Sciences Research Council (HSRC), caregivers of children aged 2–18 years were asked about communication with their children on sex, sexual abuse HIV and AIDS. Only 15.4% reported discussing sex with the

children aged 2–11 years, while 31.0% of parents reported ever discussing sexual abuse with the child, 19.0% discussed how HIV is transmitted and 18.0% discussed how HIV and AIDS is prevented. Among children aged 12–14 years, 44.0% reported having discussed sex with their parent, while 54.0% discussed sexual abuse (Shisana *et al.* 2009). These figures show very low levels of sexual and reproductive health communication among parents probably because the questions asked if they talked to 2–11 year olds rather 12–14 years olds. Further information on communication could not be gleaned from the survey as it was not the primary purpose of the study. Soon *et al.* (2013) highlight the importance of positive parenting in influencing delays in sexual behaviour and safe sex practices. In their study among black South African adolescents aged 14–19 years from a township in SOWETO, South Africa, whose primary languages were mainly Zulu, Tsonga and Xhosa, adolescents expressed their desire to get advice on sex and relationships from their parents. However, this desire was often met with parents' reluctance to discuss sex and unidirectional talk on abstinence leaving no room to discuss about safe sex practices.

In general, the studies all point to low levels of communication between parents and their children. What is missing from these studies is whether different topics were emphasised over others. For example, in this chapter the extent of communication goes beyond examining whether communication is high or low, but specific topics are examined, which will show what topics are being discussed by both parents and their children. In other words, this chapter will show the extent to which certain topics have been discussed and the topics that are discussed least. These will also be compared by the age, gender and population group of the parents and adolescents, allowing for comparison on whether age, gender and race influence the type of topics discussed. Demographic differences (e.g. age, gender, marital status, race, religion, and socioeconomic status) have been explored as possible influences on whether adolescents and parents will discuss sexuality (Somers, Tolia and Anargurthi, 2012). Findings from studies examining parents' demographics and parent-child communication have not been universal. In some studies demographic characteristics have been positively correlated with parent-child communication, whilst in others the relationship has not been found. A study by Raffaelli (1998) showed no relationship between mothers' demographics and discussions. Similarly, a study by Fox and Inazu (1980) found no significant associations between early

communication and the mother's level of education, age, employment status, family income, sex of the household or whether the daughter was the eldest in the family.

4.3.1.1 Differentials by gender

In general most studies have shown that females communicate more than males (Manu *et al.* 2015; Coetzee *et al.* 2014; Sidze and Defo, 2013; Bhatasara, Chevo and Changadeya, 2013; Kunnuji, 2012; Byers, Sears and Weaver, 2008; Sneed, 2008; Gallegos *et al.* 2007; Henrich *et al.* 2006; Raffaelli and Green, 2003; Hutchinson and Cooney, 1998). Thus among parents, mothers have been found to communicate more with their children as compared to fathers (Kunnuji, 2012; Byers, Sears and Weaver, 2008; Gallegos *et al.* 2007; Jaccard, Dodge and Dittus, 2002), whilst daughters have been reported to receive more communication from their parents (particularly from their mothers) as compared to sons (Kunnuji, 2012; Byers, Sears and Weaver, 2008; Raffaelli and Green, 2003; Jaccard, Dodge and Dittus, 2002). For example, Sidze and Defo (2013) found that in Cameroon, based on the Cameroon Family and Health Survey (CFHS) female young people aged 15–24 years reported more communication with their parents on sexual issues relative to their male counterparts. The study contends that parents engage more with female than male young people on sexual matters because of the perception that female young people are more vulnerable to social and health consequences of sexual behaviours compared to sons. A study by Bhatasara, Chevo and Changadeya (2013) found that male adolescents in Harare, Zimbabwe reported the need for parental guidance on sexual behaviours. The adolescents argued that they resorted to the media and peers because not only were their parents not open to discuss sexual issues, but sexuality talks were mainly between mothers and daughters, confirming that communication is generally between mother-daughter rather than mother-son (Hutchinson and Montgomery, 2007).

Apart from daughters or female adolescents having more communication than the sons or male adolescents, mothers are also known to communicate more than fathers (Manu *et al.* 2015; Harris, Sutherland and Hutchinson, 2013; Kunnuji, 2012). For example, the study conducted by Kunnuji (2012) on parent-child communication using a survey of 1 120 young people aged 10–24 years in the City of Lagos, Nigeria found greater involvement of mothers than fathers in parent-child communication on sexual

behaviours. Similarly in Ghana, Manu *et al.* (2015) reported on more mothers communicating with their children compared to fathers (78.8% versus 53.5%). Likewise in South Africa, findings on family communication about sex in a study among 1 902 black first-year students at a South African university show that 62.0% of respondents had received sex information from their mothers compared to 34.0% receiving it from their fathers. Notwithstanding these findings, some authors have also shown that parent-teen sexual risk communication was higher among males and fathers compared to females. For example, Jama-Shai and Mdanda (2016) noted that females were more likely to receive information from the mother than males, whereas sons were more likely to receive information from their fathers, showing that communication was higher within parent-child dyads of the same sex i.e. father-sons and mother-daughter. In the South African context there is a high level of father absenteeism and non-marital fertility, which then puts extra pressure on mothers or female caregivers to have discussions with their sons or males in the household. The current study will explore whether gender influences parent-child communication in South Africa.

4.3.1.2 Differentials by age

The age of parents and adolescents is also known to influence parent-child communication (Coetzee *et al.* 2014; Kunnuji, 2012; Byers, Sears and Weaver, 2008; Wight, Williamson and Henderson, 2006; Dilorio, Pluhar and Belcher, 2003). Among adolescents, results have been mixed. Some findings show that older adolescents are more likely to talk to their parents on sexual communication (Coetzee *et al.* 2014; Byers, Sears and Weaver, 2008; Kawai *et al.* 2008), whilst others show the opposite relationship (Kunnuji, 2012). In the study by Kunnuji (2012), parent-child sexual communication peaked at ages 15 to 19 years. Kunnuji (2012) suggests that the declines observed between ages 20 and 24 were as a result of an increased likelihood of young people living away from home and assumption of increased sexuality knowledge at older ages. Although the findings by Kunnuji (2012) point to delaying communication, there is a need to begin communication much earlier so that younger adolescents grow up knowing how to protect themselves from risky sexual behaviour particularly in societies where age-mixing is prevalent.

The age of the parents is also important to consider in parent-child communication. However, very few studies have explored this topic. Those that have considered the age of parents have also found mixed results. In some studies, older parents have been found to talk more with their children compared to younger parents (Berg, Sun and Bababola, 2012; Byers, Sears and Weaver, 2008). For example, the study by Berg, Sun and Bababola (2012) shows that communication increased with age for both fathers and mothers but was much higher for mothers as compared to fathers, holding adolescent age constant. Other studies have found that younger parents were better communicators of sexuality-related matters than older parents (Kunnuji, 2012; Ojo and Akintomide, 2010; Hutchinson and Cooney, 1998). For instance, in the study conducted by Ojo and Akintomide (2010) in Nigeria, younger parents aged below 40 and those aged 41 up to 50 years, were found to be better sexual communicators than the older ones (60 years and above). Similarly, in another study by Hutchinson and Cooney (1998), older mothers were reported to have lower parent-child sexual risk communication with their daughters compared to younger mothers. In other instances such as in Scotland, there has been no difference between older parents and younger ones (Wight, Williamson and Henderson, 2006). In South Africa, older people do not discuss sensitive issues such as HIV/AIDS, sexuality, and contraceptives with younger people (Dindili, 2014; Zimmerman, 2011). However, more information is required as few studies have explored how age of parents influences parent-child communication in the South African context.

4.3.1.3 Differentials by population group

Ethnicity has been found to have an influence on parent-child communication in various settings. In a study undertaken in Scotland, white parents were found to have spoken more with their children than Indian and other races (Wight, Williamson and Henderson, 2006). Additionally, Rafaelli and Green (2003) also noted that Latino parents in the United States were less likely to communicate with their adolescents about sexual issues than parents from other ethnic groups. The role of ethnicity is important particularly in a country like South Africa where racial differences remain wide. However few studies in South Africa have compared parent-child communication across population groups (Coetzee *et al.* 2014). Most have focused on specific ethnic groups, largely Black Africans and Coloureds. The white population and Indian/Asian population remain an

understudied group. For example, the study by Ngobese and Dlamini (2002) only focused on black mothers and their children in the Cato Manor area in Durban. This study found that though the majority (97.0%) of mothers acknowledged the importance of providing sexuality education to their children, only half of them had done so. In addition, the type of information given was either on rape, abstinence or warning statements about boys and in most cases indirect. Other studies looking at ethnic groups showed that among the Xhosa, HIV/AIDS, sexuality, and contraceptives are not discussed by older people with young people (Dindili, 2014; Zimmerman, 2011). One study that compared information by race in South Africa was undertaken by Coetzee *et al.* (2014), which found that parent-adolescent communication amongst the Indian and White populations was lower than the Blacks and Coloureds. This is unexpected given that Blacks and Coloureds tend to be less educated and more conservative about talking to their children.

4.3.2 Who talks to whom and about what?

Generally studies on the content of parent-child communication show that parents prefer non-sexual topics as compared to sexual topics. For instance, in the study among Latino' college students in the United States conducted by Rafaelli and Green (2003), parents were more likely to talk about relationships and values as compared with sexual facts and protection. Similar findings were observed among Thai adolescents in Thailand where frequent discussions with their parents were about body changes and dating and less on sexual topics such as condoms and contraception, sexual intercourse, HIV/AIDS and sexually transmitted diseases (Rhucharoenpornpanich *et al.* 2012).

Gender differences in what topics parents discussed with their children have also been observed. Parents appeared to split roles along gender lines with respect to holding discussions with their children about reproductive health. For example, in the study by Dilorio, Pluhar and Belcher (2003) conducted among adolescents in the United States mothers discussed with their daughters about menstruation and pregnancy and discussed condom use with their sons. A study conducted in Kenya also found that mothers were more likely than fathers to have discussed reproductive health issues (Kiragu *et al.* 1996). Fifty per cent of mothers had talked to the adolescent about AIDS/STDs in the preceding

year, while only 42% of the fathers had spoken to the adolescent (15-19 years). The pattern was similar for abortion and puberty. Interestingly, slightly more fathers than mothers talked to their children about family planning. Mothers reported talking more to their daughters and fathers to their sons about AIDS/STDs, boy-girl relationships, sexual behaviour, family planning, abortion and puberty. Still, the majority of parents had not discussed these subjects in the preceding year and girls were more likely to report discussions than boys (Kiragu, *et al.* 1996). However, in three African sites (Dar es Salaam in Tanzania, and Cape Town and Mankweng in South Africa), in sub-Saharan Africa over 50% of the male respondents reported never or hardly ever talking about condoms, abstinence and HIV/AIDS with their parents or guardians (Namisi *et al.* 2009). Among females, abstinence and HIV/AIDS were talked about much more than condoms with parents. This is expected since condoms are mainly regarded as prevention methods for males. The parents from Dar es Salaam were more silent compared to the parents from South Africa. Silence on HIV/AIDS, abstinence and condoms were more pervasive among females.

This shows that some countries are more conservative on sexual issues irrespective of the gender of the adolescent. Accordingly, although gender norms in different contexts show that females talk more than males, comparing sites might be slightly difficult due to cultural norms and contextual factors. Thus, some sites might be comparable and others not as shown by the study by Mmari *et al.* (2016), which showed that both context and gender were powerful in influencing and understanding how the family influences adolescent sexual behaviours in Baltimore, United States and Johannesburg, South Africa. As such they propose that programmes that are aimed at reducing adolescent sexual behaviours need to address “the complex influences on risk behaviours in different settings and in particular, the role of mothers and fathers” (p.1). The authors further argue that “prevention strategies need to also understand and incorporate gender-specific messages and interventions in order to address the high risk of sexual behaviours among adolescents in these settings” (p.1). In South Africa, the 2002 Nelson Mandela survey found that mothers were more likely to discuss sex and related matters such as HIV/AIDS with their children (Shisana *et al.* 2005). Overall, this suggests that interventions to help parents talk with their children may be needed. In addition, alternate avenues to

communicate with youth about reproductive health, such as schools and churches, may be helpful.

Another important aspect that pertains to what topics parents and teenagers discuss, points to how parents provide age-appropriate sexual and reproductive health information to their children. In other words, parents tend to be selective on the topics they share with their children based on what they believe is appropriate for their children's age. For example, Ojo *et al.* (2011) found that parents in a Nigerian state most frequently discussed topics related to sexual development (structure of sexual organ, functions of sex organ, body changes at puberty and menstruation) with 10–14 year olds and the least discussed topics were on sexual behaviour (dating, contraception, relationship with opposite sex and sexual intercourse). These topics were deferred to older ages and begun when children reached the 15–19 year old age group. Jerman and Constatine (2010) conducted a study on selected sex topics among American young people aged 8–18 years. Topics covered included human reproduction, becoming sexually active, avoiding sex, HIV/AIDS and other STIs, using protection and where to get condoms. Among those aged 8–10 years, fathers spoke to females about human reproduction and avoiding having sex more than they did with boys. None of the fathers discussed where to get condoms with the girls in this age group. For adolescents aged 11–13 years, fathers discussed more with boys on all topics except avoiding sex. The age group 14–16 years showed higher levels of discussion between father-sons for all the topics, whilst among 17–18 year olds, father-daughter discussions were higher on human reproduction, HIV/AIDS and other STIs. With mothers, mother-daughter discussions were higher in all age groups but for age 11–18 years discussions on where to get condoms were highest among mother-son.

Ethnicity and population group have been found to be predictors of sexual communication and research findings have been mixed. A study by the Center for Disease Control (CDC) found that non-Hispanics were more likely than Hispanics to discuss AIDS with their children (CDC, 2004). African American parents reported discussing more sexual risk topics with their adolescent daughters than Caucasian parents (Hutchinson and Cooney, 1998). Topics across ethnic groups show that in South Africa, all ethnic

groups spoke more about HIV and pregnancy compared to other topics (Coetzee *et al.* 2014). Based on these findings one would argue that the different population groups in South Africa are all concerned about the same issues. This however is yet to be tested in the current study considering that population groups of South Africa differ widely in terms of exposure to HIV and teenage pregnancy.

Education has been found to improve communication between parents' and adolescents given that educated parents may have more liberal ideas and attitudes towards premarital sex (Hovell *et al.* 1994a). However, the study by Hutchinson and Cooney did not find any relationship between mother's educational level and sexual-risk communication (Hutchinson and Cooney, 1998). On the other hand, the age of the mother was found to be negatively associated with sexual risk communication.

In summary, the review highlights that parents are selective on topics that they discuss with their children based on the child's gender, age and race. Similarly, the parents' age, gender and population group may influence which topics are to be discussed with the adolescent. A further analysis for South Africa is needed since there has been very little research done on the topics discussed and by whom.

4.3.3 Congruence

Research on parent-child communication tends to focus on reports of either the parent or the child. This is because few studies consider parent-child dyads. Where both views have been considered (Manu *et al.* 2015; Alubo, Oyediran and Odiachi, 2002; Hartos and Power, 2000; Jaccard, Dittus and Gordon, 1998), it is not uncommon for parents to over report having discussions with young people. In the study by Jaccard, Dittus and Gordon (1998), there were 72% of mothers who strongly agreed to the statement 'I have talked to my teen about sex'. On the contrary, less than 50% (45%) of the teenagers strongly agreed to the statement my mother has talked to me about sex. This is a huge difference between the adolescents and parents. Such wide discrepancies were also noted by Alubo, Oyediran and Odiachi (2002) among 567 adolescents and their parents in Nigeria. The authors found that only 27% of the 10–19 year olds interviewed mentioned that they had

discussed sex with their parents, whilst among parents, 72% of the parents reported that they had discussed sexual and reproductive health with their children.

Fitzharris and Werner-Wilson (2004) argue that the differences in the reporting between parents and adolescents is largely due to the *Rashoman* effect, which they describe as a "social-psychological construct, which suggests that interpretation of events is an inherently subjective experience" (p.273). In their analysis of the *Rashoman* effect from focus group interviews conducted among 14 adolescents and their parents (n=23) from two communities from Southwest Michigan, the authors investigated if there was any convergence and divergence in the perceptions of parents and adolescents about sexuality communication. The authors concluded that there was a *Rashoman* effect, with adolescents reporting little information about sex and that communication was minimal. When communication did occur, this was perceived as a lecture. In this study the *Rashoman* effect cannot be tested but the analysis on congruence will provide better understanding of how much adolescents and parents' reports differ as this can also be a barrier to communication. As Fitzharris and Werner-Wilson (2004) point out "if mothers and fathers are under the impression that they have already discussed sex with their adolescent, they may feel that additional discussions are unnecessary. Therefore perception that discussions have already occurred may be a barrier to having future conversations about sexuality" (p.278).

4.3.4 Measures

4.3.4.1 Communication variables

Communication was divided into four categories: three communication scales and beliefs about open communication. The reason why the scales were divided into three different scenarios is because we wanted to establish whether general communication is more predictive than sexual-risk communication or whether it is a combination of both (global communication). This categorisation will add to the debate on what really needs to be taught. Parents and adolescents were asked to report retrospectively on how frequently they discussed 13 items. These were how regularly they talked about topics relating to teenagers' dreams and aspirations, teenagers' friends and the things they do together,

things going on in the teenagers' lives, alcohol and drugs, someone the adolescent was dating, HIV/AIDS, dealing with pressure to have sex, the risks of unprotected sex, deciding when to have sex, relationships between men and women, contraception and how to avoid getting pregnant, the risk of sexual assault, risk of sexual abuse. Response choices were on a 6-point Likert scale ranging from "often" (coded as 1) to "refused" (coded as 6). However, for this analysis only four options were included "often", "sometimes", "rarely" and "never". These responses were recoded to yes=1 if response was "often" or "sometimes" or no=0 if the response was "rarely" or "never". The higher the percentages, the higher the level of communication. This was done to reduce the skewness of each outcome variable. The Don't Know and Refused options were not included as part of the analysis. This is because if an individual did not know the number of times they spoke about a topic then the likelihood is that it could be many times or few times hence treated as missing. Similarly if a respondent refused to give a response, then again the responses were handled as missing because failing to give an answer could not be inferred to have spoken or not spoken about the topic. Further, for the parents the 'don't know' and refused categories were combined into not stated hence the teenagers responses were also treated as such.

The parent-child global scale was formed as a sum of all the 13 communication topics (teens' dreams and aspirations, someone teen is dating, teens' friends and the things they do together, things going on in the teens' lives, alcohol and drugs, relationships between men and women, deciding when ready to have sex, dealing with pressure to have sex, HIV/AIDS, contraception, the risks of unprotected sex, the risk of sexual assault, the risk of sexual abuse) and was created for both parents and the teenagers. The parent-child communication global scale ranged from scores of 0 to 13 topics. Higher scores meant higher levels of communication. A distribution of the responses is shown in Appendix D on page 320. The Cronbach's Alpha for the youth global communication variable was 0.82 and 0.87 for the parent global communication variable. Both suggest internal consistency reliability. The second scale- the parent-child sexual risk communication scale was created using the nine sexual risk topics (dating, relationships between men and women, deciding when ready to have sex, dealing with pressure to have sex, HIV/AIDS, contraception, the risks of unprotected sex, the risk of sexual assault,

the risk of sexual abuse). This resulted in a range of 0 to 9 topics. The teenager sexual risk scale had a Cronbach Alpha of 0.82 and the parent sexual risk communication scale had a reliability score of $\alpha = 0.85$, also depicting internal consistency reliability. Details on reliability checks are shown in Appendix D. The third scale was the general communication scale, which includes the four topics: teenagers' dreams and aspirations, teenagers' friends and the things they do together, things going on in the teenagers' lives and alcohol and drugs. Scores ranged from 0 to 4. There was no internal consistency in this scale. However, the scale was used in the analysis as it was considered important to understand the role played by these topics.

Respondents were also asked about their beliefs on open communication and sexuality and whether loveLife had given them an opportunity to talk to the parent or child about specific sexual and reproductive health issues. Six items were included in the questionnaire, which asked whether respondents thought open communication about sex and sexuality could: (i) reduce the risks of HIV/AIDS; (ii) reduce the risk of pregnancy; (iii) encourage adolescents to delay sex; (iv) encourage adolescents to initiate sex ; (v) encourage adolescents to be more responsible; and (vi) had no value. Responses were (1) "agree" and (2) "disagree".

4.4 Methods

4.4.1 Data: 2001 loveLife survey

Data for this chapter were obtained from a cross-sectional national survey of adolescents and their parents' commissioned by loveLife and implemented by the Africa Strategic Research Corporation and the Kaiser Family Foundation. Data were collected during October to November 2001.

The study design was a nationally representative probability sample. Indians were over-sampled to allow for basic cross-tabulations that use population group. In total, 2 360 households were targeted but 2 300 were successfully interviewed representing a response rate of 97%. The sample was drawn from a sampling frame provided by Statistics South Africa based on the 1996 census. The primary sampling units consisted of

the 650 census enumeration areas drawn from the 65 magisterial districts across all provinces (Kaiser Family Foundation, 2001).

In each household, one resident adolescent between the ages 12 and 17 years was randomly selected and interviewed. Their parent or caregiver was also interviewed. This resulted to 2 204 matched pairs. The analytical sample includes 1 425 parent-child dyads. These were selected based on the question whether they had ever heard of loveLife. This represents 65% of the sample interviewed. The reason for asking communication questions to those that had heard of loveLife is because the main interest of the primary data collectors was to evaluate the loveLife programme. The remaining 35% were not included in the analysis because they were not exposed to the loveLife programme. The limitations are discussed later in the chapter. It is important to note the characteristics of those that had never heard of loveLife and how they differ from those that had heard of loveLife. This will be discussed in a later section in this chapter.

Data collection teams administered household interviews in the language of the respondents' choice. The researcher was not involved in the data collection but received permission from the loveLife consortium to use it for secondary data analysis. The researcher was also seconded to the Reproductive Health and HIV Research Unit as a research fellow from 1 October 2003 to 31 January 2004. Two data files were provided to me: one containing data for the youth and another containing data from the parents. The two files were matched with identification numbers and then merged and cleaned for analysis.

During this period, I was allowed to visit the company that collected the data and had access to the questionnaires. This enabled me to check the questionnaires and to verify some of the information that was in the data. This task proved to be very useful and changes that could be made were implemented. Two days were spent at the Africa Strategic Research Corporation in 2003.

The aim of the survey was to understand the general lifestyle of young people. Questions asked included beliefs and practices related to HIV and AIDS, sexuality and sexual health, knowledge about loveLife and the impact it had on their lifestyle and sexual behaviour.

Additionally, communication on sexuality and related problems was obtained from both parent and guardians.

Data quality checks were undertaken on all the variables to be used in the analysis. The following inconsistencies were found: (i) Age at first sex was greater than the current age. For example, an adolescent aged 12 years should not have age at first sex of 13 and above. In total, there were 51 cases where the age at first sex was higher than the current age of the adolescents. The age at first sex was recoded to missing. (ii) Of the 634 youth who had ever had sex, 13% had missing data on the number of sexual partners they had ever had. Perhaps these adolescents did not remember the number of lifetime partners. Further analysis of current age, age at first sex and gender show that those with missing information on the number of sexual partners were not selected by age, gender and age at first sex.

4.4.2 Exposure to loveLife

In order to answer question 4 on whether exposure to loveLife increases the opportunity to talk about sex related issues the following questions were used: has loveLife provided you with the opportunity/reason to talk to your children or parents about sex, HIV/AIDS, relationships between men and women and difficult issues? This helps to determine whether exposure to loveLife is associated with communication.

4.4.3 Covariates

Several family and personal factors, which may influence parent-child communication in the household based on other studies (Miller, *et al.* 1998) were used. These included the following socio-demographic characteristics of youth and parents: age (coded in years); gender (male and female), place of residence (urban or rural), population group- Africans, Indian/Asian, white and coloured and level of school education (recoded to categories). Another measure pertaining to youth is school attendance (coded as in school or out of school). Parents' reports on socio-economic status include family socio-economic status, living arrangements, family income, wealth status, household size. Most of the variables were recoded to allow for small categories except for province and living arrangements.

4.5 Results

4.5.1 Demographics of parents and adolescents

Table 4.1a in Appendix E on page 323 shows the sample of the adolescents. The first panel shows the socio-demographic characteristics of the youth sample, while the second panel shows characteristics of the parent or guardian sample. All results were weighted. According to Table 4.1a, the mean age of the respondents was 15 years with a statistically significant difference between males and females ($p < 0.01$). The majority of adolescents were currently schooling (93.4%), were of African descent (76.7%) and had enough to live on or were wealthy (71.0%). Over half of the respondents were aged 15–17 years (59.0%). Provincial distributions show that less than a quarter (22.5%) of adolescents lived in KwaZulu-Natal, followed by Gauteng (18.9%).

Gender differentials show that there were statistically significant differences ($p < 0.01$) observed among age groups and family wealth status. There were more girls in the 12–14 years age group than boys in the same age group (44.7% versus 36.1%), and more than half of boys aged in the 15–17 year age group (63.9% and 55.3%, males and females respectively). With regards to family wealth, there were significantly more males who indicated that they were from very poor and poor families compared to females (33.1% and 25.8%, males and females respectively).

Table 4.1b in Appendix F on page 324 shows information about the parents. The largest category of parents or guardians were aged 40 years or above (64.1%). There were 64.9% of parents who reported that they were working and 54.8% had a monthly income above R 1 000. A majority of parents reported that they had more than enough to live on or were wealthy (71.0%). About 80% of the adult respondents were the parents of the young person. Sixty-one per cent of the parents reported having only one child who was aged 12–17 years and the rest had two or more children aged 12–17 years old. Few of the parents had completed schooling, with 54.9% with no schooling or primary education. Over half of the parents lived in big households with five or more people (58.9%). Marital status and place of residence showed that parents were equally distributed between currently married and not married parents and between rural-urban areas.

Gender differentials were more evident along age with more females reporting to be under age 40 (49.4%) compared to males (24.7%). Glaring gender differences were noted in work status, whereby twice as many males were in current employment compared to females (81.3% and 45.1%, males and females respectively, $p < 0.001$). In terms of education, 59.7% of males had no education or only primary education compared to 49.1% of females; this difference was statistically significant at $p < 0.001$. Although more females were educated, few were employed as illustrated above. Other significant differences between males and females were marital status, with more males currently married than females (61.0% compared to 36.2%, $p < 0.001$); more females (50.9%) reporting earning less than R 1 000 per month compared to males (40.4%). Despite the lower incomes, more females resided in urban areas than males (54.5% and 47.8%, females and males respectively). The higher unemployment and lower incomes yet residing in urban areas ($p < 0.001$) might be indicative of the work that is done by women such as casual jobs in domestic work. Provincial distributions show that there were more men residing in KwaZulu-Natal relative to females (27.2% versus 16.8%), whilst there were more females residing in Limpopo compared to males (14.0% versus 7.1%). Slightly more females (47.3%) lived in smaller households (1–4 people) compared to males (36.0%).

4.5.2 Extent of parent-adolescent communication

4.5.2.1 Overall extent of parent-child communication

The following analysis expands on a preliminary report which described parent-adolescent communication among parents and adolescents (loveLife, 2001a). The preliminary report showed the proportion of communication between parents and their children. In this chapter, further analysis is undertaken by exploring gender, age and ethnic differences.

Table 4.1 on page 102 shows the extent of parent-child communication as reported by teenagers and parents. The percentages were obtained using frequency distributions and ranged from 0 to 13. If no topic was discussed this was assigned a 0, 1 if only 1 topic was discussed, 2 if two to twelve topics were discussed and 3 if all 13 topics were discussed. There were more parents who reported never having discussed any of the topics with

(14.6% and 3.4%, respectively). The results also show that more parents reported at least having discussed one topic than adolescents (10.8% and 3.7%, parents and adolescents respectively). The majority of respondents had discussed two to twelve topics, with more adolescents reporting having discussed two to twelve topics in comparison to their parents (88.6% versus 71.6%). With regard to discussing all the 13 topics only 4.4% of adolescents reported discussing all 13 topics with their parents, whereas among parents, a mere 3.1% had a discussion on all topics.

The sexual topics ranged from 0 to 9, and no discussion = 0, discussed at least one topic = 1, 2-8 topics discussed were assigned code 2 and 3 if 9 topics were mentioned. At least 12% of the adolescent respondents had not had a discussion on any of the sexual topics, compared to 0.8% of parents. Unlike with all the topics, parents reported higher levels of discussing two to eight sexual topics compared to their children (87.3% and 72.4%, parents and adolescents respectively). It is interesting that parents had much higher levels of discussing two to eight topics on sexual communication as compared to two to twelve topics of the thirteen topics. This was the opposite for young people, showing that they discussed two to twelve topics from the 13 topics, more than two to eight topics of the nine topics on sexual communication.

The majority of respondents fell into the two to twelve category of the 13 topics or two to eight category. Thus, demonstrating high levels on most topics of communication among parents and young people, irrespective of whether the topics were on sexual and reproductive health or other topics. Statistically significant gender differences were only evident among youth on discussions about sexual topics, with females having higher percentages of communication than males, whilst, parents did not show any differences in the percentages for all the outcomes on measuring the extent of communication.

Table 4. 1: Proportion of topics discussed by youth and their parents

Topics	Youth			Parents		
	Male	Female	Total	Male	Female	Total
	(n=613)	(n=812)	(n=1 425)	(n=777)	(n=648)	(n=1 425)
Did not discuss any of the 13 topics ¹	3.7	3.1	3.4	14.1	15.2	14.6
Discussed just one of the 13 topics ¹	3.5	3.8	3.7	11.0	10.6	10.8
Discussed two to twelve of the topics ¹	90.2	87.4	88.6	72.8	70.1	71.6
Discussed all topics ¹	2.5	5.7	4.4	2.2	4.1	3.1
Did not discuss any of the 9 sexual topics ²	14.9	10.0	12.0	0.8	0.8	0.8
Discussed just one of sexual 9 topics ²	16.1	9.5	12.3	9.9	10.6	10.2
Discussed two to eight of the sexual topics ²	65.9	72.4	69.7	87.6	86.8	87.3
Discussed all sexual topics ²	3.1	8.1	6.0	1.6	1.7	1.7

Source: loveLife Survey, 2001

¹Teenagers' dreams and aspirations, someone teenager is dating, teenagers' friends and the things teenagers do together, things going on in the teenagers' lives, alcohol and drugs, relationships between men and women, deciding when ready to have sex, dealing with pressure to have sex, HIV/AIDS, contraception, the risks of unprotected sex, the risk of sexual assault, the risk of sexual abuse.

²Dating, relationships between men and women, deciding when ready to have sex, dealing with pressure to have sex, HIV/AIDS, contraception, the risks of unprotected sex, the risk of sexual assault, the risk of sexual abuse.

4.5.2.2 Extent of communication by topics discussed

To answer the question on what parents and their children talk about, communication on specific topics reported by the respondents were examined using cross-tabulations and chi-square statistics. To measure the extent of communication, respondents were provided with a list of topics that they communicated with each other and were then asked 'how regularly do you talk to (with your parent or adult guardian if teenager or teenage children if parent) about' (list each topic)? Proportions were based on those who reported discussing topics often and sometimes. Table 4.2 on page 106 presents the differences between topics discussed by parents and their children and by their gender. In general (see columns 3 and 7), parents reported higher levels of discussions than teenagers for all topics except talking about teenagers' friends and the things they do together, which were relatively similar. When considering the specific topics discussed, teenagers (column 3) reported discussing with their parents the following topics: teenagers' dreams and aspirations (79%), friends and what they do together (69%), HIV/AIDS (69%), things going on in their lives (67%), drugs and alcohol (58%), sexual abuse (56%), and sexual assault (55%). Among parents (column 7), 11 of the 13 topics had proportions above 50%. These were: teenagers' dreams and aspirations (86%), HIV/AIDS (80%), alcohol and drugs (75%), things going on in teenagers' lives (72%), teenagers' friends and the things they do together (70%), risks of sexual assault (66%), risks of sexual abuse (64%), risks of unprotected sex (63%), contraception (58%) and relationships between men and women (54%). Topics that were least discussed (less than 50%) were all sexual topics. Dealing with pressure to have sex was reported lowest by both teenagers and parents (31% and 43%, teenagers and parents respectively), followed by deciding when the adolescent is ready to have sex (34% among teenagers and 44% among parents).

4.5.2.3 Extent of parent-child communication by gender

Columns 2-3 and 5-6 show parent-child communication by gender. The inclusion of gender remains important in the analysis because of the differences identified in the literature on how gender may influence communication between parents and children. This will improve our understanding about which topics were most discussed and those

least discussed by a particular gender. Further, it will show whether females and males talk about the same things or not. Table 4.2 on page 106 shows that both sons and daughters reported high proportions of discussing teenagers' dreams and aspirations (78% versus 80%, male and females respectively). The second highest proportions (71%) of discussions that were reported by females were: talking about the teenagers' friends and the things they do together, HIV/AIDS, and things that are going on in the teenagers' lives. Daughters also reported sexual abuse and sexual assault, 61% and 59% respectively. Among sons, the second highest proportion of topics discussed was about their friends and the things they do together (68%), followed by HIV/AIDS (66%), things that are going on in the teenagers' lives (61%) and drugs and alcohol use (60%).

Eight topics were significantly different among youth. Daughters reported higher proportions on all eight topics. Things that are going on in the teenagers' life, contraception and pregnancy, risks of unprotected sex, sexual abuse and sexual assault were significant at $p < 0.001$. Deciding when ready to have sex and relationships between men and women were significant at $p < 0.05$ and dealing with pressure to have sex at $p < 0.01$.

Among parents, the first five topics were ranked the same for both mothers and fathers. These were teenagers' dreams and aspirations, HIV/AIDS, alcohol and drugs, things that are going on in teenagers' lives, and teenagers' friends and the things they do together. Mothers reported significantly higher levels of discussion on topics on risks of unprotected sex and contraception and avoiding pregnancy ($p < 0.05$) and fathers reported a significantly higher level of discussion on talking about the dreams and aspirations of their teenagers ($p < 0.05$).

4.5.2.4 Extent of parent-child communication by population group

South Africa has a very diverse population and thus is important to understand the role of population group with regards to parent-child communication. This would be reflective of the diverse socio-economic and cultural backgrounds. . Table 4.3 on page 107 shows the extent of communication controlling for ethnicity. Whites, coloureds and Indians were combined as non-Africans.

Non-African youth reported significantly higher proportions of having talked to their parents about dating, teenagers' friends and the things they do together, alcohol and drugs and relationships between men and women. African youth had a higher proportion on talking about contraception and avoiding pregnancy ($p < 0.05$). Among parents, non-Africans reported significantly more discussions than Africans on dating, teenagers' friends and the things they do together, alcohol and drugs, things that are going on in the teenagers' lives, dealing with pressure to have sex, deciding when ready to have sex and relationships between men and women.

Table 4 2: Percentage of parents and teenagers who reported often or sometimes discussed selected topics

Topic	Youth				Parents			
	n ¹	Sons	Daughters	Total	n ¹	Fathers	Mothers	Total
Teenagers' dreams and aspirations	928	78.4	79.9	79.2	1 155	87.9*	83.3*	85.7
Someone you are dating	438	37.5	38.0	37.8	660	48.4	51.5	49.8
Teenagers' friends and the things they do together	818	67.6	70.8	69.4	941	70.1	70.0	70.1
Alcohol and drugs	677	59.5	56.8	57.9	1 021	76.7	73.8	75.4
HIV/AIDS	810	66.0	71.1	68.9	1 072	79.2	80.2	79.6
Things that are going on in the teenagers' lives	778	60.6***	71.0***	66.6	954	71.2	72.2	71.7
Dealing with pressure to have sex	346	25.7**	34.5***	30.8	570	41.5	46.6	43.9
Risks of unprotected sex	536	41***	58***	47.0	830	59.7*	66.0*	62.6
Deciding when you're ready to have sex	379	29.4*	36.3*	33.5	556	41.6	43.4	42.5
Relationships between men and women	531	42.6*	49.1*	46.4	715	54.9	53.7	54.3
Contraception and avoiding pregnancy	569	43.0***	53.9***	49.4	763	55.4*	61.5*	58.2
Sexual assault	627	48.9**	58.7**	54.7	863	65.7	65.7	65.7
Sexual abuse	643	48.5***	61.3***	56.0	842	66.0	62.4	64.3

Source: LoveLife Survey 2001 *p<0.05, **p<0.01, ***p<0.001 for difference between gender ¹Sample sizes differ per topic and are based on those that reported sometimes or often talking about the topic

Table 4. 3: Percentages of parents and teenagers who reported often or sometimes discussed selected topics by population group

Topic	Youth			Parents		
	n ¹	African	Non-African	n ¹	African	Non-African
Teenagers dreams and aspirations	928	79.6	78.1	1 155	83.8 ***	92.0
Someone you are dating	439	32.6 ***	55.7***	661	45.7 ***	64.1***
Teenagers friends and the things they do together	817	66.7 ***	78.8***	942	65.1 ***	86.5***
Alcohol and drugs	677	55.7 ***	65.3***	1 020	72.3 ***	85.8***
HIV/AIDS	810	68.9	69.3	1 072	79.6	79.8
Things that are going on in the teenagers lives	778	65.7	69.5	953	69.3 ***	79.3***
Dealing with pressure to have sex	346	30.7	31.2	570	42.3***	49.5***
Risks of unprotected sex	537	48.2	44.0	829	63.1	60.6
Deciding when you're ready to have sex	379	33.4	33.5	556	40.8 ***	48.2***
Relationships between men and women	531	44.2 **	53.8**	716	50.6 ***	66.9***
Contraception and avoiding pregnancy	568	51.0 *	44.3*	763	58.8	56.5
Sexual assault	627	55.4	52.3	862	66.0	64.8
Sexual abuse	643	56.7	53.7	842	64.9	62.5

Source: loveLife Survey 2001 *p<0.05, **p<0.01,***p<0.001 for differences between African and non-Africans,

¹Samples sizes per topic and are based on those that reported sometimes or often talking about the topic

4.5.2.5 Extent of parent-child communication by age groups

Age differentials have been considered because the literature suggests that young people aged 12–14 years may have different experiences compared with adolescents aged 15–17 years. This is particularly true when considering differences in sex related topics as shown by Table 4.4 on page 109. Topics that were significantly different for adolescents by age were talking to parents about someone the adolescent is dating, alcohol and drugs, dealing with pressure to have sex, deciding when you're ready to have sex, relationships between men and women, sexual assault and contraception avoiding pregnancy. For the statistically significant topics, older adolescents (15–17 years) reported higher proportions on discussing with their parents. However, few of the topics that differed among adolescents by age were ranked over 60%. For example, only 54.7% of young adolescents reported discussing alcohol and drugs compared to 60.3% of 15–17 year olds.

Table 4.4 also shows differences between parents aged under 40 years and those aged 40 and above. The top five topics discussed frequently by parents were teenagers' dreams and aspirations, HIV/AIDS, alcohol and drugs, things that are going on in the teenagers' lives, and teenagers' friends and the things they do together. Statistical differences between parents by age showed that older parents (40 and above) discussed more often alcohol and drugs (77.8% compared to 71.1% of those aged under 40 respectively) and HIV/AIDS (81.0% for older parents and 77.0% for under 40). Younger parents (under 40) discussed more often risks of unprotected sex (66.3% versus 60.5% among older parents).

Table 4.4: Percentages of parents and teenagers who reported often or sometimes discussed selected topics by age group

Topic	Youth			Parents		
	n ¹	12–14	15–17	n ¹	Under 40	40 and above
Teenagers' dreams and aspirations	928	78.3	80.0	1 155	82.3	87.8
Someone you are dating	439	30.7***	43.0***	661	47.8	51.3
Teenagers' friends and the things they do together	817	70.5	68.7	942	67.6	71.5
Alcohol and drugs	677	54.7*	60.3*	1 020	71.1**	77.8**
HIV/AIDS	810	66.7	70.7	1 071	77.0*	81.0*
Things that are going on in the teenagers' lives	778	65.6	67.4	954	71.0	72.1
Dealing with pressure to have sex	346	25.3***	34.8***	570	43.7	44.0
Risks of unprotected sex	536	44.6	49.2	829	66.3*	60.5*
Deciding when you're ready to have sex	378	30.3*	35.7*	556	41.3	43.1
Relationships between men and women	531	40.5***	50.9***	715	52.3	55.5
Contraception and avoiding pregnancy	568	45.1**	52.6**	764	59.4	57.6
Sexual assault	628	50.4**	57.9**	863	65.1	66.1
Sexual abuse	643	55.3	56.5	842	62.6	65.3

Source: loveLife Survey 2001 p* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ for differences between age groups, ¹Sample sizes differ per topic and are based on those that reported sometimes or often talking about the topic

4.5.3 To whom do teenagers talk and about what?

In order to examine which parent teenagers talk to about specific topics and which teenager parents talk to, cross tabulations for each topic with the gender of the adolescent and gender of the parent were undertaken. The analysis is restricted to those adolescents who reported that the relationship to the adult respondent was their parent. That is, only biological parents ($n = 1\,234$) were included in the analysis (87% of the sample were biological parents). The reason for this is because a female caregiver can either be an aunt, sister, grandmother or other female relative or person residing with the adolescent, whereas for males it could be a brother, uncle, grandfather or other male relative or person residing with the adolescent. Although they might still play the role of a parent, not being able to distinguish between the caregivers would allow for speculation. Communication with the father was derived from selecting the male parent and then running a cross tabulation with the gender of adolescent and the topic. A similar process was followed for mothers with the selection of females.

Table 4.5 on pages 112 and 113 shows to whom teenagers talk by gender, race and age of the teenager. Columns 2–3 of Table 4.5 show that young people reported significantly higher levels of communication with their mothers than with their fathers on most topics. These were things that are going on in the teenagers' lives, 'teenagers' friends' and the things they do together', someone you are dating, HIV/AIDS, risks of unprotected sex, deciding when to have sex, relationships between women and men and contraception and avoiding pregnancy ($p < 0.05$).

When considering differences between boys and girls and the topics that were discussed with each parent, for most topics there was no statistically significant difference between adolescent girls and boys, particularly with the mother (see columns 4–7). However, differences were evident with the father. On the one hand, female adolescents reported having spoken to their father more about HIV/AIDS, risks of unprotected sex, contraception and avoiding pregnancy, sexual abuse and sexual assault. On the other hand, when talking to their mother, the only significant differences between teenagers were about things going on in the teenagers' lives and dealing with pressure to have sex, where more girls than boys reported having such discussions with their mother.

Columns 8–11 of Table 4.5 show differences between African and non-African teenagers and whom they spoke to about the 13 topics. Differences in communication were observed by racial group for teenagers that reported communication with father and mothers on five topics. Among those who reported communicating with the father, statistical differences were observed on someone the teenager is dating, the teenagers' friends and the things that they do together, risks of unprotected sex, contraception and avoiding pregnancy and sexual abuse. On two of the five topics non-Africans reported higher levels of communication than Africans on someone you are dating and the teenagers' friends and the things that they do together, whilst Africans had significantly higher levels of communication with the father on risks of unprotected sex, contraception and avoiding pregnancy and sexual abuse. Overall, differences between Africans and non-Africans were that African fathers talked more about risks and non-Africans fathers discussed more about relationships and life. Despite these differences, teenagers' friends and the things that they do together was the only topic with about two-thirds of the respondents reporting frequent discussions. The rest of the topics that were significantly different by race were border line or below 50%.

The results also show that there were certain topics that were discussed with the mother which differed significantly by race. These include someone you are dating, teenagers' friends and the things they do together, alcohol and drugs, dealing with pressure to have sex and relationships between men and women. In all five topics non-Africans reported statistically significant higher proportions compared to Africans ($p < 0.01$). The gaps between Africans and non-African included discussing dating, teenagers' friends and the things they do together and relationships between men and women. Huge margins were observed with 62% of non-Africans reporting talking to their mother about someone they were dating compared to only 33% of Africans. A similar gap was observed on teenagers' friends and the things they do together (87% versus 69%, non-Africans and Africans respectively).

Table 4.5: Teenagers' reports of communicating with parents sometimes or often by gender, race and age of youth

Topics	All			Gender					
	Communicated with			Communicated with Father			Communicated with Mother		
	n ¹	Father	Mother	n ¹	Male	Female	n ¹	Male	Female
(1)	(2)	(3)		(4)	(5)		(6)	(7)	
Teenagers' dreams and aspirations	767	81.7	78.4	451	81.8	81.6	316	74.5	80.5
Someone you are dating	361	35.8 [†]	42.0 [†]	195	37.5	34.2	166	35.7	45.3
Teenagers' friends and the things they do together	673	67.9 [†]	73.3 [†]	380	67.4	68.5	293	70.7	74.6
Alcohol and drugs	572	61.1	58.1	343	63.1	59.4	229	55.9	59.1
HIV/AIDS	683	68.8 [†]	74.3 [†]	383	64.1*	72.5*	300	76.1	73.3
Things that are going on in the teenagers' lives	641	61.5 ⁺⁺⁺	74.7 ⁺⁺⁺	342	56.1	66.2	298	67.4*	78.7*
Dealing with pressure to have sex	278	28.9	32.5	154	26.0	31.4	124	24.8*	36.8*
Risks of unprotected sex	448	44.5 ⁺⁺	54.2 ⁺⁺	240	39.1*	49.1*	208	52.6	55.0
Deciding when you're ready to have sex	310	31.0 [†]	37.2 [†]	167	27.9	33.3	142	36.0	37.9
Relationships between men and women	438	43.9 [†]	50.9 [†]	240	41.1	46.3	198	47.4	52.8
Contraception and avoiding pregnancy	471	47.3 [†]	53.8 [†]	259	39.4***	53.9***	212	52.2	54.7
Sexual assault	534	56.3	57.9	308	49.4**	62.1**	226	56.0	59.0
Sexual abuse	548	58.3	58.6	320	50.8*	64.6*	228	54.0	61.2

Source: loveLife Survey 2001 *p<0.05, **p<0.01, ***p<0.001 Significant gender differences (sons versus daughters), [†]p<0.05, ⁺⁺p<0.01, ⁺⁺⁺p<0.001

Table 4.5: Teenagers' reports of communicating with parents sometimes or often by gender, race and age of youth (cont.)

Topics	Race						Age					
	Communication with Father			Communication with Mother			Communication with Father			Communication with Mother		
	n ¹	African	Non African	n ¹	African	Non African	n ¹	12–14	15–17	n ¹	12–14	15–17
(1)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)				
Teenagers' dreams and aspirations	452	81.6	76.3	316	77.3	80.2	452	80.0	80.5	316	75.8	79.3
Someone you are dating	196	32.2 ^c	50.3 ^c	166	33.2 ^c	62.4 ^c	195	27.5***	42.7***	166	34.5 ^x	43.3 ^x
Teenagers' friends and the things they do together	380	64.6 ^a	72.2 ^a	293	68.9 ^c	86.9 ^c	379	67.2	65.9	292	74.7	71.9
Alcohol and drugs	342	56.7	64.1	229	54.6 ^a	66.9 ^a	343	52.8**	62.5**	229	57.1	57.7
HIV/AIDS	383	67.5	69.8	300	70.4	68.6	383	65.5	69.7	300	68.0	57.7
Things that are going on in the teenagers' lives	343	60.7	64.9	298	71.5	75.6	342	63.0	60.9	298	68.8	75.0
Dealing with pressure to have sex	154	31.5	24.3	125	29.5 ^a	40.4 ^a	154	22.0***	35.6***	124	29.3	33.7
Risks of unprotected sex	240	46.0 ^a	36.2 ^a	208	50.7	53.6	240	42.3	44.8	208	47.5	54.5
Deciding when you're ready to have sex	167	32.6	26.8	142	34.3	41.8	168	28.7	33.1	142	32.1	38.7
Relationships between men and women	241	44.2	46.2	198	44.4 ^c	62.6 ^c	240	37.3 ^z	50.1 ^z	198	44.1 ^x	51.7 ^x
Contraception and avoiding pregnancy	259	51.3**	37.2**	212	50.6	53.0	259	46.3	49.2	212	43.9 ^x	56.7 ^x
Sexual assault	308	55.9	50.3	226	54.6	54.7	308	49.0 ^x	58.7 ^x	226	51.6	56.9
Sexual abuse	320	59.1 ^a	49.0 ^a	228	53.8	59.6	320	53.6	58.7	228	56.9	53.8

Source: loveLife Survey 2001 ^ap<0.05, ^bp<0.01, ^cp<0.001 Significant for differences between Africans and non-Africans, ^yp<0.01, ^zp<0.001 Significant age differences between (12–14 year olds and 15–17 year olds), ¹Sample sizes differ per topic and are based on those that reported sometimes or often talking about the topic

In columns 12–15 of Table 4.5 the age of the youth is compared with communication with the father and communication with the mother. For this analysis 12–17 year olds were disaggregated into younger adolescents (12–14 years) and older adolescents (15–17 years). The importance of this disaggregation was to better understand if there were age differences in communication with parents by each sex of the parent. Discussions with fathers show that there were five topics where older adolescents reported significantly higher levels of communication as compared to younger adolescents. These were someone you are dating, alcohol and drugs, dealing with pressure to have sex, relationships between men and women and sexual assault. For all other topics age did not matter. The topics with the highest frequency of discussion with father was on teenagers' dreams and aspirations (80%) for both younger and older adolescents, whereas the least discussed topic with fathers was dealing with pressure to have sex among 12–14 year olds (22%) and deciding when you're ready to have sex (33%) among 15–17 year olds.

Columns 12–15 of Table 4.5 also show communication with the mother and as was observed with the father, talking about the teenagers' dreams and aspirations was the most discussed topic with the mother (76% for 12–14 year olds and 79% for 15–17 year olds). The least discussed topic with mothers was risks of unprotected sex (29%) for the 12–14 year olds and dealing with pressure to have sex (34%) for the 15–17 year olds. Significant differences by age for communication with the mother were observed on the following topics: someone you are dating, relationships between men and women, and contraception and avoiding pregnancy. In all three topics, older adolescents reported higher proportions of discussing the topic with the mother than younger adolescents.

Further analyses shows that only one topic was discussed more with fathers than mothers irrespective of age (teenagers' dreams and aspirations), showing that mothers were the main communicators with their children. In addition, fathers communicated more (46%) on contraception and avoiding pregnancy with 12–14 year olds compared to 44% of mothers, whilst among 15–17 year olds, fathers communicated more than mothers on alcohol and drugs (63% versus 58%, fathers and mothers respectively), HIV/AIDS, 70% and 58% (fathers and mothers respectively). These comparison were not tested for statistical

significance but are based on comparing the reports by age per parent i.e. teenagers reports of 12–14 years compared with the father and mother and teenagers reports among 15–17 years compared with the father and the mother.

Comparisons across the six groups of teenagers' shows that non-African teenagers communicated more with the mother on six topics: teenagers' friends and the things they do together, alcohol and drugs, someone you are dating, dealing with pressure to have sex, deciding when you're ready to have sex and relationships between men and women. This shows a combination of sexual and non-sexual topics and may be indicative of open communication with mother in all aspects. However, non-Africans also had the lowest proportions on communication with father on the following sex related topics: risks of unprotected sex, deciding when you're ready to have sex, contraception and avoiding pregnancy and sexual abuse. Younger adolescents also featured low in discussing sexual topics with the father on four topics: someone you are dating; dealing with pressure to have sex, relationships between men and women and sexual assault.

Teenagers' dreams and aspirations remained high for all groups under study, showing more than 70% for each of the categories by age, gender and race. Someone the teenager was dating showed huge discrepancies with non-Africans reporting the most discussions (64%) with the mother and 12–14 year olds reporting the lowest level of discussions with the father (28%). Similarly, non-Africans reported the highest communication with the mother on relationships between men and women, whilst 12–14 year olds reported the lowest proportions of 37% with the father. Among the non-sexual topics, teenagers' friends and the things they do together were also found to be highest among non-Africans discussing with the mother and lowest among Africans discussing with the father (87% versus 65%). Things going on in the teenagers' lives was highest for daughters who communicated their mothers and lowest among sons who communicated with their fathers, 79% and 56% respectively.

4.5.4 To whom do parents talk and about what?

In the previous section, an analysis of which parent teenagers talk to was presented. In this section, the focus is on the teenager in the study that the parent is likely to talk to frequently about certain topics and also to establish if there were significant differences between communication with daughters and sons as well as differences between mothers and fathers by gender of the child. The third and fourth columns of Table 4.6 on page 119, present how parents communicate with sons and daughters generally and by parents' gender. Overall, parents reported higher levels of communication with daughters than with sons on almost all the topics except alcohol and drugs, with slightly more parents having spoken to sons than daughters. Significant differences were on communication about HIV/AIDS, things that are going on in the teenagers' lives, dealing with pressure to have sex, risks of unprotected sex, deciding when you're ready to have sex and contraception and avoiding pregnancy. In all the significant topics, parents talked more frequently with daughters than sons. The gaps were widest among topics on risks of unprotected sex (67% for daughters and 56% for sons) and contraception and avoiding pregnancy (62% and 51%, daughters and sons respectively) $p < 0.01$. Further analysis of topics most commonly discussed by parents with their children show that parents discussed with sons about the teenagers' dreams and aspirations followed by HIV/AIDS, alcohol and drugs, things that are going on in the teenagers' lives and teenagers' friends and the things they do together. Topics least discussed with their children were readiness to have sex for both sons and daughters (36% versus 45%, sons and daughters respectively); dealing with pressure to have sex (39% for sons and 46% for daughters and dating (50%, both sons and daughters).

When looking at how each parent communicated with the children, fathers talked frequently with sons about the teenagers' dreams and aspirations followed by alcohol and drugs, HIV/AIDS, teenagers' friends and the things they do together and things that are going on in the teenagers' lives. Topics rated high with their daughters were about the teenagers' dreams and aspirations, HIV/AIDS, alcohol and drugs, things that are going on in the teenagers' lives, teenagers' friends and the things they do together, sexual abuse and sexual assault. Fathers spoke more frequently with their daughters on sex

related issues such as HIV/AIDS, risks of unprotected sex, deciding when ready to have sex, contraception and avoiding pregnancy, sexual assault and sexual abuse. These were all statistically significant ($p < 0.05$). Analysis of mother and child communication patterns shows that mothers talked to their sons on the teenagers' dreams and aspirations, HIV/AIDS, alcohol and drugs, teenagers' friends and the things they do together and things that are going on in the teenagers' lives. Whilst with daughters, mothers discussed frequently the teenagers' dreams and aspirations, HIV/AIDS, things that are going on in the teenagers' lives, alcohol and drugs and teenagers' friends the things they do together. Note worth mentioning is that father-daughter communication was more common than father-son communication. Further, only two topics were significantly different between mother-daughter and mother-son. These were things going on in the lives of the teenager and deciding when ready to have sex, where mother communicated with daughters more than with sons.

In Table 4.7 on page 120, parents' reports of communicating with their teenagers sometimes or often by population group and age group of parents are presented. Columns 2–5 show distribution by population groups. In general non-African parents had significantly higher proportions on discussing with sons and daughters on the following topics: someone you are dating, teenagers' friends and the things they do together, alcohol and drugs and relationships between men and women.

For sons, non-African parents had a higher proportion on dealing with pressure to have sex. Analysis on the age of parents (shown in Table 4.7 Columns 2–5, page 120) shows that there were no significant differences between parents aged under 40 and those aged 40 and above in terms of topics discussed with sons. However, for daughters, parents aged 40 and above were statistically more likely to have discussed with their teenager on teenagers' dreams and aspirations, alcohol and drugs, HIV/AIDS and relationship between men and women.

Taken together mothers had the highest communication with daughters about sexual assault and sexual abuse. Across gender, age and race, non-Africans had the highest levels on communication with daughter on the teenagers' dreams and aspirations, someone you are dating, teenagers' friends and the things they do together, things that are going on in the teenagers' lives, deciding when to have sex and relationships between men and women. Older parents also proved to be concerned about their daughters' sexual risk as

they had the highest levels of communication compared to all the other groups under study. They reported the highest levels of communication on HIV/AIDS, risks of unprotected sex and contraception and avoiding pregnancy. Communication with sons featured only in two topics as the highest level with non-African parents depicting the highest levels of communication with sons on alcohol and drugs and dealing with pressure to have sex.

The results also confirm that communication with sons was low across gender, race and age on most of the topics under discussion. Mothers had the lowest levels of communication with sons about HIV/AIDS and risks of unprotected sex, whilst fathers had the lowest levels of communication with sons on the things going on in the teenagers' lives'. Communication with sons was also low for Africans on things the teenagers' friends and the things they do together, dealing with pressure to have sex and relationships between men and women. Non-Africans had the lowest proportions on discussing contraception and avoiding pregnancy with their sons. Younger parents reported the lowest levels of communication with their son on deciding when to have sex, sexual assault and sexual abuse, whilst older parents were reluctant to discuss risks of unprotected sex with their sons as they reported the lowest levels on this topic. Although, overall the results confirm that communication with sons was low, younger parents reported the lowest levels of communication with daughters on the teenagers' dreams and aspirations and alcohol and drugs.

Table 4.6: Parents' reports of communicating with their teenagers sometimes or often by gender of youth and gender of parent

Topics	Communicated with			Father Communicated with			Mother Communicated with		
	n ¹	Son	Daughter	n ¹	Son	Daughter	n ¹	Son	Daughter
Teenagers' dreams and aspirations	966	87.2	88.6	567	89.4	90.3	399	84.1	86.6
Someone you are dating	538	49.9	49.7	299	48.3	47.6	238	52.3	51.9
Teenagers' friends and the things they do together	783	69.8	72.6	451	69.9	72.0	332	69.9	73.0
Alcohol and drugs	843	77.1	75.6	495	77.1	77.1	348	77.1	73.7
HIV/AIDS	893	78.3**	83.4**	511	75.4***	84.5***	382	81.9	82.0
Things that are going on in the teenagers' lives	785	68.0**	75.4**	451	69.7	73.9	333	65.1**	77.1**
Dealing with pressure to have sex	453	38.8*	45.6*	254	37.8	45.4	199	40.4	46.1
Risks of unprotected sex	670	55.9***	66.7***	370	52.7***	66.2***	299	61.1	67.1
Deciding when you're ready to have sex	434	35.8**	44.7**	245	36.1*	44.2*	189	35.1*	45.2*
Relationships between men and women	587	52.3	56.4	344	52.2	58.5	243	52.3	53.9
Contraception and avoiding pregnancy	619	51.2***	62.3***	341	47.5***	62.2***	278	57.2	62.4
Sexual assault	701	61.4	68.3	409	60.1**	71.6**	292	63.4	64.4
Sexual abuse	681	60.6	66.0	408	60.1**	71.9**	275	61.6	59.1

Source: loveLife Survey 2001, *Significant gender differences (sons vs. daughters) *p<0.05, **p<0.01, ***p<0.001, ¹Sample sizes differ per topic and are based on those that reported sometimes or often talking about the topic

Table 4. 7: Parents' reports of communicating with their teenagers sometimes or often by gender of youth and population group and age group of parents

Topics (1)	Communicated with Son			Communicated with Daughter			Communicated with Son			Communica	
	n ¹	African	Non-African	n ¹	African	Non-African	n ¹	Under 40	40 and above	n ¹	Ur
		(2)	(3)		(4)	(5)		(6)	(7)		
Teenagers dreams and aspirations	416	86.1	90.4	549	86.4*	95.3*	416	84.0	89.2	550	8
Someone you are dating	232	45.8*	61.3*	305	44.3*	66.4*	232	49.0	50.3	310	
Teenagers friends and the things they do together	330	64.5***	85.4***	453	67.5***	88.7***	329	66.3	71.5	453	
Alcohol and drugs	372	73.9***	85.7***	473	72.7**	85.1**	371	74.5	78.4	472	6
HIV/AIDS	372	78.7	76.0	521	83.2	83.9	372	77.8	78.1	520	7
Things that are going on in the teenagers lives	321	65.9	74.4	464	72.3*	85.3*	322	67.1	68.4	463	
Dealing with pressure to have sex	176	34.4***	51.8***	277	45.4	48.7	176	42.4	36.7	277	
Risks of unprotected sex	257	57.5	51.7	414	67.4	64.4	256	61.6	52.8	414	
Deciding when you're ready to have sex	161	35.0	38.1	274	42.5	51.7	162	34.4	36.8	274	
Relationships between men and women	244	49.1***	61.5***	343	51.7***	70.7***	243	52.5	52.1	344	
Contraception and avoiding pregnancy	235	52.9	47.0	385	62.3	62.2	235	55.3	49.2	385	
Sexual assault	281	61.2	61.7	420	69.3	65.1	281	59.2	62.5	420	
Sexual abuse	275	60.0	62.3	406	67.7	60.4	276	54.8	63.7	407	

Source: loveLife Survey 2001 *p<0.05, **p<0.01, ***p<0.001 Significant racial differences (Africans vs. Non Africans), ^ap<0.05, ^bp<0.01, ^cp<0.001 Significant age differences (Under 40s vs. 40 and above, ¹Sample sizes differ per topic and are based on those that reported sometimes or often talking about the topic

4.5.5 Congruence between parents and teenagers' reports

Congruence measures the level of agreement and disagreement between parents' reports and teenagers' reports on communication. Agreement suggests that both parents and teenagers agree that the topic was discussed or that both disagree that a topic was discussed. Figure 4.1 on page 123 shows whether there was a consensus between the parents' reports and teenagers' reports with regard to topics discussed. Each of the 13 topics by parents was cross-tabulated with the reports of the 13 topics among adolescents. For example, teenagers' dreams and aspirations from the parents was cross-tabulated with teenagers' dreams and aspirations from the teenagers' report. Three measures of agreement were used. The first measurement was the percentage of pairs in agreement. This included reports of both the parent and adolescent with respect to having discussed the specified topic (sometimes or often) or not (never or rarely). The second measurement is the proportion of parents and adolescents in disagreement shown in Table 4.2a in Appendix G on page 325 where parents reported that they never or rarely discussed the topic, whilst the adolescents report that they discussed the topic or vice versa i.e. parents reporting to discuss the topic sometimes or often and the adolescent reporting never or rarely. Lastly, the third measurement uses Cohen's kappa (κ) (Cohen, 1960), which is a statistic that adjusts for agreement by chance. It is described by the following formula:

$$\text{Kappa } (\kappa) = \frac{\text{proportion of observed agreement} - \text{proportion of chance agreement}}{1 - \text{proportion of chance agreement}}$$

Kappa scores range from 0 to 1 and larger scores indicate better reliability. Scores greater than 0.70 are considered to be satisfactory.

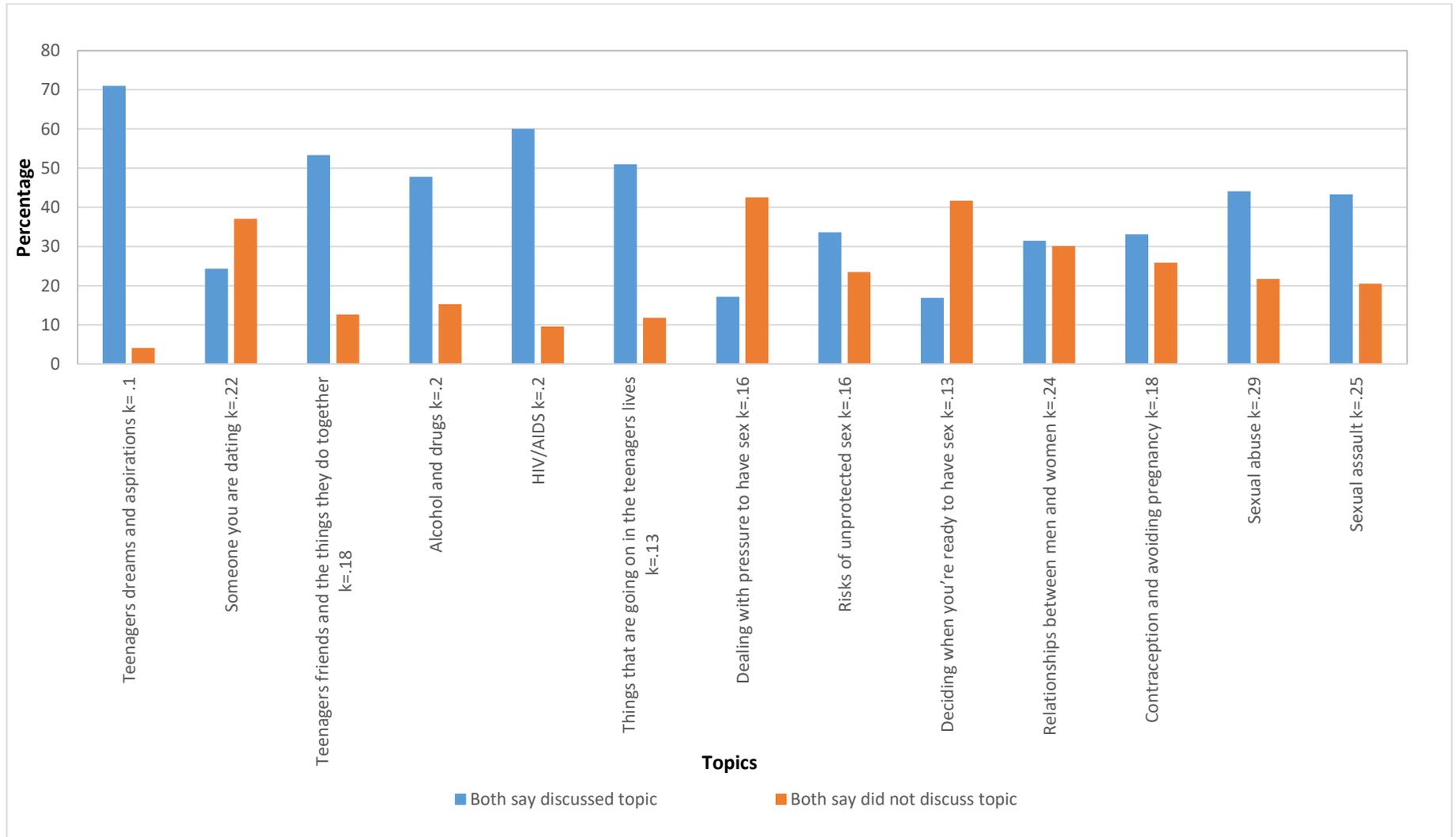
Figure 4.1 shows that there was a lot of consensus between the parents and teenagers' reports on the topics discussed. In the same way, there was also agreement on topics that they did not discuss. The responses suggesting a high level of congruence include topics discussed- teenagers' dreams and aspirations (71%), HIV/AIDS (60%), talked about the teenagers' friends (53%) and what was going on in the teenagers' lives (51%). Apart from HIV/AIDS, agreement on discussions on sexual topics was relatively low. Although there were also agreements on topics not discussed these were low, ranging from 4.1% (teenagers' dreams and aspirations) to 43% dealing with pressure to have sex. When

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considering levels of disagreement a lot of variation was observed between teenagers and parents (see Table 4.2a on Appendix G). Disagreements were largely reflective of parents reporting higher levels of discussion than the teenagers. This also confirms the findings in Table 4.2. Only one topic did not show large discrepancies, that is the topic on teenagers' friends and the things they do together (16% reported by teenagers but parents saying they did not discuss and 18% reported by parents but teenagers say they did not discuss).

The results from the kappa statistics show very little (poor) agreement in the parents and teenagers' reports ranging from 0.10 to 0.29. This suggests poor levels of agreement. This is based on the guidelines from Altman (1999), and adapted from Landis and Koch (1977). All kappa scores were significant at $p < 0.05$. Yet when considering the level of agreements based on the cross-tabulation, certain variables had high levels of agreement such as discussing topics on teenagers' dreams and aspirations, teenagers' friends and the things they do together, HIV/AIDS, and things that are going on in the teenagers' lives. These low levels of agreement may also be indicative of the Rashoman effect which in its definition points to the fact that different individuals involved in an event may contradict each other in interpretation of the event.

Figure 4.1: Consensus between parents' reports and teenagers' reports: percentage distribution of parent-child pairs, by agreement



4.5.6 Exposure to loveLife

Another objective of the chapter was to examine whether loveLife increased the opportunity to talk to parents and teenagers about selected issues. I expected that exposure to loveLife would improve communication between parents and their children. However, among young people loveLife did not provide an opportunity for the teenagers to discuss on the selected topics for boys and girls as less than half of them reported improved discussion on any of the topics except HIV/AIDS (see Table 4.8 column 2-3). There were however statistically significant differences between boys and girls, suggesting that loveLife provided more opportunity to discuss the selected topics with parents with girls as compared to boys. Among parents, exposure to loveLife increased the opportunity to discuss all topics except discussing about difficult issues, which was very low at 17% for both mothers and fathers. There was no statistical difference by gender for the parents (items 4-5). The majority of parents reported that exposure to loveLife provided them with an opportunity to talk about HIV/AIDS (above 80%) and sex (above 70%). In items 6-9, exposure to loveLife and opportunity to talk was compared with the population group of the participants. As was observed with gender, adolescents only reported high levels of communication about HIV/AIDS (65% African and 61% non-Africans).

There were no racial differences among youth. Among parents only discussions of other difficult issues were different by race with more Africans (21%) reporting that loveLife enabled them to talk about other difficult issues compared to 7% of non-Africans. LoveLife created a platform for parents to talk mainly about HIV/AIDS (83% versus 81%, Africans and non-Africans respectively), followed by sex (73% Africans and 72% for non-Africans) and then relationships with men and women (64% for Africans compared to 69% for non-Africans). Differentials by age group are shown in items 10-13. Among youth only differences in discussing relationships between men and women were observed with older adolescents reporting significantly higher proportions compared to the young adolescents. With parents statistical differences were observed on discussing other difficult issues with older parents showing higher proportions of communication (19.1%) compared to young parents (13.7%) but the proportions were very low.

Table 4.8: Does exposure to loveLife improve communication by gender, population group and age?

Has loveLife provided an opportunity to talk about	Gender			Population Group			Age		
	n ¹	Male	Female	n ¹	African	Non African	n ¹	12-14	15-17
Youth		(2)	(3)		(6)	(7)		(10)	(11)
Sex	628	40.3***	49.6***	627	46.0	44.6	627	44.8	46.2
HIV/AIDS	872	59.7**	66.2**	872	64.6	60.9	872	64.9	62.5
Relationships between men and women	663	44.8*	50.7*	662	48.7	46.3	662	44.3**	50.9**
Other difficult issues	663	45.3*	50.3*	663	48.4	47.4	663	46.2	49.6
Parents		(4)	(5)		(8)	(9)		(12)	(13)
Sex	540	71.7	73.7	540	73.0	71.7	541	74.1	71.7
HIV/AIDS	615	83.2	82.0	615	83.4	80.6	615	83.5	82.2
Relationships between men and women	488	66.9	63.8	487	64.3	68.8	487	62.9	67.0
Other difficult issues	127	16.8	17.4	128	20.8***	6.8***	127	13.7*	19.1*

Source: loveLife Survey 2001 *p<0.05, **p<0.01, ***p<0.001

4.5.7 Factors associated with parent-child communication

4.5.7.1 The Model

Previous research has shown that many factors might influence communication and this may include both individual and familial factors. In the previous section population group, gender and age were controlled for. This analysis includes the three variables and other socio-demographic characteristics. First, the relationship between reported communication and the background characteristics of the young people and their parents was assessed. Correlations between topics and demographic characteristics were used to establish relationships between dependent and explanatory variables. Due to the depth of the analysis only results from the multivariate analysis are reported. Multiple Linear regression was used to examine which of the socio-demographic variables were associated with the parent-child communication scale scores consisting of all 13 topics. In this instance, the dependent variable was parent-child communication and the explanatory variables were the socio-demographic variables and exposure to loveLife variables.

$$\text{Regression Formula: } Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \epsilon$$

Where Y is the dependent variable, β_0 is the intercept point of the regression line, β_1 is the slope parameter for X_1 and ϵ represents the errors.

Prior to conducting the multiple linear regression analyses an assessment of multicollinearity among the independent variables was undertaken. Of the 155 correlations about 40 ranged from $r = 0.3$ to 0.5 . Only sexual assault and sexual abuse were highly correlated ($r = 0.8$, $p < 0.01$). Only one of these variables was used in the regression. Additional examination of assumptions on outliers, normality, linearity, independence residuals homoscedasticity found a few outliers but did not require that these needed to be removed from the model as reflected by Cook's distance (see Appendix H on page 326). All variables were approximately normally distributed except parent report of sexual communication.

The results for the multiple linear regressions are shown in Tables 4.9–4.12. The Enter method was used to predict communication for both parents and adolescents. The variables were entered in three blocks (respondents' demographics, beliefs towards communication and whether exposure to loveLife had increased communication on selected topics). In the first model, the demographic characteristics of the parent (work household size, income, age group, residence, wealth status, education, children and relationship) or teenager's characteristics (work, residence, education, age group, race group, province, wealth status and living arrangements) were entered as control variables and parent-child communication was the dependent variable and was based on whether the focus was on parent-child communication reported by parents or parent-child communication reports for the adolescents. The dependent variable used was the sum of the 13 topics.

In the second model, variables were on beliefs towards open communication (Help reduce the risk of HIV/AIDS, Help reduce the risk of teen pregnancy, Encourage adolescents to delay sex, Encourage adolescents to initiate sex, Encourage adolescents to be responsible and Has no real value) and in the third model variables on whether exposure to loveLife had provided an opportunity for parents and teenagers to talk about specific issues (sex, relationships between men and women, HIV/AIDS and other difficult issues) were added to the model. Only significant variables are shown.

4.5.7.2 Factors associated with parent-child communication among teenagers

Tables 4.9 on page 129 presents the regression models for sons and daughters. The table shows that parent-child communication was significant in all the three models. Parent-child global communication for boys was five times more likely with only the teenagers' characteristics. For girls communication was six times more likely. Once beliefs towards communication were included into the model this increased to eight times likely for both sons and daughters and addition of exposure to loveLife communication increased communication 13 times for boys and 11 times for girls. This shows that overall, having communication among sons was heavily dependent on the three models. Among males, the variance was only 2% in the first model, increased to 5% in the second model when beliefs towards communication were added and then to 27% once exposure to loveLife was added. For females, the variance in the models was explained by less than one per

cent of the teenagers' demographic characteristics and increased slightly to 2% when beliefs on communication were added. In the final model, the variance was explained by 10% of the independent variables.

The variables that made a contribution to the first model in predicting parent-child global communication for sons were whether the son was in school or not and whether the son resided in an urban area or not. Attending school had a higher beta value (2.4, $p < 0.05$) than place of residence (0.63, $p < 0.05$). The positive association between parent-child global communication continued to exist even once beliefs were included but school status lost its predictive powers when exposure to loveLife was added to the third model. For place of residence contributing to parent-child communication ceased after attitudes towards communication but became statistically significant when exposure to loveLife was added in the models. Suggesting that where you live has an impact on parent-child communication. Further details are shown in Appendix I on page 332.

Several communication variables were predictive for parent-adolescent global communication among girls. Among these were open communication encourages adolescents to initiate sex, open communication encourages adolescent to become more responsible, loveLife gave female opportunity to talk to parents about HIV/AIDS and relationships between men and women. Lastly, factors associated with parent-adolescent communication among youth controlling for ethnicity were explored (see Table 4.10 on page 130). Again residence showed some predictive power, being in school and that loveLife gave the opportunity to talk about sex, HIV/AIDS and relationships between men and women for both non-Africans and Africans.

Table 4.9: Multiple linear regression for factors associated with parent-child global communication among sons and daughters

Variables	Model 1		Model 2		Model 3	
	Males	Females	Males	Females	Males	Females
	(n=431)	(n=638)	(n=431)	(n=638)	(n=431)	(n=638)
R ²	0.03	0.02	0.07	0.03	0.30	0.12
Adjusted R ²	0.02	0.01	0.05	0.02	0.27	0.10
Parent-child communication (95% C.I)	5.18*** (3.57,6.80)	5.73*** (4.21,7.24)	7.98*** (5.35,10.61)	7.76*** (5.21,10.31)	12.69*** (10.21,15.17)	10.98*** (8.40,13.55)
School (Ref not attending) Attending (95% C.I)	2.42* (0.21,4.63)		2.23* (0.05,4.41)		-	
Current grade (Ref Senior secondary) Primary/Junior Sec (95% C.I)		0.50* (0.06,0.95)				
Residence (Ref Urban) Rural (95% C.I)	0.63* (0.03,1.23)		0.68 (0.08,1.27)		0.71** (0.19,1.24)	
Open communication encourages adolescent to initiate sex(Ref disagree) Agree (95% C.I)				-0.62* (-1.19,-0.05)		
Open communication encourages adolescent to become more responsible(Ref disagree) Agree (95% C.I)				-0.84* (-1.69,0.01)		
Open communication helps reduce risk of HIV/AIDS(Ref disagree) Agree (95% C.I)			-1.44* (-2.77,-0.11)		-	
loveLife provides opportunity to talk to parents about HIV/AIDS(Ref disagree)Agree (95% C.I)					-2.33*** (-3.04,-1.63)	-1.09** (-1.84,-0.34)
loveLife provides opportunity to talk about relationships with men and women(Ref disagree)Agree (95% C.I)					-1.16*** (-1.83,-0.50)	-1.05** (-1.72,-0.37)

Source: loveLife Survey 2001 *p<0.05 **p<0.01 *** p<0.001 - Not significant, 95% Confidence Intervals (95% C.I)

Table 4.10: Multiple linear regression for factors associated with parent-child global communication among non-African and African teenagers'

Variables	Model 1		Model 2		Model 3	
	Non-African	Africans	Non-African	Africans	Non-African	Africans
	(n=242)	(n=857)	(n=242)	(n=857)	(n=242)	(n=857)
R²	0.02	0.03	0.04	0.05	0.22	0.18
Adjusted R²	-0.01	0.02	-0.01	0.04	0.17	0.17
Parent-child communication (95% C.I)	6.56*** (3.20,9.93)	5.54*** (4.34,6.73)	7.88** (2.15,1.36)	7.91*** (5.98,9.84)	12.57*** (7.17,17.96)	11.67*** (9.74,13.59)
Current grade (Ref Senior secondary) Primary/Junior Sec (95% C.I)		0.578*** (0.23,0.92)		0.57** (0.22,0.92)		-
Residence (Ref Urban) Rural (95% C.I)		0.77*** (0.31,1.24)		0.730** (0.27,1.19)		0.601** (0.17,1.04)
Open communication encourages adolescents to initiate sex (Ref disagree) Agree (95% C.I)				-0.528* (-1.01,-0.05)		
loveLife provides opportunity to talk to parents about sex(Ref disagree) Agree (95% C.I)					-0.538* (-1.01,-0.05)	
loveLife provides opportunity to talk to parents about HIV/AIDS(Ref disagree) Agree (95% C.I)					-1.25* -2.46,-0.04)	-1.73*** (-2.31,-1.14)
loveLife provides opportunity to talk about relationships between men and women (Ref disagree) Agree (95% C.I)						-1.14*** (-1.66,-0.62)

Source: loveLife Survey 2001

* p<0.05 **p<0.01 *** p<0.001 - Not significant, 95% Confidence Intervals (95% C.I)

4.5.7.3 Factors associated with parent-child communication among parents

Table 4.11 on page 133 shows multiple linear regression results for factors associated with parent-child communication among fathers and mothers. For fathers, the overall model R^2 was 0.09 for model 1, 0.11 for model 2 and 0.24 for model 2. In essence, adding the extra variables increased the variation explained in the model. Overall the multiple regression model significantly predicted communication among males $F(19, 330) = 5.47$, $p < 0.05$, adj, $R^2 = 0.24$. Few of the fathers' demographic characteristics predicted communication. Work status was significant only when it was just the father's demographic characteristics and became insignificant once the attitudinal and exposure to loveLife variables were added into the models. In the first model the father's work status showed that a father that was not working was 1.21 times more likely to have had a discussion with the child compared to working fathers. Education was significant in the first two models, showing that fathers with none/primary education reduced the odds of talking to their children compared to fathers with matriculation or above. The only demographic variable that remained in the final model was wealth status, where poor fathers were significantly less likely to have discussions with their children compared to fathers with more than enough. None of the attitudinal variables were significant for fathers. However, exposure to loveLife shows that opportunity to talk about sex with children was predictive of parent-child communication, indicating that fathers that agreed with the statement that loveLife gave them an opportunity to talk about relationships between men and women with their children were twice as likely to have communicated with their teenagers than fathers who didn't agree with the statement.

For mother/female caregivers, R^2 was 0.07 in the first model, 0.13 in the second model and 0.30 in the third model. The final model shows that communication was predicted significantly by the explanatory variables where $F(19, 265) = 6.02$, $p < 0.05$, adj, $R^2 = 0.25$. Residence and wealth emerged as significant predictors of parent-child communication but became insignificant once exposure to loveLife was introduced into the model. In the final model, mothers perceived that communication was encouraging adolescents' to delay sex and having an opportunity to talk about sex with their children and opportunity to talk about relationships between men and women had a positive impact on communication.

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Table 4.12 on page 134 shows the predictors for parent-adolescent communication controlling for the population group. Education and wealth were predictive of communication among non-Africans, while education was predictive of communication among Africans. Attitudes towards communication that were found to be predictive of parent-adolescent communication were that open communication encourages adolescents to be responsible, help reduce teenage pregnancy and that loveLife gave parents an opportunity to talk about sex and relationships between men and women.

Table 4.11: Multiple linear regression for factors associated with parent-child global communication among fathers and mothers

Variables	Model 1		Model 2		Model 3	
	Males	Females	Males	Females	Males	Females
	(n=350)	(n=285)	(n=350)	(n=285)	(n=350)	(n=285)
R²	0.09	0.07	0.11	0.14	0.24	0.30
Adjusted R²	0.06	0.04	0.07	0.09	0.20	0.25
Parent-child communication (95% C.I)	2.52 (-1.13,6.16)	5.15** (1.26,9.04)	0.22 (-4.28,4.72)	3.81 (-1.04,8.67)	-1.83 (-6.41,2.76)	-4.28 (-9.58,1.01)
Wealth (Ref more than enough) Poor/Enough (95% C.I)	1.21* (0.12, 2.29)	-0.83* (-1.59,-0.61)	-	-0.83*(-1.59,- 0.61)	-	
Work (Ref not working) Working (95% C.I)	-0.88** (-1.45, -0.31)		-0.89** (-1.46,-0.32)		-0.82** (-1.35, -0.28)	
Education (Ref Post Matric) None/Secondary/Matric (95% C.I)	0.62* (0.13, 1.12)		0.62* (0.12, 1.12)		-	
Residence (Ref Rural) Urban (95% C.I)		1.13* (0.19, 2.086)		0.97* (0.21,1.92)		
Open communication encourages adolescents to delay sex (Ref disagree) Agree (95% C.I)				2.48*** (0.96,4.00)		1.49* (0.09,2.89)
loveLife provides opportunity to talk about sex (Ref disagree)Agree (95% C.I)					2.45*** (1.42, 3.48)	2.23*** (0.96,3.49)
loveLife provides opportunity to talk about relationships between men and women(Ref disagree) Agree (95% C.I)						2.13*** (1.12,3.15)

Source: loveLife Survey 2001* p<0.05 **p<0.01 *** p<0.001 - Not significant, 95% Confidence Intervals (95% C.I)

Table 4.12: Multiple linear regression for factors associated with parent-child global communication among non-African and African parents

Variables	Model 1		Model 2		Model 3	
	Non-African	Africans	Non-African	Africans	Non-African	Africans
	(n=152)	(n=483)	(n=152)	(n=483)	(n=152)	(n=483)
R²	0.09	0.04	0.17	0.11	0.30	0.27
Adjusted R²	0.04	0.03	0.07	0.08	0.193	0.24
Parent-child communication (95% C.I)	1.982 (-2.45,6.40)	4.79** (1.59,8.00)	0.155 (-5.96,6.27)	2.28 (-1.54,6.09)	-7.56* (15.25,0.124)	-2.28 (-6.16,1.59)
Education (Ref Post Matric) None/Secondary/Matric (95% C.I)	0.86** (0.24,1.48)		0.64* (0.001,1.27)		0.62* (0.01,1.24)	
Wealth (Ref more than enough) Poor/Enough (95% C.I)		-1.09*** (-1.68,-0.50)		-1.08*** (-1.65,-0.50)		-0.6* (-1.23,-167)
Open communication encourages adolescents to be responsible (Ref disagree) Agree (95% C.I)			1.86*** (0.83,2.89)	-1.74* (-3.35,-0.11)	1.39** (0.41,2.36)	-1.96* (-3.50,0.41)
Open communication encourages adolescents to delay sex (Ref disagree) Agree (95% C.I)				1.30* (0.30,2.29)	1.401* (-0.02,2.84)	
Open communication helps reduce teenage pregnancy (Ref disagree) Agree (95% C.I)				-1.91* (-3.529,-0.29)		
loveLife provides opportunity to talk to parents about sex (Ref disagree) Agree (95% C.I)					2.37** (0.86,3.88)	2.47*** (1.58,3.36)
loveLife provides opportunity to talk about relationships between men and women (Ref disagree) Agree						1.41*** (0.62,2.218)

Source: loveLife Survey 2001 * p<0.05 **p<0.01 *** p<0.001 - Not significant, 95% Confidence Intervals (95% C.I)

4.6 Discussion and conclusion

4.6.1 Patterns of communication

This chapter looked at parent-adolescent communication among 1 425 adolescents and their parents/guardians in South Africa. The results from this analysis should be interpreted with caution as the sample is selective of only those adolescents who had heard of loveLife and their parents or guardians. This is because the initial research was to evaluate the loveLife programme and thus not designed for the interest of the secondary research undertaken for this study. Nevertheless, this study is one of the most comprehensive studies undertaken in South Africa to provide information on communication between parents and adolescents.

One of the objectives of the study was to establish the extent of communication between parents and their children, the findings demonstrate that the majority of parents and adolescents fell into the category of two-twelve topics for the 13 topics discussed and two-eight topics on the sexual topics, depicting high levels of parent-child communication. On the one hand, these findings suggest that parents reported on discussing more on sexual risk taking topics and less on global (combination of sexual and general) topics. On the other hand, adolescents reported having had more discussions on global topics and far less on sexual risk taking topics. The themes highlighted some years ago from this study continue to be relevant in more recent papers such as with findings from Jama-Shai and Mdanda (2016) who reported that parent-child communication was common. The findings however contradict previous findings by Coetzee *et al.* (2014) who observed lower rates of parent-child communication about in South African. The unique contribution of this analysis is that unlike in previous studies undertaken in South Africa, a comparison could be made for both parents and their adolescents. Thus highlighting the differences in how parents and their children perceive communication.

Further analysis undertaken in the study was to compare the content discussed by parents and their teenagers. The findings show that parents reported higher levels of discussions than teenagers for all topics listed except talking about teenagers' friends and the things they do together, which were relatively similar for both parents and teenagers. In this study, three topics were most talked about, with 75% or more parents reporting

discussions 'sometimes' or 'often'. These were teenagers' dreams and aspirations, HIV/AIDS and alcohol and drugs. The study also found that conversations about sexual matters were least discussed ranging from 30.8%-56.0% among youth and from 42.5% to 65.7% among parents. Among youth, six topics had less than 50%, whilst among parents only three topics had less than 50%. Incidentally, the bottom three topics discussed were similar for both youth and parents but were rated differently and were reported much lower among youth. These were: someone you are dating, dealing with pressure to have sex and deciding when you're ready to have sex. This supports the above findings on youth reporting less discussions on sexual matters, whilst parents reported having had more discussions on these topics. This finding would suggest that parents have no reservations about discussing sexual and reproductive health issues with their teenagers. Having said that however, one has to be careful about interpreting these results because the nature in which these discussions took place cannot be established nor is there certainty about the context in which they were discussed.

What is clear from the results is that topics related to general communication were discussed more than those related to sexual and reproductive health as depicted by the higher proportions. This is consistent with the study by Rafaelli and Green (2003) among Latinos in the United States, whose findings show that overall, relationships and values were more frequently discussed than protection and sexual facts. Similarly, the study by Sneed (2008) among adolescents in South Carolina in the United States, found that more adolescents reported discussing topics that were not directly related to intercourse compared to topics that were directly related to intercourse. For example, the author found that 32% of the respondents had discussed waiting to have sex until marriage compared to 81% who reported having discussed dating and/or relationships and 72% receiving warnings about sexually transmitted diseases.

The findings provide a very clear lesson that for parent-child sexual risk communication to take place, there's need to start with general topics. Knowing one's teenager and what happens in their everyday life is important and a good starting point is to develop a culture of communication with one's child. This also takes away the awkwardness of discussing sexual and reproductive health topics. Notwithstanding, the findings tend to

contradict with other studies in relation to parent-child sexual risk communication. Research from other countries has shown that parents may be reluctant to talk about specific sexual topics because they might embarrass the adolescents, or may lack knowledge on sexual risk topics. In many African societies, discussing sexual matters is very challenging and sometimes considered taboo (Mturi, 2003). Hence, it is not always addressed directly. Instead, parents may beat about the bush or use parables such as “don’t befriend boys because you will fall pregnant” (Ngobese and Dlamini, 2002, np). Sometimes they may say “do not go with boys”, which may simply mean, do not spend too much time with boys because you might be exposed to sex. If such communication is used, then there may be some inconsistency in the reporting. This observation can be supported by findings from the congruence reports where the kappa scores suggest low levels of agreement between parent and youth reports. For instance, the lowest agreements on topics discussed were about dealing with pressure to have sex and deciding when to have sex. Again, parents reported higher levels of discussion than adolescents and therefore one would need to explore further the context in which discussions are held in a qualitative study.

A further objective of the study was to assess the extent of communication by gender, age and ethnicity. This study confirms that parent-child communication is higher among females for both adolescents and parents as observed by Coetzee *et al.* (2014) Gender differences also show that female adolescents had more discussion on all sexual topics as compared to males. Daughters reported higher levels for nine of the thirteen topics, of which eight of these were significantly different ($p < 0.05$). Differences among parents varied with fathers having significantly higher proportions discussing teenagers’ dreams and aspirations, whilst mothers had significantly higher proportions than fathers for risks of unprotected sex and contraception and pregnancy. This largely implies that fathers discussed general topics, whilst mothers discussed risk-related sexual topics.

Contrary to the findings by Coetzee *et al* (2014) where the authors observed higher levels of parent-child communication among Black Africans compared to Whites and Indians, this study found that non-African parents and teenagers were more likely to report having had discussions on most of the 13 topics. This finding is expected because generally communication among Africans is not encouraged and sexual talk is perceived as taboo (Mturi, 2003). It is interesting that we found that contraception and avoiding

pregnancy was the only significant topic where African youth reported higher proportions of discussions compared to non-Africans. However, there were no population group differences in discussions pertaining to the eight topics: teenagers' dreams and aspirations, HIV/AIDS, things that are going on in the teenagers' lives, dealing with pressure to have sex, risks of unprotected sex, deciding when ready to have sex, sexual assault and sexual abuse. This finding shows that Africans especially discussed 'risky' topics and suggests that they are discussing sex-related topics reluctantly and only when it feels necessary to avoid risk or disease or life chances being diminished. A similar trend on HIV/AIDS, risks of unprotected sex, contraception and avoiding pregnancy, sexual assault and sexual abuse was observed among parents.

These findings have demonstrated that parents worry about their children's sexual health and are therefore preoccupied with more risk related issues irrespective of the race to which they belong. Accordingly, meeting the needs of young people in South Africa can be channelled through issues that are a common problem to all races. This finding is supported by the variables that predicted parent-teen communication, which showed that parents who believe that open communication encourages young people to be responsible, to delay sex and that exposure to loveLife has provided them with an opportunity to talk about sex and relationships between young men and women. These findings cannot be compared to Coetzee *et al.* (2014) as the authors considered inter-racial differences rather than intra-racial comparisons. However, from their study HIV/AIDS and pregnancy were most talked about by the four populations groups thus confirming that concerns for HIV/AIDS and avoiding pregnancy remain paramount. Indeed, dual protection by using condoms remains one of the most accessible prevention methods to young people. Although, condom use in South Africa has declined over time, it has been more effective in the Abstinence, Be faithful and Condomise (ABC) approach.

The analyses on age differentials showed that older teenagers reported having more discussions with parents compared to younger teenagers, especially on sexual risk topics and one general topic on alcohol and drugs. The findings concur with those from Coetzee *et al.* (2014), where adolescents aged 17 were less likely to have had communication with parents compared to 18 year olds. Among parents significant differences were observed on three topics: alcohol and drugs, HIV/AIDS and risks of unprotected sex. The latter was

higher among younger parents. Parent-child communication in itself is challenging and discussing with younger adolescents also presents bigger challenges. This is mainly because parents tend to fear that having such discussions with children might lead to initiating sexual intercourse. However, it is important to initiate discussions at a much earlier age to prepare young people for later in their teens.

4.6.2 Who talks to whom?

A second question addressed by the study was to establish who talks to whom and about what. The aim was to identify who teenagers talk to about certain topics and who parents talk to about specific topics. The results show that teenagers were more likely to talk to their mothers irrespective of the gender of the teenager. The findings show that adolescents reported significantly higher levels of communication with their mothers than with their fathers on eight topics except talking about their dreams and aspirations, alcohol and drugs, dealing with pressure to have sex, sexual assault and sexual abuse, where proportions were relatively similar among mothers and fathers. Again it is no surprise as gender differentials have been observed in other settings. For example, Coetzee *et al.* (2014) also found higher parent-child communication among females. Similarly, in Nigeria, Musa *et al.* (2008) found that communication on HIV/AIDS was higher among mothers than fathers. In the United States both young women and men reported higher levels of discussions with mothers than fathers (Rafaelli and Green, 2003). Similar findings were observed by (McNeely *et al.* 2002) where mothers talked with daughters about sex and birth control more often than they did with sons.

The results also show that certain topics were reserved for certain genders with more topics related to sexual risks reserved for daughters than for sons. However, this finding is not consistent with Rafaelli and Green (2003) where mothers discussed relationships, facts, and values with young women more often than with young men, whilst fathers discussed protection more often with sons than with young women. In the same vein, findings by Allen (2012) among South-western adolescents in the United States upheld significant gender differences with mothers communicating more with daughters on menstruation, how babies are made, her own sexual experiences, how the mother expected her daughter to behave, postponing or abstinence, how to deal with peer pressure from dating partners and resisting sexual pressure from peers and fathers

communicated more with sons on human sexuality, how babies are made, father's own sexual experience, how his son should behave sexually, contraception, HIV/AIDS, STDs, ways to protect from acquiring STDs and condoms. These findings point to more mother-daughter discussions and more father-son discussions.

The above findings are also inconsistent with the thesis findings as father-daughter talk was more significant than either mother-daughter or father-son communication. Further, most of the significant topics discussed by fathers with their daughters were on sexual issues, which suggests that fathers were concerned about their daughters. This study seems to yield a new finding in the parent-adolescent communication literature. Mothers have been found to be communicators for both sons and daughters. However, it is interesting that in this case it's not the father to son talk that is more pronounced but father-daughter talk, whilst previous studies have found the contrary. For example in Malaysia, females conversed more with their mother than males and males had more conversations with their fathers than females (Hassan *et al.* 2015).

The findings also point to the type of issues that parents focus on, in that the emphasis is more on HIV/AIDS, risk of unprotected sex, contraception and avoiding pregnancy, sexual abuse and sexual assault. It is worth noting that when comparisons were undertaken for fathers and mothers, fathers reported higher discussions on two of the general topics and mothers reported higher levels of discussion on four sexual topics. However, once these were disaggregated by gender of the adolescent, emphasis was on discussing sexual topics for father-daughter communication.

The results further show that non-African mothers discussed more topics with their teenagers compared to African mothers. Five topics were significantly different. Fathers had three topics that were significantly higher among non-Africans and two among Africans. According to the findings more non-African mothers were talking to their teenagers, whilst among fathers these were mainly driven by the topic at hand. When considering age the results confirm earlier findings that older teenagers reported higher levels of communication with parents. Differences were observed for both fathers and mothers. Both mothers and fathers focused on the sexual topics. Hence, confirming that

as age increases parents tend to worry about their children's behaviour and are therefore more likely to have discussions with them.

4.6.3 Congruence

Additional analysis on whether there was any consensus in the topics teenagers and parents reported on was undertaken. Consensus could either be that the discussion happened or did not take place. Whilst disagreement was based on parents reporting that the discussion happened but teenager says it did not happen or vice versa. In terms of agreement, the findings show that both parents and adolescents reported having discussions on teenagers' dreams and aspirations, talking about friends, HIV/AIDS and what was going on in the teenagers' lives. Three of these topics fall within the general communication domain and HIV/AIDS on sexual and health related topics. The study further identified that parents tended to over report on discussions they had with their teenagers. This was true for all topics except for teenagers' friends and the things they do together, where differences were minimal. These contradictory findings may be indicative of the presence of the Rashoman effect and are consistent with Manu *et al.* (2015), where results showed that parents tend to report having more discussions with teenagers as compared to the teenagers' reports. The kappa scores in the study ranged from 0.10–0.29 suggesting low levels of agreement. These low levels confirm earlier findings that showed that teenagers reported lower frequencies on communication compared to parents. The reasons parents report high levels of communication as compared to their teenagers may be attributed to the communication style. For example, parents may believe that if they have mentioned a topic (even in passing) then a discussion has taken place. This brings in the question of how communication is perceived by the receiver and the communicator. Thus making it difficult to measure communication in a quantitative setting as one cannot always probe on how the message was communicated. Despite the high levels of disagreement in the study, the levels of agreement show that when discussions are general then there's more agreement, thus pointing to the need to have more open discussions in the family, which in turn can lead to better communication between the parent and the child.

4.6.4 Exposure to loveLife

In this study exposure to whether loveLife increased communication was also assessed. For teenagers, exposure to loveLife was reported much less as compared to parents. However, among the teenagers, gender was significant as females reported that exposure to loveLife increased opportunities to talk about sexual matters. Since females already had higher levels of communication, as noted in this study and other findings, it would be useful for interventions to also target boys so that they discuss more openly about sexual and reproductive health issues.

4.6.5 Factors associated with parent-child communication

Lastly, this study found that few demographic variables of the parents and adolescents were predictive of parent-adolescent communication irrespective of whether gender or ethnicity was controlled for. However, it is important to note that education, wealth and residence were significant predictors in all models. This finding may be indicative of the visibility of loveLife programmes in the urban areas and schools. Wealth also may suggest that poorer families are less likely to communicate with their children, which is an expected finding because their main concern would be to provide food for their families and thus unable to spend time developing communication skills. The results are consistent with Namisi *et al.* (2009) who found a positive association between socio-economic status and levels of frequent communication with parents in two South African sites- Cape Town and Mankweng. The finding is not surprising in the South Africa context given that poverty or families of lower socio-economic status are faced with the burden of material wealth and as such cannot be able to take on a further responsibility for their children. It would also imply that interventions need to be developed in recognition of the socio-economic context of South Africa. Also evident in the regression models is that the exposure to loveLife does promote parent-child communication particularly on talking about sex, HIV/AIDS and relationships between men and women. For parents, this finding suggests that parents and adolescents who have been exposed to loveLife have found it much easier to communicate on sexuality topics. The visibility of loveLife and campaigns of promoting open communication are a force to reckon with.

4.6.6 Policy implications

As was the case with the introduction of Life skills education in schools, parents need to be empowered to be able to talk to their children about sexuality education. For instance, Life skills education in South Africa is offered from grades five to nine (typically among 11–15 year olds). One of the challenges has been that implementation has not always been possible, due to “inadequate training and lack of resources, educators often lack the competence to communicate sexual health education in a successful manner” (Thaver, 2012, np). This would be more evident in farm and resource poor schools. Further, some former Model C schools and Christian schools have often found it not necessary to carry out the programme. This is typical of other adolescent friendly policies such as the Contraception Bill. In light of these barriers strengthening parent-adolescent communication is necessary to complement sex education in schools and community based interventions.

Although not all children will grow up with their biological parents, there are still adult caregivers that should take the responsibility to educate young people. A study by the Human Science Research Council (HSRC) shows that about 83.6% of the adolescents aged 10–14 years still had both parents alive, whereas among 15–18 years, 76% still had both parents. Accordingly, the role of the parent/caregiver in sexual socialization of their children can still be addressed. Further, even though the data allow one to look at the interrelations between the parents’ and teenagers’ reports about communication on sexual and reproductive issues as well as their beliefs about open communication, one cannot determine the nature and process in which these discussions took place; that is whether parents talked to adolescents in a youth friendly manner, in a moralistic tone, etc. as such the context in which the communication took place is not understood. For instance, an evaluation of the Young’s Men’s Christian Association Adolescent Reproductive Health (YMCA ARH) programme found that the parent-child relationship was not enabling open discussions within the reproductive health space for youth (Allen, Bossio and Gilbert, 2001). According to most participants, parental communication is usually reactive, such as admonishing and warning about the dangers of unsafe sexual behaviour. Parents considered parent-adolescent communication to be a new phenomenon and required help from the YMCA programme (Allen, Bossio and Gilbert, 2001). In KwaZulu-Natal alone, there were three programmes empowering parents to talk

to children about sexuality issues, these were offered by the Planned Parenthood Association South Africa (PPASA), YMCA in Amazimtoti and Collaborative HIV Adolescent Mental Health Program (CHAMP) in Valley Trust in KwaZulu-Natal under the auspices of the HSRC. The loveLife programme also has a telephone line to assist parents with questions on how to talk to their children about sexuality issues. The CHAMP programme will soon be scaled-up nationally. The objectives of these programmes will be addressed in a separate paper.

4.6.7 Limitations of this study

One of the shortcomings of this study is that it measures communication on a frequency scale. This however does not tell us the context in which communication took place nor when the communication took place prior to the survey that is whether it occurred 12 months before the survey or much earlier. In addition, communication is a long term process and thus the cross-sectional design of the study misses the robustness of the communication process and how this develops during the child's development. This point is better illustrated in Jaccard *et al.* (2000) where the authors point out that barriers to communication change with the age of the adolescent and the gender of the adolescent, thus this needs to be taken into account when developing programmes. Understanding what age the communication was initiated will also bring to the realisation that different age groups require different information. Thus sexuality in the home can be targeted for different groups.

Further, the study only focuses on communication. This limitation may suggest that communication alone maybe insufficient to encourage risk-reducing behaviour. Thus, there is a need to consider what other authors refer to as components of parent-child connectedness. These include among others, attachment/bonding, warmth/caring, cohesion, communication, support, involvement, monitoring, autonomy granting and maternal and paternal characteristics (Lezin *et al.* 2004). Another limitation of the study is that it does not capture religion. Religion has been found to have an influence in the attitudes towards sex and communication and therefore might be a useful control in determining parent-adolescent communication as well as behaviour.

This study also introduces bias given that the child reports on communication only include adolescents that had ever heard of loveLife hence only 65% of the total sample was included in the analysis. Further, this selectivity may suggest that those exposed to loveLife were better informed than the remaining 35%. It is important to note that loveLife was introduced in 1999 as such having two-thirds of youth who recognised the brand within two years was rather high for an intervention in its infancy. A comparison of youth among males, 50% of younger adolescents had not heard about loveLife compared to 36% that had heard about it in the same group. Only whites were significantly different in the male category. More males residing in the rural areas had never heard of loveLife. Eastern Cape and Limpopo had more males that had not heard of loveLife as was the case with males that were in primary school. Among females, differences between those that had not heard of loveLife and those that had heard it were evident among the younger age group, with more 12–14 years haven't heard of loveLife. Fewer Whites had heard of loveLife, more females from Eastern Cape and Limpopo had never heard of loveLife. More females in primary school had also not heard of loveLife.

4.6.8 Suggested future research

The results of this study indicate that further research is required to explore the specific topics on sexual communication. In this study parent-child communication was analysed as a single variable. However, there is scope for further analysis and understanding in more detail the content of discussions. This would also enable the identification of topics which need to be focused on and which should not. One of the reasons communication was addressed as both general and sexual reproductive health communication topics is because there were few discussions related to sexual topics. Further it is also important to recognise that introducing such topics in the home may not be easy. A better understanding of the predictors of communication will enable the development of innovative programmes that may assist parents in introducing the topic in the homes. It is also recommended that future research should explore mechanisms of how more open communication may help teenagers negotiate more effectively in other social and sexual relationships as a way of giving them agency.

Chapter 5: The role of parent-adolescent communication on the sexual behaviour of young people in South Africa

5.1 Introduction

5.1.1 Background

The majority of young people in South Africa begin sexual activity in their mid-teens (Beksinska, Pillay and Smit, 2014; Bana *et al.* 2010; Berry and Hall, 2009; Boafo, Dagbanu and Asante, 2014; Bryan, Kagee and Broaddus, 2006; Lam, Marteleto and Ranchhod, 2009; Richter *et al.* 2015; Kaiser Family Foundation [KFF], 2007; Setswe and Zuma, 2009; Johnson *et al.* 2013; Pettifor *et al.* 2004; Shisana *et al.* 2002; loveLife, 2001a, Rutenberg *et al.* 2001). An extensive review of behaviours among young people that lead to HIV was discussed in Chapter two. These include condom use, sexual debut and number of sexual partners. In this chapter more focus will be on teenage pregnancy and child bearing, sexual coercion, sexually transmitted infections (STIs) other than HIV and contraception.

The 2012 South African National HIV, Behaviour and Health Survey defined early sexual debut as engaging in sexual activities before the age of 15 years (Shisana *et al.* 2014). The survey reported that approximately a tenth of the respondents aged 15–24 years had sex before the age of 15 years, with males having a threefold likelihood of early sexual debut than females. Adolescents who begin sexual intercourse at an early age are less likely to use contraception (Bana *et al.* 2010; Boafo, Dagbanu and Asante, 2014; South African National Aids Council [SANAC], 2014; Zuma, Mzolo and Makonko, 2011; Mfono, 1998; Makiwane, 1998) and these experiences are often coercive or unplanned. Consequently, exposing the adolescent to pregnancy and STIs (Beksinska, Pillay and Smit, 2014; De Vries *et al.* 2014; Manzini, 2001; Moore and Chase-Lansdale, 2001). The study conducted by Bana *et al.* (2010) among 15–24 year old students from three rural schools in Eastern Cape found that, while 75% of the students reported having had sexual intercourse; only 54% of those who were sexually active reported using condoms. Of those who reported using condoms, only 62% used condoms consistently. This shows that there was a 21 percentage point difference between those that had ever had sex and those that used

protection.

Table 5.1 on page 152 shows trends in selected sexual behaviours among learners in South Africa. Details of the sample age structure have been discussed in Chapter two on page 31. Data were collected in schools in all South African provinces at three time points: (i) In 2002, 1st South African National Youth Risk Behaviour Survey (YRBS) (ii) 2008, 2nd South African National Youth Risk Behaviour Survey and the (iii) 2011 3rd South African National Youth Risk Behaviour Survey. The data was weighted by school and learner as there was over-sampling of Indians in KwaZulu-Natal and Gauteng. The authors note that “the results from the 2011 findings allow for determining the magnitude of the change in behaviour as well as the direction of the change in the three surveys (2002, 2008 and 2011). Accordingly, are timely in assessing the trends, if any, and will inform the recommendations made for future research efforts as well as the development of specific policies and interventions pertaining to the specific behaviours” (p.67).

According to the three surveys, a positive significant change at the 95% confidence level was observed between 2002 and 2008 for learners who had one or more sexual partners in the past 3 months with a decline from 70.2 % to 52.3%. However, between 2008 and 2011, there was a reversal and learners reported an increase in one or more sexual partners in the past 3 months from 52.3% in 2008 to 58.0% in 2011. Similar patterns were observed among those who had STIs. Overall, statistically significant decreases in ever experiencing a STI were observed from 7% in 2002 to 4% in 2008 but no significant change was observed in 2011 (5%). It is important to note that having had an STI is not the same as being at high risk of contracting an STI. These figures should be interpreted with caution as the YRBS only consists of a population of young people attending school and thus not generalizable to all young people as it excludes out of school youth and those below the grades not covered by the survey. For example, the 2012 National Antenatal Sentinel (NAS) HIV and Herpes Simplex Type-2 Prevalence Survey illustrated that nearly a third (28,4%) and about half (48.8%) of pregnant women aged 15–19 years and 20–24 years, respectively, were infected with the herpes simplex type-2 STI, which is one of the drivers of HIV infection in South Africa (Department of Health, 2013).

Amid scarcity of information on the toll of STIs in South Africa, HIV incidence rates and prevalence among young women in South Africa are still relatively high. Data from the

2012 NAS survey reports that in 2011, HIV prevalence among pregnant young women aged between 15 and 24 years old was 20.1%, down from 21.8% in 2010 (Department of Health, 2013). This can be attributed to the circumstances in which sexual debut takes place. For example, the Joint United Nations Programme on HIV/AIDS, [UNAIDS] (2007) (cited in Boafo, Dagbanu and Asante, 2014), reported that a study in KwaZulu-Natal found that the first sexual experience of over a third of adolescent girls between ages 15 and 19 was through coercion (UNAIDS cited in Boafo). The study by Boafo, Dagbanu and Asante (2014) used data on 3 655 school going learners from Cape Town to examine dating violence among adolescents. The study found that 14% of males and 5% of females reported experiencing forced sexual intercourse. The proportions by Boafo, Dagbanu and Asante (2014) seem to be low, but are confirmed in Table 5.1 on page 152, where in 2011 only 9% of learners reported having experienced coerced sex. Though this figure might be low, forced sex among young people remains a grave concern.

Table 5.1 also shows that teenage pregnancy among learners has somewhat declined over time. However the same cannot be said about adolescent pregnancy nationally, where increases have been observed in recent years. In 1993, teenage childbearing was reported at 22%; five years later, teenage childbearing was reported at 35% (South Africa Labour and Development Research Unit (SALDRU), 1994; Department of Health, 1998). The loveLife 2003 survey shows that 34% of all young women in South Africa have ever been pregnant (Pettifor, *et al.* 2004). Branson, Ardington and Leibbrandt (2013) also underscore high teenage childbearing with their estimates indicating that in 2008, 25% of young women aged 20 years gave birth during their teens and about 35% of children under-20 years were born to teen mothers. Despite the high prevalence of teenage pregnancies, in South Africa access to sexual and reproductive health services is not restricted. However the estimates on contraceptive use paint a different picture as shown in Table 5.2 on 153, with comparisons made for 1998 and 2005 and another comparison of trends for 2002 to 2011.

Between 1998 and 2005, contraceptive use among females aged 15–24 year olds declined substantially in 2005 (34%) compared to 67% in 1998. Whilst the information is from non-comparable data sets, it gives an indication of contraceptive use in this age group. The

only increase observed between the two data sets was in condom use, though it was still negligible given that only 11% were currently using condoms as a contraceptive method. The trends among the learners also shown in Table 5.2 confirm that condom use has increased as a contraceptive method but other methods have not followed similar patterns. This is of great concern given that apart from the fact that condoms provide dual protection, young people still rely on the injection, which can only protect against pregnancy and not sexually transmitted infections including HIV. By contrast, male condoms are easily accessible and are free from public health facilities. In addition, emergency contraception, which can be used as a back-up method for condom failure is available for free at public health facilities and is readily available over the counter in pharmacies.

The decrease in the use of the injection among females aged 15–24 years as noted in Table 5.2, which has been the widely used method of contraception, particularly among Africans could be explained by four major developments in South Africa initiated during 1996–2007. These include the policy on abortion, emergency contraception, child support grant and policy to keep pregnancy teenagers in school and allow them to return to school. The first two developments were introduced to reduce overall teenage pregnancy, while the third was introduced to alleviate the financial burden of parenthood and the last to ensure that pregnant girls are given an opportunity to continue with their education. In the first development, reference is made to the legalisation on abortion in 1996, when the Choice on Termination of Pregnancy Act was promulgated. This meant that young people were able to have access to free abortion in public health facilities within 20 weeks. The second development was the increase in access to Emergency contraception (EC). In November 2000, EC became readily available over the counter in pharmacies. Notably, these two developments increased access to contraceptive options for young people and as a result may be used to substitute long-term contraception given the sporadic nature of adolescent sexual behaviour. Studies that have explored EC utilization among young people suggest that EC is under-utilized (Maharaj and Rogan; 2007; Mqhayi *et al.* 2004; Steyn, Britz and Foster, 2004). However, a 2005 study on the profile of EC clients shows that the majority of EC clients were young people under age 25 years and the main reason for seeking EC was because they had not used any contraceptive method (Manzini, Smit and Beksinska, 2006). Further, the awareness of EC

has increased dramatically since the two studies were conducted. By 2003, KwaZulu-Natal and Western Cape had EC hotlines, where people could call to find out where the nearest EC outlet is located.

The third reason that could be put forward to explain the decline in the injectable is the Child support grant (CSG). The CSG was introduced in 1997. In its introduction, it targeted parents/caregivers of children aged 0 to 7 who were unable to provide financially for their children. Currently, the grant covers children up to age 18 years old. Though the amount is insignificant R350 (\$20 per month) (Richter *et al.* 2015); anecdotal evidence suggests that young people are falling pregnant because of this grant. However empirical evidence has refuted these claims. For instance, in 2003 the Planned Parenthood Association of South Africa (PPASA) conducted a baseline survey among teenage parents. When respondents were asked about the circumstances under which they fell pregnant, only 12% reported that they became pregnant in order to access the CSG (PPASA, 2003). According to a recent report by Department of Social Development, South African Social Security Agency and United Nations Children's Fund [DSD, SASSA and UNICEF] (2012), the South African CSG, which was implemented in 1998 has progressed over the years to be one of the most protective social security systems in the country. The report suggests that this positive impact is not only due to its role in poverty alleviation but also increases in eligibility of children from age limit of seven to 18 years and adjustments in the grant based on variations in inflation rates.

It is further highlighted that the CSG has been instrumental in the reduction of adolescents' risky behaviours and negative outcomes such as early sexual debut, pregnancy, alcohol consumption and drug use especially amongst adolescents who received CSG during early childhood. In contrast, in a study conducted in a municipality in Limpopo among adolescent mothers aged 10–19 years, Lambani (2015) evokes that poverty plays a role in teenage pregnancy as 80% of the study participants reported that they fell pregnant so as to be recipients of the CSG. They reported peer pressure from friends who were already recipients of the CSG and were lured by the prospects of being economically independent. Branson, Ardington and Leibbrandt (2013) points out that while the media has suggested that there have been increases in teenagers getting pregnant to gain access to the CSG, there has been limited empirical evidence to support

this assertion. It is against this background that due to fragmented information on CSG, the decline in injection and overall contraceptive use can be best explained by the policy environment and increase in contraceptive options, which are more suitable for young people.

The fourth development that could explain why teenage pregnancy remains high and increased is because in 2007, the Department of Basic Education (DBE) introduced measures for the prevention and management of learner pregnancy (Department of Basic Education [DBE], 2007). This allows pregnant learners to stay at school during their pregnancy and then also return to school after giving birth to their child. As such, the expulsion of girls from school is no longer allowed. The reason for this policy was to reduce the number of drop outs due to pregnancy but it can also be contributing to increased pregnancies among learners as the consequences of falling pregnancy are no longer as dire, although being in school is protective against pregnancy and early sexual debut.

Fuelling the apprehensiveness about sexual activity among young people is the gap between the onset of intercourse and the timing of marriage, which has considerably widened as young people are initiating sex at younger ages and yet marrying later than in previous generations. Although marriage in South Africa is not universal, this has serious implications on non-marital fertility and the length of exposure to serial monogamy or multiple partnerships and hence may exacerbate the spread of HIV. Further, several studies have shown that adolescents isolate their fertility intentions from the possibility of acquiring HIV/AIDS (Rutenberg *et al.* 2003, Preston-Whyte, 1999). For instance, among females aged 15–24 years who were sexually active 12 months preceding the 2005 HSRC survey, 29% were HIV positive and had used the injection, whereas 23% were HIV positive and had used the condom in conjunction with either the pill or injection (Shisana *et al.* 2005). Consequently, suggesting that youth are more concerned with preventing a pregnancy than protecting themselves against HIV acquisition.

Table 5.1: Sexual Behaviour among learners in South Africa*

Sexual behaviour	2002		2008		2011	
	%	95% C.I	%	95% C.I	%	95% C.I
Ever had sex	41.1	[38.6 - 43.7]	37.5	[35.0 - 40.1]	36.3	[33.9 -38.7]
Always used condom	28.8	[26.0 - 31.5]	30.7	[28.0 - 33.6]	32.9	[30.1 - 35.8]
Had one or more sexual partners in past 3 months	70.2	[67.7 - 72.8]	52.3	[49.7 - 54.9]	58.0	[55.3 - 60.6]
Ever pregnant/impregnated someone	16.4	[13.9-18.8]	19.0	[16.9-21.3]	18.0	[16.5-19.7]
Ever had sexually transmitted infections	7.4	[6.0-8.7]	4.4	[3.6-5.2]	5.0	[4.1-6.1]
Ever had coerced sex	9.8	[8.1-11.3]	10.0	[9.0-11.1]	8.8	[7.9-9.7]

Sources: Youth Risk Behaviour Survey, 2002. Youth Risk Behaviour Survey, 2008, Youth Risk Behaviour Survey, 2011 *Weighted data

Table 5.2: Contraceptive use among females aged 15-24 and trends in current use of contraception among female learners 2002-2011

Method	Females aged 15-24		Learners					
	1998 ¹	2005 ²	2002		2008		2011	
			%	95% C.I	%	95% C.I	%	95% C.I
Condom	4	11	44.8	[41.5-48.2]	45.1	[41.9-48.4]	46.8	[43.8-49.8]
Pill	13	6	7.3	[6.8-8.6]	4.7	[3.8-5.7]	5.8	[4.3-7.8]
Injection	50	17	10.6	[7.8-13.3]	7.0	[5.4-8.9]	7.4	[6.0-9.2]
Not using	33	65*	28.1	[25.1-31.2]	17.9	[16.4-19.4]	17.5	[15.5-19.6]
Withdrawal	-	-	4.8	[3.7-6.0]	3.3	[2.5-4.3]	5.2	[4.3-6.3]
Emergency contraception pill	-	-	1.4	[0.9-1.9]	1.4	[0.9-2.0]	1.3	[0.8-2.0]
Other method	-	-	2.9	[2.2-3.6]	2.6	[1.9-3.4]	3.1	[2.4-4.0]

Sources: National Department of Health 1998, Shisana O, *et al* 2005; Youth Risk Behaviour Survey, 2002. Youth Risk Behaviour Survey, 2008, Youth Risk Behaviour Survey, 2011

¹National Department of Health 1998, ² Shisana O, *et al* 2005; *Includes those not currently using any method and never used contraception

5.1.2 Contextualisation of sexual behaviour among South African Youth

In order to understand the sexual behaviour of young people in South Africa, one needs to understand the socio-cultural context of sexual behaviour. This is particularly important because it may lead to significant behaviour change. The socio-political history of South Africa was very instrumental in shaping the sexual behaviour of young people. The apartheid regime in South Africa brought about social conditions filled with turbulence and the marginalisation of certain demographic groups. During those atrocious times, many youth, and particularly black African youth engaged in activities that were detrimental to their health. For instance, a great number of youth felt despondent about their future, in the process African males engaged in crime and violent related activities such as carjacking, gang raping (jack rolling) and sexual abuse. A large body of literature reports that a substantial number of young people were more likely to have been forced or raped during their first sexual encounter (Pettifor *et al.* 2005; Manzini, 2001; Jewkes *et al.* 2001; Wood, Lambert and Jewkes, 1998; Buga, Amoko and Ncayiyana, 1996). After the demise of apartheid, although democratic policies and programmes were established in South Africa, the behaviours of young people observed during apartheid still form part of the dynamics in adolescent relationships. Makiwane *et al.* (2009) highlights that social contexts characterised by pervasive poverty, lack of open communication with young people, unfriendly health services, intergenerational relationships, stigma and cycle of early parenthood among young people, increases the propensity of young people to engage in risky sexual behaviours.

Present day South Africa is characterised by a sexual culture of increasing transactional sex in the form of gifts and money. This is what Leclerc-Madlala (2001) referred to as chasing king cash or the five C's (cash, cell phone, car, credit card and clothes). The consumerism among adolescent relationships and how this might influence the sexual behaviour of adolescents has been explored by among others (Mazibuko and Nkune, 2014; Shisana *et al.* 2014; Stoebenau *et al.* 2011; Makiwane *et al.* 2009; Pettifor *et al.* 2008; Leclerc-Madlala 2001; Kaufman and Stravos, 2002; Hunter 2002). There is an inextricable link between age-disparate relationships and economic insecurity. As Leclerc-

Madlala (2008) argues that young women engage in relationships with older men to accrue social capital. In essence, while on the one hand young women have power in exploiting the wealth of the older men; on the other hand, the older men have power in negotiating sexual behaviours where young women end up having to trade-off their health for the financial benefits (Leclerc- Madlala, 2008). This has been shown in the new phenomenon of *blessers*, a new terminology used for sugar daddies in South Africa.

Violence within adolescent relationships in South Africa continues to define some of the relationships that young people have with their partners (Jonas *et al.* 2016; Otwombe, *et al.* 2015; Boafa *et al.* 2014; Russell *et al.* 2014; De Vries *et al.* 2014; Scott-Sheldon *et al.* 2013; Makiwane *et al.* 2009; Jewkes *et al.* 2001; Wood, Lambert and Jewkes, 1998). Notably, these relationships have been characterised by high risk sexual behaviours as young people find themselves with less negotiation power for protected sex. Consequently, it might seem that the social environment in which these young people have been raised is conducive to increasing levels of sexual activity, HIV infection, STIs and unplanned pregnancies, hence increasing their vulnerability. In June 2016, the Deputy President of South Africa Mr Cyril Ramaphosa launched the 'she conquers' campaign, which is intended to address issues of HIV, unwanted pregnancies, school-drop outs, sexual and gender-based violence, unemployment and shortages of economic opportunities among young women (townpress, 2016).

5.1.3 Significance of the study and policy relevance

The heightened visibility of teenage sexuality has generated much interest in preventive policies, and has led to services being introduced to address the high rates of unwanted pregnancies and HIV and AIDS in South Africa as well as permissive legislation to enable young people to gain access to contraception (Choice of Termination of Pregnancy Act in 1996 and Youth friendly services, access to emergency contraception over the counter). The Government, in partnership with non-governmental organisations, has also introduced an extensive campaign to provide information for young people. Services that have been introduced tend to focus on clinical services, counselling and provision of information and, in some instances, recreational facilities. Despite these programmes being targeted at young people to promote safer behaviours, some continue to engage in risky sexual behaviour. It has been argued that, while many young people may have the

knowledge to prevent unwanted pregnancies and HIV infection, they may lack the necessary skills to negotiate safer sex. Since campaigns and services cannot be expected to directly assist in skill development, it has become increasingly important that, during the transition to adulthood, schools, neighbourhoods, families and friends play a significant role in helping to shape young people's attitudes, skills and behaviour. As highlighted in a policy document "decisions young people make about sexuality, the behaviour they engage in, and the values and attitudes they hold are shaped by their physical and social environments, their life histories and personal qualities" (Department of Welfare, 1998:24).

The Department of Social Development (DSD) (2015) in a report on the adoption of the National Adolescent Sexual and Reproductive Health and Right (ASRH&R) framework strategy 2014–2019 brings forth a number of issues that are important in achieving sustainable youth health. The report notes that curbing factors such as early sexual debut, short duration from sexual initiation and pregnancy, teenage pregnancy, forced sex among youth, inadequate youth knowledge about contraceptives, intergenerational relationships, low youth confidence and self-esteem, lack of both parental monitoring and low parental capacity for effective parent-child dyads and youth complacency towards risky sexual behaviours is of paramount importance in achieving youth well-being. The report further highlights that one of the ways the ASRH&R framework seeks to achieve parental readiness is by training parents in parent-child dyads as well as dispelling myths and stereotypes that impede young people's capacity to access health services and taking informed decisions about either engaging or not engaging in sexual behaviours.

Despite that parent-adolescent communication is considered to be one of the myriad of approaches in which to promote safer sex behaviours among young people, much of the attention has focused on peer education, life skills education in schools and provision of adolescent friendly services (Rutenberg *et al.* 2001; Erulkar, Beksinska and Cebekhulu, 2001) and yet tend to attract a lot of controversy (Eisenberg *et al.* 2004). For instance, the content of the school-based sex education remains a subject of debate (Ibid). On the contrary, the role of families particularly parents as sexuality educators has received less attention and yet less controversial. Studies undertaken mainly in the United States show mixed results. Where the latter has been questioned the argument has been that parents

lack accurate information to provide to their children (Ibid). This however highlights the need for parents to be better equipped to discuss sexuality issues with their children. As Kirby and Miller (2002:93) noted, “it is far less controversial to help parents communicate their own values to their children, and hopefully to decrease sexual risk-taking behaviour, than to provide abstinence-only education, to teach sex or HIV education that discusses condoms and other forms of contraception, or to provide condoms or contraceptives through public institutions such as schools.”

In this study an in-depth analysis on parent-child communication is provided. The effects of global communication, sexual-risk communication and general communication are considered. This methodological approach of measuring parent-child communication will provide us with a clearer understanding on whether programmes that target parents and adolescents should provide a holistic approach to communication or provide specific teachings of sexual risk or even concentrate on general communication. Again the requirements may differ for the different sexual behaviour outcomes therefore providing implications for specific target groups. This again is an important aspect in health promotion since adolescents are not a homogeneous group.

5.2 Previous research

5.2.1 Parent-child communication

Proponents of sex education argue that parent-adolescent communication can be a protective factor in adolescent relationships (Hutchinson and Montgomery, 2007; Hutchison *et al.* 2003, Hutchison, 1999). For example, the Society for Adolescent Health and Medicine (2014) has called on providers to encourage age-appropriate communication on sexual and reproductive health issues between parents and their children. Similarly, ties to extended families and adherence to traditions that governed young people's sexual behaviour in the past are eroding (Makiwane, 1998). This can be largely attributed to the migration system, which led to the break-up of traditional families and modernisation. However, Makiwane *et al.* (2009) buttresses that although the family structure in South Africa has been compromised by increased internal migration from rural to urban areas; it still strongly reflects the socio-cultural factors that support multigenerational household compositions. Differentials exist in household composition by race as Whites are characterized by nuclear families, while Coloureds,

Indians and Africans have multigenerational household compositions. The extended family makeup has been commended for its potential to enhance adolescent mothers' educational achievement in terms of availability of different family members who can help with child care and financial resources (Doherty, 2011). Albeit, in 2007 the government of South Africa formalized continued schooling of adolescent mothers, this is never an easy and straightforward process

In the Agincourt region in Mpumalanga, adolescent mothers who live with grandmothers who are recipients of the government pension were found to be more likely to continue with school after giving birth (Doherty, 2011). In contrast, Kaufman, De Wet and Stadler (2001) suggest that the primary responsibility of caring for the child rests with the adolescent mother and returning to school can be hindered if the family is either unwilling or unable to accommodate that the adolescent mother has to go to school and even study. Concurring, Chigona and Chetty (2007) conducted a qualitative study in Cape Town and reported that the lack of social support for adolescent mothers can lead to them failing or dropping out of school, of which both lead to low educational achievement. While curbing teenage pregnancy remains a priority in South Africa, the situation is further exacerbated by high prevalence of early sexual debut. Early sexual debut is a public health concern due to its association with risky sexual behaviours and negative outcomes such as unintended pregnancy, HIV infection and STIs (Bana *et al.* 2010; Beksinska, Pillay and Smit, 2014; Berry and Hall, 2009; Bofo, Dagbanu and Asante, 2014; Bryan, Kagee and Broaddus, 2006; Lam *et al.* 2009; Makiwane *et al.* 2009; Richter *et al.* 2015; The Henry Kaiser Family Foundation [KFF], 2007). In recognition of the risks factors that have increased sexual behaviour among young people there are now opportunities to promote protective behaviours.

5.2.2 Parent-adolescent communication and risky sexual behaviour

There have been numerous studies exploring how parent-child communication influences adolescent behaviour (Dessie, Berhane and Worku, 2015; Ayalew, Mengistie and Semahegn, 2014; Kunnuji, 2012; Soon *et al.* 2013; Beckett *et al.* 2010; Atienzo *et al.* 2009; Makiwane *et al.* 2009; Palen *et al.* 2009; Babalola, Tambashe and Vondrasek, 2005; Heubner and Howell, 2003; Hutchinson, 2002; McNeely *et al.* 2002; Dittus and Jaccard 2000; Kotchick *et al.* 2000; Dilorio, Kelley and Hockenberry-Eaton, 1999; Rodgers, 1999; Whitaker and Miller, 1998; Raffaelli *et al.* 1998; Jaccard, Dittus and Gordon, 1996; Leland and Barth, 1993; Casper, 1990; Weinstein and Thornton, 1989; Udry and Newcomer, 1985, Darling and Hicks, 1982). Studies documenting the relationship between sexual risk-taking and parental communication have often found that adolescents who communicate with their parents are more likely to delay sexual activity, use contraception when they do become sexually active and are less likely to become pregnant than their peers who don't communicate with their parents (Dessie, Berhane and Worku, 2015; Ayalew, Mengistie and Semahegn, 2014; Makiwane *et al.* 2009; Hutchinson, 2002; Blum, Beuhring and Rinehart, 2000; Jaccard, Dittus and Gordon, 1996). Blake *et al.* (2001), suggest that the quality of parent-adolescent communications about sex and sexuality is a strong determinant of adolescents' sexual behaviour. They argue that the extent to which parents are involved and the manner in which they are involved in their children's lives are critical factors in the prevention of high-risk sexual activity. Further, the authors point out that children whose parents talk with them about sexual matters or provide sexuality education or contraceptive information at home are more likely than others to postpone sexual activity and when these adolescents become sexually active, they have fewer sexual partners and are more likely to use contraceptives and condoms than young people who do not discuss sexual matters with their parents, and therefore are at reduced risk for pregnancy, HIV and other STIs.

Although, a large body of literature laments that parent-child communication on sexual and reproductive health are important in young people's healthy transition to adulthood; the same studies also highlight a number of factors that if no interventions are made these undermine the positive impact of parent-child dyads. For example, a study conducted in the United States of America, found that parent-child dyads before puberty were instrumental in delaying adolescents' sexual debut (Beckett *et al.* 2010). However,

the same study highlighted that a significant proportion of the parents do not communicate with their adolescent children regarding sexual behaviour. In South Africa, Makiwane *et-al.* (2009) suggests that although parent-child dyads are important in mitigating risky sexual behaviours amongst adolescents, with a high proportion of young people viewing parents as trusted sources of information, lack of communication, lack of openness in communication and infrequent communication inhibits their effectiveness. In some instances, their effectiveness is undermined by cultural norms of silence about sexual behaviour, parents providing vague information and lack of parental knowledge.

Similarly a study in Ethiopia found that albeit in theory the majority of young people acknowledged the significance of communicating with parents about sexual behaviour, in practise they prefer talking to their peers due to poor parent-child dyads characterised by ambiguous information and lack of reticence (Dessie, Berhane and Worku, 2015). Also Izugbara (2008) in a study conducted in rural Nigeria established that low parent-child communication about sexuality was due to parents portraying sex as immoral, and giving insufficient, ambiguous information as a way of deterring young people's engagement in sexual behaviours. Lebesse *et al.* (2010) in a qualitative study focused on acquiring information from all mothers to school going adolescents ages 10–19 years in Vhembe district, Limpopo concluded that poor quality parent-child dialogues were instrumental in continued high early pregnancies, HIV infection and the spread of STIs among young people. The study highlights that parents often wait for behaviour indicators such as young people getting home late, physical indicators such as menarche in girls and changing voices in boys and during television or radio programmes that touch on sexual issues to initiate talks on sexuality with their children.

This method often does not work as it lacks pro-activeness since it is based on reacting to the behaviour indicators, physical indicators or media programmes. In addition to the difficulties parents experience in initiating talk about sexuality, the parents were found to focus only on inhibiting young people's sexual behaviour and not on giving young people sufficient information on sexual conduct lest they decide to engage in the sexual activities (Lebesse *et al.* 2010). Similarly, Lukoko and van Dyk (2015) in a study conducted in Namibia suggest that parents fail to openly talk with their children about sexuality due to

embarrassment and the culture of silence that has been maintained since time immemorial. Parents often feel like they lack the capacity to talk to their children due to their low educational levels. However, as Lukoko and van Dyk (2015) argue: young people who talk to their parents either delay sexual behaviour or are responsible in their behaviours since parents are the primary socializing agents that have power in shaping young people's social norms and values. Lukoko and van Dyk (2015) contend that although schools also relay information on sexuality, their impact is often short lived. As such, in the long term values, attitudes and beliefs learnt at home exert the most influence on young people's conduct. It is for the above reasons that the training of parents on sexuality related issues and methods of conveying the information and preparing their children have been recommended as crucial in facilitating young people's healthy development (Lukoko and van Dyk, 2015; Ntshwarang and Malinga, 2015; Nambambi and Mufune, 2011).

Holtzman and Rubinson (1995) found that in the United States that communication with parents was likely to reduce the likelihood that adolescents would engage in sexual risky behaviour. In another study by Karim *et al.* (2001), the authors found that communication with parents and family members about avoiding sex was a significant protective factor among youth in Ghana. Other studies have shown that lack of sexual communication between mothers and their daughters would have a negative effect on their sexual behaviour. Drawing on data on mothers and children, Thornton and Camburn (1987) looked at the influence of on premarital sexual attitudes and behaviour and concluded that in most cases the attitudes of mothers were reflected in the behaviour of their children, thus suggesting that mothers with a permissive attitude towards sex had children who were sexually active. Newcomer and Udry (1985) found very little effect of parent-adolescent communication on subsequent sexual initiation or contraceptive behaviour.

Overall, extensive research focusing on the influences of parent-adolescent communication on adolescent behaviour has been undertaken in the United States and other developed nations. In South Africa and sub-Saharan Africa this topic is a growing area of research. Thus there remains limited evidence to understand the South African context. Accordingly, the aim of this study was to investigate the role of parent-child communication on adolescent sexual behaviour in South Africa. Further, while previous

studies have documented the associations between parent-child communication and understanding how those conversations effect behaviour, this work will extend the previous work that has been done by combining general communication and communication on sexuality topics. This is because an earlier analysis showed that parents were more likely to talk to their teenagers about non-sexual topics. Accordingly, efforts aimed at increasing sexual risk communication among parents and teenagers may develop interventions that promote communication in general in the family and by so doing young people may find it easier to communicate with their parents or caregivers on sexual matters.

5.3 Research aim and questions

The aim of this study is to better understand the association between parent-child communication and sexual behaviour in South Africa. This is done by asking the following questions:

1. Is parent-adolescent communication associated with lower levels of sexual risk behaviours among adolescents?
 - a. Are young people who communicate with their parents' more likely to have initiated sex?
 - b. Are young people who have discussions with their parents less likely to be involved in risky sexual behaviour?
2. Does the content of communication influence sexual behaviour-global communication, sexual-risk communication and general communication?
3. What influence if any do socio-demographic factors have on the relationship between parent-adolescent communication and sexual risk taking behaviours?

5.4 Data and Methods

5.4.1 Data

The loveLife survey was used to examine the relationship between parent-child communication and sexual behaviours. loveLife is a multimedia programme aimed at promoting healthy behaviours among young people in South Africa. A detailed discussion about this programme is found in Chapter two. One of loveLife's principal goals is to

create an environment in which more open discussion between parents and their children about sex and sexuality is the norm. International experience suggests that this type of communication can contribute to better sexual health outcomes for young people (loveLife, 2001b).

The analysis is based on data from a 2001 National survey of South African youth, a cross-sectional study commissioned by loveLife and implemented by the Africa Strategic Research Corporation and the Kaiser Family Foundation. Data was collected during October to November 2001. In total, 2 360 households were visited from which 2 204 adolescents aged 12–17 years old and their parents or guardians were interviewed. Data collection teams administered household interviews in the language of the respondents' choice. More information about the survey was discussed in Chapter four.

5.4.2 Study design

The study used a probability sampling approach. Using the 1996 census enumeration areas (EAs) as a sampling frame, a probability sample of 650 census EAs was selected from 65 magisterial districts, and 2 360 households were targeted. Although the sample was self-weighted with respect to racial groups, Indians were over-sampled because they form only 2.5% of the overall population. Two questionnaires were used to collect the data for the study. Both questionnaires were administered in the household. The household head was interviewed first, then consent was obtained to interview the young person identified in the household. The household questionnaire listed all members of the sampled household and recorded their basic socio-demographic profiles. In addition, information from parent/guardians/caretakers of young people was also collected. Information collected included parents' perception of the main concerns of young people, communication about sex and sexuality with their young people and awareness and impact of loveLife. The youth questionnaire collected detailed information about their general lifestyle, awareness and impact of loveLife and sexual health matters. Questions on communication were only asked to adolescents who had ever heard of loveLife. Thus the analysis is based on 1 425 adolescents.

5.4.3 Measures

Research on adolescent sexuality has identified several factors that may predispose or protect young people from HIV infection or unwanted pregnancies. Two outcome measures have been considered as indicators for sexual behaviour: ever had sex and risky sex.

5.4.3.1 Outcome variables

Ever had sex- To measure sexual intercourse, female teenagers were asked, “has a man/boy ever put his penis inside your vagina?”, yes or no. Among boys “have you ever put your penis inside a girl’s vagina? Responses were either yes (coded as 1) or no (coded as 0).

Risky sexual behaviour

Although the most common definition for risky sex is unprotected sex with a partner of unknown HIV positive status, the operational definition for this variable includes condom use in the past 12 months and number of partners in the past 12 months.

Ever used condom- Two questions were asked:

- For condom use in the past year, adolescents were asked “thinking about the number of times you had sex in the past year, how many times did you use a condom? Possible responses ranged from ‘never’ to ‘always’ on a four- point scale. These responses were recoded to 1 if the condom was used always or during most times the past 12 months and 0 if it was used sometimes or never.
- For condom use at last sex, respondents were asked “thinking about the last time (most recent) you had sex, did you use a condom? Responses were either yes or no.

Multiple sexual partnerships

Two questions were asked, one pertaining to the number of sexual partners ever had in lifetime and the other pertaining to number of sexual partners in the past 12 months. In the first question, respondents were asked, ‘how many different sexual partners have you

had?’ In the second, respondents were asked ‘how many different people have you had sex with in the past year?’

In order to operationalize sexual risk-taking behaviour, two possible outcomes were used and a composite index associated with sexual intercourse was constructed. These include number of partners and consistency of condom use. Given that condom use in the past 12 months is a better indicator for consistent use than condom use at last sex, the former was included. Consistent condom use is defined as using condoms always or most times during the sexual act in the past 12 months. Further, due to the recall bias for lifetime partnerships, the analysis is restricted to partners in past 12 months. Table 5.3 on page 167 describes the percentage of adolescents falling into the two categories. Table 5.3 also shows the categories of possible risk groups. Accordingly, risky sexual behaviour has two categories: low risk and high risk where low risk includes those that had either one partner or used condoms most or always or both (one partner and consistent condom use). Although a category of no risk could be added, the data does not allow us to include this given that respondents who had 1 partner in the past 12 months and used condoms consistently comprise only five per cent of the respondents. As such, combined those who have two or more partners and used condoms consistently. Low risk group is coded as 0. High risk behaviour is coded 1 and includes those that used condoms sometimes or never and those that had two or more partners or used condoms sometimes or never and also have more than one partner.

The definition of risk-taking behaviour has been adapted from Luster and Small (1994) and Huebner and Huebner and Howell (2003). The inclusion of one partner but did not use condoms consistently in the high risk group is informed by three possible explanations. First, by recognising that when the study was undertaken voluntary counselling and testing was not common in South Africa and therefore unlikely that the adolescents would know their partner’s HIV status. Accordingly, given the context of sexual relationships among young people, which are sometimes coerced or unplanned, having one partner in the past 12 months cannot be a protective factor on its own. This leads to the second explanation, where there was no information of the type of partner and this is important in understanding the circumstances in which sexual intercourse took place. These are teenagers, and sexual activity among teenagers tends often to be casual and opportunistic. Moreover, it is not known whether the single sexual partners reported

by those who said they had only had one partner in the last 12 months were 'regular' ones in committed relationships or casual ones. If many of these partners were casual, then the sexual activity would be risky unless condoms were used consistently. Third, the ages of the partners were not given and that again may increase the risk factor if the partners were older particularly among younger females where the power dynamics would come into play. According to the Measure/DHS indicator of age-mixing, "sex between young women and older men is often risky because young women lack the power in the relationship to negotiate safe sex. It is also an efficient means of spreading HIV infection, since, for physiological reasons, younger women are more likely to become infected. Each sexual act with an infected man carries a higher risk of infection for a young girl, and older men are more likely than younger men to be infected. AIDS prevention programmes sometimes try to address this issue through information, education and communication (IEC) campaigns aimed at making sex with younger women socially unacceptable among older men and through initiatives to increase girls' negotiating power" (Measure, Accessed 17/12/2005).

Table 5.3: Number of condom use in past 12 months and number of sexual partners in past 12 months

Condom use in past 12 months	Number of sexual partners in past 12 months	
	1	2+
Always or most	99 (a)	124 (b)
Sometimes or never	88 (c)	103 (d)
Low risk (a+b)	(a) used condom always or most times and had one sexual partner in the past 12 months	(b) used condom always or most times and had two or more partners in the past 12 months
High risk (c+d)	(c) had one partner but did not use condoms consistently	(d) did not use condom consistently and had two or more partners

Source: loveLife Survey 2001

5.4.3.2 Predictor variables

Parent-adolescent communication

Parent-child communication is divided into three sub-topics, discussions on all communications topics, general and sexuality topics as well as beliefs on open communication about sexuality. Parallel questions to both parents and adolescents were asked, although among parents all subjects were asked, while among teenagers questions were restricted to those that had ever heard of loveLife. We only use the reports of the adolescents to examine the relationship between parent-child communication and sexual behaviour. This is because the analysis on congruence between parent and teen reports showed that there was a high level of disagreement between reported discussions. Accordingly, this suggests that the interpretation of what would constitute a discussion varies from the parent and adolescent perspective, despite that similar questions were asked. The context in which these discussions took place is unknown. Questions on general communication included talking about the teenagers' dreams and aspirations,

things that are going on in the teenagers' lives and alcohol and drugs. Sexual and reproductive health questions included how regularly they talked about topics relating to sexual and reproductive health. Specifically, topics included whether there were discussions about someone the adolescent was dating, HIV/AIDS, dealing with pressure to have sex, the risks of unprotected sex, deciding when to have sex, relationships between men and women, contraception and how to avoid getting pregnant, the risk of sexual assault, risk of sexual abuse. Response choices ranged from (1) often to (4) never. The responses were combined into two categories to reduce skewness in the analysis. The first category included often and sometimes and was coded as 1, the second category was rarely or never and was coded as 0. Three scores were created, a parent-child communication global scale, parent-child sexual risk communication scale and parent-child general combination scale. The first scale was created as a sum of 13 the communication topics covered. The parent-child sexual risk communication scale includes nine topics on sexual risks. The last scale includes four topics on general communication. The details of these scales were discussed in Chapter Four.

Another question asked was whether respondents thought open communication about sex and sexuality could reduce the risks of HIV/AIDS, reduce the risk of pregnancy, encourage adolescents to delay sex, encourage adolescents to initiate sex, encourage adolescents to be more responsible, or had no value. Responses were (1) agree and (2) disagree.

Several family and individual characteristics may influence sexual activity and consequent behaviour as well as the level of communication in the household. Thus the following demographic characteristics were selected. (i) *Teenagers characteristics*: age; gender; province; place of residence; population group and school attendance. (ii) *Parents characteristics*: age, population group, education attained, occupation, household income and wealth status. (iii) *Household Structural factors* living arrangements, household size and number of children aged 12–17 years in the household. Table 5.1a in Appendix K on pages 360 and 361 describes how the variables were coded in the models. These may differ from the original coding structure in the questionnaire. Table 5.4 is intended to distinguish the reference categories from the other variables. All reference categories in the models were assigned a 0. Since most variables in the survey take the form of 1 if the

response is positive or lower, and 2 if it is negative or higher, the coding structure is determined by the values and unless SPSS is told which variable it should use as the reference category, variables with one become 0 and variables with a 2 become 1. The coding structure of the dependent and independent variables have been described in the previous section. Coding for the confounding variables was as follows: For teenage characteristics age was coded as 1 if the adolescent was aged 12–14 years and 0 if the adolescent was 15–17 years, i.e. as the reference category. The type of residence had two options either living in the urban area which was coded as 0 and 1 if the adolescent lived in the rural area. Urban was used as the reference category.

5.4.4 Data Quality issues on sexual behaviour variables

Prior to undertaking the analysis, an assessment of the data quality issues were made. Bivariate analysis was undertaken between age at first sex and ever had sex. Three respondents (0.6%) had age at first intercourse yet had never had sex. Further confirmatory analysis on other sex related variables was undertaken and a decision was made to change these age at first sex to missing given that there was no additional information to suggest that the respondents were sexually experienced.

Another quality assurance applied was the investigation of the 453 adolescents who reported to have had been sexually experienced. Of these, 33 respondents did not have the age at first sex. Hence for this particular variable the analysis was based on 421 cases. There was one respondent who had selected not applicable on number of sexual partners ever had but yet was sexually experienced. The case information was changed to not stated. Two respondents were coded as not applicable on the response on used condom in the past year. This was changed to not stated as the respondents were eligible to be asked the question.

5.4.5 Methods of Analysis

5.4.5.1 Descriptive Analysis

For the descriptive analysis simple cross tabulation and chi-square test statistics were used. The latter was used to examine associations between explanatory factors and outcome variables. Differences within gender groups were taken into account.

5.4.5.2 Multivariate Analysis

Logistic regression was used as the outcome variables have two possible outcomes. Logistic regression enables one to determine relationships while controlling for confounding factors. All models were controlled for background characteristics of the teenagers, parents' characteristics and household structural factors as well as parents' attitudes towards open communication (shown in Appendix J on 358). Since the aim of the chapter was to identify the role of parent-child communication the Enter method was used to test the hypothesis that parent-child communication is a protective factor for risky behaviour. For each dependent variable four different models were run. Parent-communication without adding the control variables, the second model included parent-child communication controlling for the teenagers characteristics, the third model included parents characteristics and structural factors, and lastly the parents' attitudes towards open communication were included. SPSS version 23 was used to undertake the analyses. To increase interpretability of the results odd ratios are used. Thus, measuring the likelihood of the dependent variable and controlling for possible confounders.

5.4.6 Bivariate Analyses

5.4.6.1 Sexual Experience

The results show analyses undertaken to compare gender disparities. Table 5.4 on page 172 shows the sexual experience of the adolescents. According to the table, there were more males (49%) aged 15–17 years who had ever had sex compared to females (37%), whereas there was virtually no difference among those aged 12–14 years. About 50% of females had one partner in the past 12 months prior to the survey compared to 40% males. Whilst more males had two or more partners compared to females (60% versus

50%). However, this was only significant among those aged 15–17 years old with 50% of females having had one partner in the past 12 months compared to 39% of males. More than a third of respondents used condoms consistently in the past 12 months and there was a significant difference between males and females in the 12–14 years group (42% for males and 49% for females). Statistical differences were also observed in the 15–17 year old age group, 54% and 42%, females and males respectively. In terms of condom usage and partnerships, there were significantly more males aged 15–17 years in the high risk group compared to their female counterparts, 57% and 46%, males and females respectively.

Table 5. 4: Percentage of sexually experienced according to age and gender

Characteristic	12-14		15-17		Total	
	Male	Female	Male	Female	Male	Female
Sexual initiation						
% Ever had sex	18	16	49	37***	38	28***
Age at first sex						
<14	-	-	56	37***	61	49
15–17	-	-	44	63	39	51
Number of sexual partners in past 12 months						
One	49	49	38	50***	40	50***
Two or more	51	51	62	50	60	50
Condom use						
<i>Used condom in past 12 months</i>						
Most times or always	40	34	42	54*	42	49*
Never or sometimes.	60	66	58	46	58	51
<i>Last sex</i>						
Used condom	54	52	65	66	63	63
<i>Condom use and partnerships</i>						
Low risk	41	37	43	54	43	50
High risk	59	63	57	46*	57	50

Source: loveLife Survey 2001 * p<0.05 **p<0.01 *** p<0.001, 95% Confidence Intervals (95% C.I)

5.4.7 Multivariate analyses

Tables 5.5–5.16 show the relationship between parent-child communication and sexual behaviour among young people in South Africa. Logistic regression was used and four models were run. These included: (i) Model 1-parent-child communication (with no controls); (ii) Model 2 includes Model 1 and controlling for teenagers demographic characteristics; (iii) Model 3 comprises Model 2 and controlling for parents demographic characteristics and (iv) Model 4 combines Model 3 and controlling for parents attitudes towards communication.

5.4.7.1 Predictors of ever had sex

5.4.7.1.1 Global communication and ever had sex

As mentioned in the measures section global communication is the sum of all the 13 topics. Tables 5.5 and 5.6 on pages 174 and 175, respectively show the relationship between global communication and ever had sex for males (Table 5.5) and females (Table 5.6). No significant associations were found between parent-child global and sexual activity for both male and female adolescents. This pattern did not change even when all demographic variables were added into the models. Table 5.5 shows that the significant variables in the logistic regression analyses among males were: age, population group, and wealth status of the parents and were all significant at $p < 0.05$. Males aged 12–14 years were less likely to have had sex than males aged 15–17 years ($p < 0.0001$). African males were most likely to have had sex than non-African males ($p < 0.0001$). Socio-economic status was also associated with sexual behaviour. Poor males were less likely to have had sex than males who came from wealthy families. These findings tend to be contradictory, given that poverty is indicative of low socio-economic status. However the reason will be further explored in the discussion. Population group became non-significant in the final model.

Table 5.6 shows the association between parent-child global communication and ever had sex among females. Age, type of residence and the number of children aged 12–17 years in the household were significant at the $p < 0.05$. Females aged 12–14 years were less likely to have had sex than females aged 15–17 years. For type of residence, females residing in rural areas were more likely to have had sex than females residing in the urban areas. A comparison in the sexually active population by type of residence shows that sexual activity was higher in rural areas (34% compared to 23%). The results also show that females in households with one child aged 12–17 years were more likely to have had sex than females in households with two or more children aged 12–17 years.

Table 5.5: Logistic regression of factors associated with whether respondents had ever had sex among male: teenagers' reports on parent-child global communication

Variables	Model 1	Model 2	Model 3	Model 4
Parent-child global communication (95% C.I)	0.995 (0.927-1.067)	0.979 (0.908-1.056)	0.876 (0.918-1.076)	0.982 (0.906-1.065)
Teenagers characteristics				
Age group (Ref 15–17 years) Age 12–14 years (95% C.I)		0.246*** (0.160-0.379)	0.220*** (0.140-0.346)	0.221*** (0.140-0.346)
Population group (Ref non-African) African (95% C.I)		1.835** (1.044-3.226)	1.875* (1.053-3.342)	1.913 (1.068-3.427)
Parents characteristics and household structural factors				
Wealth (Ref have more than enough) Poor (95% C.I)			0.629* (0.402-0.984)	0.637 (0.405-1.001)
Household income (Ref R1 000 and above) Less than R1 000 (95% C.I)			1.570 (0.995-2.475)	1.487 (0.934-2.368)

Source: loveLife Survey 2001 * p<0.05 **p<0.01 *** p<0.001 - Not significant, 95% Confidence Intervals (95% C.I)

Table 5.6: Logistic regression of factors associated with whether respondents had ever had sex among females: teenagers' reports on parent-child global communication

Variables	Model 1	Model 2	Model 3	Model 4
Parent-child global communication (95% C.I)	0.958 (0.908-1.011)	0.965 (0.912-1.021)	0.957 (0.903-1.014)	0.962 (0.907-1.020)
Teenagers characteristics				
Age group (Ref 15–17 years) Age 12–14 years (95% C.I)		0.314*** (0.213-0.463)	0.312*** (0.210-0.456)	0.312*** (0.202-0.454)
Residence (Ref Urban) Rural (95% C.I)		2.302*** (1.504-3.523)	2.522*** (1.579-4.030)	2.583*** (1.612-4.139)
Parents characteristics and household structural factors				
Number of Children aged 12– 17 years (Ref Two or more children) One child aged 12–17 years old (95% C.I)			1.563* (1.063-2.299)	1.504* (1.017-2.224)

Source: loveLife Survey 2001 * p<0.05 **p<0.01 *** p<0.001, 95% Confidence Intervals (95% C.I)

5.4.7.1.2 Parent-adolescent sexual risk communication and ever had sex

Tables 5.7 below and 5.8 on page 177 show associations between parent-child sexual risk communication and ever had sex. The relationship between parent-child sexual risk communication and ever had sex was positive for females. This suggests that young people who had ever had sex were more likely to talk to their parents about sexual risk. The relationship was only statistically significant for females. Even when controlling for confounders, the association continued to be positive.

As expected, young males and females (i.e. 12–14 years) were less likely to have sex than the 15–17 year olds. Significant variables specific to gender show that males residing in households with less than a R1 000 were more likely to have sex than males residing in a household with R1000 or more and this remained statistically different in the final model. For females, females residing in rural areas were more likely to have had sex than females residing in urban areas. Also the findings show that females that resided in a household with only one child aged 12–17 years were more likely to have had sex than females who lived in a household with two or more children aged 12–17 years.

Table 5.7: Logistic regression of factors associated with whether respondents had ever had sex among males: teenagers' reports on parent-child sexual risk communication

Variables	Model 1	Model 2	Model 3	Model 4
Parent-child sexual risk communication (95% C.I)	1.062 (0.985-1.144)	1.043 (0.962-1.132)	1.036 (0.952-1.127)	1.049 (0.962-1.145)
Teenagers characteristics				
Age group (Ref 15–17 years) Age 12–14 years (95% C.I)		0.224*** (0.142-354)	0.191*** (0.118-310)	0.191*** (0.117-0.311)
Parents characteristics and household structural factors				
Household income (Ref R1000 and above) Less than R 1 000 (95% C.I)			1.803* (1.104-2.944)	1.674* (1.015-2.761)

Source: loveLife Survey 2001 * p<0.05 **p<0.01 *** p<0.001,95% Confidence Intervals (95% C.I)

Table 5. 8: Logistic regression of factors associated with whether respondents had ever had sex among females: teenagers' reports on parent-child sexual risk communication

Variables	Model 1	Model 2	Model 3	Model 4
Parent-child sexual risk communication (95% C.I.)	1.118*** (1.045-1.196)	1.107** (1.032-1.188)	1.121** (1.042-1.206)	1.118** (0.907-1.020)
Teenagers characteristics				
Age group (Ref 15–17 years) Age 12–14 years (95% C.I.)		0.311*** (0.205-0.473)	0.302*** (0.201-474)	0.302*** (0.195-0.466)
Residence (Ref Urban) Rural (95% C.I.)		2.387*** (1.504-3.789)	2.656*** (1.594-4.393)	2.656*** (1.596-4.422)
Parents characteristics and household structural factors				
Number of children aged 12-17 years (Ref Two or more) One child aged 12–17 years (95% C.I.)			1.593* (1.072-2.479)	1.235* (0.788-2.088)

Source: loveLife Survey 2001 * p<0.05 **p<0.01 *** p<0.001, 95% Confidence Intervals (95% C.I)

5.4.7.1.3 Parent-child general communication and ever had sex

The next set of analysis looks at general communication shown on Table 5.9 and Table 5.10 found on 178. Unlike in global communication and parent-child sexual risk communication the relationship between parent-child general communication and ever had sex differs for males and females. Males who had general communication with their parents were less likely to have had sex but this was not statistically different from 1.0, whereas the reverse is true for females but was not statistically significant from 1.0 either. Among males, the variables that were significant between parent-child sexual risk communication and ever had sex were still significant (age and household income). With general communication, living arrangements were added for females. The results show that females residing with biological parents and mother were less likely to have sex than those residing with someone who was not their biological parent.

Table 5.9: Logistic regression of factors associated with whether respondents had ever had sex among males: teenagers' reports on parent-child general communication

Variables	Model 1	Model 2	Model 3	Model 4
Parent-child general communication (95% C.I.)	0.960 (0.805-1.146)	0.966 (0.795-1.174)	0.954 (0.779-1.169)	0.972 (0.790-1.195)
Teenagers characteristics				
Age group (Ref 15–17 years) Age 12–14 years (95% C.I.)		0.218*** (0.138-0.344)	0.181*** (0.11-0.296)	0.182*** (0.11-0.297)
Parents characteristics and household structural factors				
Household income (Ref R1000 and above) Less than R 1000 (95% C.I.)			2.008** (1.215-3.319)	1.873* (1.121-3.129)

Source: loveLife Survey 2001 * p<0.05 **p<0.01 *** p<0.001 95% Confidence Intervals (95% C.I)

Table 5.10: Logistic regression of factors associated with whether respondents had ever had sex among females: teenagers' reports on parent-child general communication

Variables	Model 1	Model 2	Model 3	Model 4
Parent-child general communication (95% C.I.)	1.028 (0.878-1.203)	1.045 (0.882-1.238)	1.048 (0.882-1.246)	1.041 (0.874-1.239)
Teenagers characteristics				
Age group (Ref 15–17 years) Age 12–14 years (95% C.I.)		0.296*** (0.195-0.450)	0.291*** (0.189-0.447)	0.284*** (0.184-0.440)
Residence (Ref Urban) Rural (95% C.I.)		2.281*** (1.434-3.628)	2.524*** (1.521-4.187)	2.535*** (1.523-4.221)
Parental and household structural factors				
Living arrangements (Ref Other)				
Both parents (95% C.I.)		0.638 (0.364-1.121)	0.515** (0.280-0.949)	0.524* (0.284-0.966)
Mother only (95% C.I.)		0.441** (0.238-0.818)	0.462*** (0.242-0.882)	0.458* (0.239-0.876)
Father only (95% C.I.)		1.069 (0.384-2.977)	1.141 (0.393-3.317)	1.176 (0.400-3.460)
Number of children aged 12–17 in the household (Ref Two or more children) One child aged 12–17 years (95% C.I.)				1.634* (1.067-2.501)

Source: loveLife Survey 2001 * p<0.05 **p<0.01 *** p<0.001, 95% Confidence Intervals (95% C.I)

5.4.7.2 Predictors of risky sex

The next set of analysis focuses on risky sex and factors that are associated with risky sex. As with ever had sex, the analysis is split into three phases: global communication, sexual risk communication and general communication.

5.4.7.2.1 Global communication and risky sexual behaviour

Tables 5.11 and Table 5.12 on page 180 examined the relationship between parent-child global communication and risky sexual behaviour. For global communication and risky sex, communication was positively associated with risky sexual behaviour. This was consistent for females throughout the modelling. However, among males global communication was negatively associated with risky sexual behaviour and the variable that changed this relationship was the gender of the household head. All were not statistically significant. Significant variables in the final model were population group, gender of the household head, children aged 12–17 years and open communication. For females the only significant variable was residence.

Table 5. 11: Logistic regression of factors associated with whether respondents had risky sex among males: teenagers' reports on parent-child global communication

Variables	Model 1	Model 2	Model 3	Model 4
Parent-child global communication (95% C.I)	1.096 (0.971-1.236)	1.013 (0.886-1.158)	0.989 (0.918-1.076)	1.016 (0.864-1.195)
Teenagers characteristics				
Population group (Ref non-African) African (95% C.I)		4.415*** (1.480-13.174)	4.422* (1.379-14.177)	4.659* (1.364-15.915)
Parents characteristics and household structural factors				
Gender of household head: (Ref Female) Male (95% C.I)			3.821*** (1.670-8.742)	5.512*** (2.169-14.01)
Number of children aged 12–17 (ref Two or more children) One child aged 12–17 years (95% C.I)			0.436* (0.207-0.918)	0.437* (0.201-0.951)
Open communication (ref disagree) Encourages adolescents to be responsible (agree) (95% C.I)				7.966* (1.304-4.669)

Source: lovelife Survey 2001 * p<0.05 **p<0.01 *** p<0.001,95% Confidence Intervals (95% C.I)

Table 5.12: Logistic regression of factors associated with whether respondents had risky sex among females: teenagers' reports on parent-child global communication

Variables	Model 1	Model 2	Model 3	Model 4
Parent-child global communication (95% C.I)	1.057 (0.964-1.160)	1.026 (0.929-1.133)	1.028 (0.903-1.142)	1.016 (0.909-1.136)
Teenagers characteristics5				
Residence (ref Urban) Rural (95% C.I)		2.369* (1.099-5.108)	2.151 (1.579-4.030)	2.526* (1.002-6.367)

Source: lovelife Survey 2001 * p<0.05 **p<0.01 *** p<0.001,, 95% Confidence Intervals (95% C.I)

5.4.7.2.2 Parent-child sexual risk communication and risky sexual behaviour

In Tables 5.13–5.14 on page 182, parent-child sexual risk communication and risky sexual behaviour were negatively associated for both males and females. Significant variables among males were similar to those in the global communication, although the education of the parent became significant in sexual-risk communication. Males with parents that had an education less than matric were more likely to adopt risky sexual behaviours. Similarly, males whose fathers were the household head were also more likely to engage in risky sexual behaviours than males whose mothers were the head of household (see Table 5.13). Among females (refer to Table 5.14 on page 182), residence and marital status of the parents matter. Females residing in rural areas were twice more likely to engage in risky sexual behaviour than females residing in urban areas. Further, females whose parents were not currently married were more likely to engage in risky sexual behaviour.

Table 5.13: Logistic regression of factors associated with whether respondents had risky sex among males: teenagers' reports on parent-child sexual risk communication

Variables	Model 1	Model 2	Model 3	Model 4
Parent-child sexual risk communication (95% C.I)	0.868* (0.758-0.994)	0.883 (0.763-1.022)	0.866 (0.740-1.015)	0.848 (0.715-1.007)
Teenagers characteristics				
Population group (Ref non-African) African (95% C.I)		5.106*** (1.692-15.407)	5.345** (1.604-17.819)	5.549** (1.529-20.141)
Parents characteristics and household structural factors				
Gender of household head (Ref Female) Male (95% C.I)			3.469* (1.403-8.581)	5.734** (1.950-16.861)
Number of children aged 12-17 (Ref Two or more) One child aged 12–17 years (95% C.I)			0.386* (0.170-0.877)	0.347* (0.146-0.827)
Education of parent (Ref Matric and above) Less than Matric (95% C.I)				2.564* (1.009-6.516)
Encourage youth to be responsible (Ref Disagree) Agree (95% C.I)				8.920* (1-173-67.833)

Source: loveLife Survey 2001 * p<0.05 **p<0.01 *** p<0.001 95% Confidence Intervals (95% C.I)

Table 5.14: Logistic regression of factors associated with whether respondents had risky sex among females: teenagers' reports on parent-child sexual risk communication

Variables	Model 1	Model 2	Model 3	Model 4
Parent-child sexual risk communication (95% C.I)	0.827**** (0.728-0.940)	0.845* (0.738-0.967)	0.829** (0.716-0.958)	0.829* (0.713-0.964)
Teenagers characteristics				
Residence (Ref Urban) Rural (95% C.I)		2.730* (1.164-6.402)	2.674* (1.014-7.047)	2.695 (0.980-7.411)
Parents characteristics and household structural factors				
Marital status of parents (Ref Currently married) Not married (95% C.I)			3.058* (1.224-7.640)	2.621* (1.008-6.811)

Source: loveLife Survey 2001 * p<0.05 **p<0.01 *** p<0.001 -95% Confidence Intervals (95% C.I)

5.4.7.2.3 General communication and risky sexual behaviour

Parent-child general communication between males and females was negatively associated with risky sexual behaviour as depicted by Tables 5.15-5.16. Population group, gender of the household head and number of children aged 12–17 years in the household were the only significant variables. Among females residence and marital status were the two significant variables.

Table 5.15: Logistic regression of factors associated with whether respondents had risky sex among males: teenagers' reports on parent-child general communication

Variables	Model 1	Model 2	Model 3	Model 4
Parent-child general communication (95% C.I)	0.615** (0.438-0.863)	0.645* (0.450-0.924)	0.602** (0.404-0.899)	0.655* (0.427-1.006)
Teenagers characteristics				
Population group (Ref non-African) African (95% C.I)		5.415** (1.757-16.692)	5.833** (1.704-19.975)	6.137** (1.672-22.528)
Parents characteristics and household structural factors				
Number of children aged 12-17 (Ref Two or more) One Child aged 12–17 years (95% C.I)			0.387* (0.170-0.879)	0.342* (0.144-0.814)
Gender household head (Ref Female) Male (95% C.I)				4.788** (1.682-13634)

Source: loveLife Survey 2001 2001 * p<0.05 **p<0.01 *** p<0.001 -95% Confidence Intervals (95% C.I)

Table 5.16: Logistic regression of factors associated with whether respondents had risky sex among females: teenagers' reports on parent-child general communication

Variables	Model 1	Model 2	Model 3	Model 4
Parent-child general communication (95% C.I)	0.634 ** (0.468-0.858)	0.679* (0.492-0.937)	0.707* (0.502-0.994)	0.660* (0.459-0.948)
Teenagers characteristics				
Residence (ref Urban) Rural (95% C.I)		2.654* (1.128-6.243)	2.620* (0.998-6.880)	2.621 (0.947-7.260)
Parents characteristics and household structural factors 0.387*				
Marital status of parents (Ref Currently married) Not married (95% C.I)			2.454* (1.026-5.869)	2.053 (0.824-5.115)

Source: loveLife Survey 2001 * p<0.05 **p<0.01 *** p<0.001 -95% Confidence Intervals (95% C.I)

5.5 Discussion and Conclusion

5.5.1 Predictors of sexual behaviour

A general finding for males and females for the relationship between parent-child communication scales and ever had sex was non-existent except among females where parent-child sexual risk communication was positively correlated with ever had sex. Thus more females who talk to their parents about sexually related topics were more likely to have initiated sex or females who had initiated sex were more likely to communicate with the parents. What can be concluded from the results is that there seems to be an implication that sexual risk communication is triggered by sexual behaviour. In other words, parents may initiate discussions about sex with their children when there is evidence of sexual activity. Though causality could not be established, this trend has also been observed in other studies (Moore, Peterson and Furstenberg, 1986). However, Wight, Williamson and Henderson. (2006) concedes that the relationship between parent-child communication about sex and sexual behaviour is complex. The findings

cannot be compared with other studies conducted in South Africa as the focus has mainly been on communication but without assessing its relationship between behaviour.

When considering the significant variables in the models. Age was a significant variable for both males and females in all the communication topics. Those aged 12–14 years were less likely to have had sex than those aged 15–17 years and this was expected. The findings are consistent with other studies that have shown that sexual behaviour increases with age (Rai *et al.* 2003). Among males, household income was also significant irrespective of the type of topics discussed, whilst population group and wealth status only mattered with global communication. Africans showed a higher likelihood to have had sex compared to non-Africans. Again this finding is consistent with previous research on adolescent sexual behaviour in other countries such as the United States of America (Sonenstein *et al.* 1991).

Wealth status was also significant for males where the poor were less likely to have had sex compared to the wealthy. The contradictory finding between parent-child global communication and the socio-economic measures of wealth and household income is difficult to explain. The results show that poor males were significantly less likely to initiate sex compared to wealthy males, whereas males who came from a family with a lower household income were more likely to have had sex. The latter finding is consistent with a study in Nigeria that explored parental characteristics and adolescent sexual behaviour (Odimegwu *et al.* 2002)). Further, in terms of interpretation the relationship between sexual behaviour and household income may be more accurate than poor males having lesser sex. This is because in the survey, the question on household income was asked to the parents, while the wealth question was asked to the adolescents. Adolescents may report a subjective indicator of wealth, while parents are more likely to report a factual indicator of household income.

In subsequent analysis of communication, wealth no longer appears in the models. On the contrary, it is also possible that poor males may not afford to date girls therefore less likely to engage in sex. However given the high levels of HIV prevalence in urban informal areas in South Africa (11.3% versus 7.1% national average in 15–24 years) and high levels of early sexual debut (12.0% versus 10.7%) and condom use among those aged 15 and above 43.7% in urban informal versus 36.2% national, this interpretation might not hold (Shisana *et al.* 2014).

Among females, in addition to age, residence and the number of children aged 12–17 years were significant predictors of sexual behaviour for all three communication scales. Younger females (12–14 years) who had talked to their parents about global, sexual risk and general topics were less likely to have sex. Type of residence and number of children in the household was also significant, with females residing in rural areas having a higher risks of ever had sex compared to those in urban areas, whilst being an only child aged 12–17 years in the household increased likelihood of having ever had sex. Other significant variables were observed with general communication where females were living with their parents were less likely to have sex than females residing with other guardian.

5.5.2 Predictors for risky sex

Contrary to sexual activity, risky behaviour global communication was positively correlated to risky sex in the last 12 months, while adolescents who had communicated with their parents on sexual risk topics and general communication topics were less likely to have been risk takers. This negative relationship between parent-child sexual risk communication and risky sexual behaviour may support the notion that when parents notice that their children are sexually active they then initiate discussions about sexual risk. Similarly, some studies have also suggested that general communication about ones values and beliefs as well as showing interest in the adolescents lives may lead to better behaviour. Hence the importance of parent-child relationships. When looking at the differences by gender, parent-child sexual risk communication females was significant throughout, while for males' parent-child sexual risk communication was significant in the first model but once confounders were controlled for it was no longer significant. When controlling for the various demographic characteristics population group, gender of the household head and children aged 12–17 years were the significant variables for all the communication variables among males. African males were more than four times likely to have engaged in risky sex compared to non-African males, whilst gender of the household also showed that males residing with fathers were more likely to engage in risky sexual behaviours than males residing with their mothers. Unlike with ever had sex, children who were an only child aged 12–17 years in the household were less likely to engage in

risky sex compared to those with two or more children aged 12–17 years old. Attitude towards open communication (encourages adolescents to be responsible) was only significant in the analysis in global communication and parent-child sexual risk communication, while the education of the parent was only significant in parent-child sexual risk communication.

Among females, residence was significant in all three communication analyses. This was similar to ever had sex where females residing in rural areas were more likely to engage in risky sex than those residing in urban areas. It can be assumed that rural females may not have access to services like adolescents in urban areas where condoms are easily accessible. However, it is a bit surprising that youth may be more promiscuous seeing that rural areas tend to be more conservative than urban areas. The marital status of parents was also significant among females but only for parent-child sexual risk communication and general communication. Parents' marital status was a protective factor for risky sex as adolescents residing with non-married parents had a higher propensity to engage in risky sexual behaviour than those residing with married parents. This finding is inconsistent with the literature as noted in Mmari *et al.* (2016), in Johannesburg family structure did not have any influence on ever had sex among males and among females the direction was reversed. Females residing with both biological parents were more likely to have had sex compared to those who lived with non-biological parents, other relatives and non-relatives.

5.5.3 Limitations of the data

Though the sample size of the study was representative of the population, the limitation of the data is that on the one hand questions pertaining to parent-child communication among adolescents were only asked to those who had heard of loveLife hence limiting it to 65% of the sampled population. This therefore precludes generalization of the results on communication to the entire sample population. On the other hand, this was not the case among the parents although the analysis includes parents of teenagers who had heard of loveLife. In future surveys, questions should not be restricted to those that had heard of loveLife, considering that the communication questions were asked to all parents, whereas this was not the case with the adolescents. Accordingly, exposure to

loveLife introduces bias into the sample given that the programme uses a lot media campaigns which target both youth and adolescents.

Despite the detailed information provided by the survey on parent-adolescent communication the cross-sectional design does not allow one to establish the timing of the communication and sexual behaviour. Consequently, it is not known whether parent-child communication happened before the sexual event or whether the sexual event happened before parent-child communication took place. This is an important disadvantage because sexual activity in South Africa takes place at an early age and therefore discussions on sexuality taking place prior to sexual debut could promote safer sexual behaviours. Accordingly, more studies are needed to further examine this relationship, particularly longitudinal studies. At present it can only be speculated as to what this means. This limitation is consistent with the finding of Heubner and Howell (2003).

Another limitation regarding the frequency of communication is that it is based on a timeless measure. That is, whether frequency is within a month, or 12 months preceding the survey. Unlike the sexual risk measures which are measuring consistent use and partnership in the last 12 months.

Lastly, given the nature of the collection of the data, the data provided is self-reported hence one has to be cautious with interpretations of the data, particularly because anecdotal evidence suggests that males tend to over-report their sexual experiences, while females may underreport largely because of the gender roles (Morris, 1993).

Though the data provide a list of sexual topics it is not clear what the content of these conversations were. For instance, the exactly was talked about on HIV/AIDS specifically. It is not possible to tell whether the discussion was on how to prevent HIV/AIDS, or how HIV/AIDS is transmitted.

Qualitative studies would provide a better understanding of the relationship between sexual communication and behaviours as given that it is not possible to determine the style of communication.

5.5.4 Suggested Future research

Research that is either of a panel nature or longitudinal nature is required to better understand the relationship between sexual behaviour and communication. This is shown necessary because cross-sectional surveys cannot show causality and there it is not known whether the communication happened before the behaviour. Thus in order to develop interventions baseline information is needed.

Chapter 6: Parent-child communication on sexual and reproductive health education in South Africa: Implications for sexual and reproductive health interventions

6.1 Introduction

6.1.1 Background

One of the recommendations made by Bastien, Kaluja, and Muhwezi (2011) is the need for qualitative studies to enhance our understanding of how parents communicate with their children on sexuality issues and the strategies that they employ whilst doing so. Moreover, the review called for a better understanding of studies that will investigate how traditional practices and modes of sexual socialization are shifting (Bastien, Kaluja, and Muhwezi, 2011).

6.1.2 Study aim and objectives

This chapter forms part of the qualitative component aimed at enhancing the results from the quantitative analysis of the 2001 national survey of South African youth and their parents. The purpose of the chapter is to flesh out some of the issues that could not be answered in the quantitative papers pertaining to the socio-cultural factors underpinning parent-child communication. Without an in-depth understanding of these factors it is difficult to strengthen parental involvement in promoting sexual health among young people. Accordingly, the objective of the study was to describe the context, content and timing of parent-child sexual and reproductive health communication in South Africa.

6.1.3 Research questions

In order to meet the above objective the following question was asked: What are the socio-cultural factors influencing parent-child communication on sexual and reproductive health? Three questions were asked:

1. To answer the question on context: Two themes were considered:
 - a. How are parent-child relationships and how do these influence parent-child communication?
 - b. What are the sources of sexual and reproductive health information and how do these influence parent-child communication?
2. With regard to timing: when does parent-child communication take place and at what age should it take place?
3. Last, for content, what information is provided by the different sources of information and how do these influence or deter parent-child communication?

6.2 Literature Review

There is a growing body of systematic reviews on the influence of parent-child communication on sexual behaviours (Santa Maria *et al.* 2015; Ryan, Roman and Okwany, 2015; Sutton *et al.* 2014; Wright and Fullerton, 2013; Bastien, Kaluja, and Muhwezi, 2011; Downing *et al.* 2011). Many of these have focused on quantitative studies and interventions which were mainly based in the United States and other developed countries (Miller *et al.* 2011; Martino *et al.* 2008; Villarruel *et al.* 2008; Baptiste *et al.* 2005; Eastman *et al.* 2005; MacKay *et al.* 2004).

6.2.1 Context of parent-child communication

Parent-child communication has been studied in various contexts and although most young people report that they would like to receive information on sexual matters from their parents few have had such a conversation (Kajula *et al.* 2014; Asampong *et al.* 2013; Mturi, 2003; loveLife, 2001a; Givaudan *et al.* 1994; Wilson *et al.* 1994). Kirby and Miller (2002) highlight that in the American setting parents often talk infrequently and inadequately with their children about sexuality because they have considerable difficulty discussing the subject. Despite the uneasiness related to talking about sexual matters, other studies have suggested that the lack of communication on sexual matters between

parents and their children is associated with the perception that it might increase sexual activity, thus delaying or withholding information on sex education. For example, in Brazil, Vasconcelos *et al.* (1997), found that mothers played a role in this process by preventing their children from getting access to information. This finding suggests that parents think that providing information to young people will encourage them to engage in sex. However, such perceptions may be counterproductive because failing to provide children with information is likely to lead to them seeking information from other sources such as peers and the information might not always be accurate. This is particularly true for the younger adolescents who might also feel that they are too young to talk to their parents lest they are reprimanded.

In the review by Bastien, Kaluja, and Muhwezi (2011) the focus of parent-child communication was about sexuality and HIV/AIDS, social and cultural norms and historical factors, which have influenced the trajectory of parent-child communication. For example, in Zimbabwe barriers that have been identified include family separation, economic constraints to travel, as well as rivalry and educational and class differences within extended families. As such, the role of sexual socialization now lies with the parents. However, both parents and adolescents in Zimbabwe were reluctant for parents to educate adolescents about sexual matters (Wilson *et al.* 1994). A study by Rwenge (2000) among young people in Cameroon also found a lack of communication about sex between adolescents and their parents or guardians. In this study the lack of parental knowledge about sex played a role and the author suggests that the traditional education that parents received put little emphasis on explanation and verbalization.

A study by Wamoyi and Wight (2014) looked at how structural factors influence adolescent sexual and reproductive behaviour through parent-child connectedness in Tanzania. The study was conducted among young people aged 14–24 years and parents with children in the same age group. One of the findings from this study is that parent-child relationships in Tanzania were influenced by material circumstances as compared to what happens in EuroNorth countries where relationships were linked to the emotional bond. Indeed this finding is an exception rather than the rule as it illustrates that parent-child connectedness is compromised when poverty exists and also hinders on behavioural control and parental communication. This study will look into the context of parent-child

relationships and how these facilitate communication between parents and children. This is important because some authors (Lukolo and van Dyk, 2015; Wamoyi *et al.* 2010) attribute the lack of communication between parents and their children to lack of parent-child closeness. Thus, this study will explore whether this is also true for South Africa as no study has explored the relationship between parent-child relationships and how these facilitate or hinder communication.

6.2.2 Timing of parent-child communication

One assumption parents make about their children is that they are not sexually active and postpone having conversations with them (Beckett *et al.* 2010). At times parents look for changes in their children's behaviour and then begin to have discussions with them. At this point, having discussions that will lead to less risky sexual behaviours or even having the skills to discuss condom use with their partners might be too late. Hence the importance of timing and providing age-appropriate information becomes fundamental despite its controversy. For example, Bastien, Kaluja, and Muhwezi (2011) suggest that timing of communication is a contentious issue because it is not clear when parents should initiate discussions on sex. In one study the authors' noted that parents waited until the child was in secondary school and assumed that a child in primary school had not initiated sex. As such, these perceptions might be misleading and result in delay in communication. Indeed the issue of timing is one that remains unresolved.

Reservations pertaining to providing sexuality education to pre-teens stem from the notion that this might encourage young people to initiate sex, while other scholars have found that this might not be the case and have proposed that communication should begin early by providing age-appropriate education on sexuality to pre-scholars (Wilson, 2010). The earlier children are provided with information about sexuality, the better they will know and understand them. This has been confirmed by Miller *et al.* (1998), who found that when adolescents had discussions prior to sexual debut they were more likely to use condoms once they engaged in sex. Similarly, Atienzo *et al.* (2009), found that adolescents who communicated about risk and prevention prior to sexual initiation was associated with condom use at first intercourse, whereas adolescents that had late discussion initiated sex before age 15. In other words, adolescents who had discussions about sex before they engaged in sex used condoms once they initiated sex, whilst those

adolescents who had discussions with their parents after they had initiated sex began to have sex at a younger age (<14 years). Therefore, implying that it is better to communicate about sexual issues before young people engage in sex so that they practise safer sex once they commence.

For example, the study by Obono (2012) found that 40.6% of mothers initiated reproductive communication with girls aged 13–15 years and 23.9% communicated with girls in the aged group 10–12 years. Fewer parents (11.8%) communicated with adolescents below 10 years of age, whilst 23.7% communicated with girls aged 16–19 years old. The findings from the focus group discussions and in-depth interviews also show that communication took place once mothers observed maturity in their girls and were attracted by men to start a sexual relationship. At times this can be triggered by the realisation that the daughters are now at a reproductive health risk (p.104). This can be supported by the higher proportion of sexual and reproductive health communication at 13–15 years. Research undertaken in South Africa on parent-child communication has not considered the timing of communication. Although Lebesse *et al.* (2010) note the circumstances that may trigger the discussion, it is not clear when these discussions take place. Accordingly, this study will explore the parents and young people views on the age at which communication occurs and the age that both parents and adolescents believe is appropriate to discuss SRH among themselves. In doing so, the study will contribute to the discussion on timing of communication which is an area that has been less studied in South Africa. Findings on the timing of communication will inform interventions on the right time to involve parents in parent-child communication.

6.2.3 Content of parent-child communication

Another aspect that surrounds communication is that parent-child communication might take place but is restricted to particular topics particularly across gender lines. Thus content of discussions differ for boys and girls. For example, in Mexico, while girls tend to communicate with their mothers and boys with their fathers, about a third of the adolescent girls had not had a conversation on sexual themes with their mother and over 50% of boys had never had a conversation with their father (Givaudan *et al.* 1994; 1997). When communication did take place, the focus was on HIV/AIDS and puberty rather than

on sexual relations, STDs and contraception, including use of condoms, suggesting that the discussion about HIV/AIDS was general, rather than focusing on specifics such as prevention. This finding was also replicated in a study among American youth where the authors found that discussing whether to have sex was talked about more than communicating about STDs or birth control (Raffaelli, Bogenscheinder and Food, 1998). Thus, as Hutchinson suggests, topics that were removed from intercourse were discussed more than those close to intercourse (Hutchinson, 1999). Other studies including sub-Saharan Africa suggest that the low level of communication between parents and children in most sub-Saharan countries has been attributed to the fact that talking about sex is taboo (Nobelius *et al.* 2010; Mturi, 2003).

Research into the topics discussed in parent-child conversations suggest that topics related to sex and sexuality still remain a challenge for both parents and adolescents. A study conducted on behalf of loveLife in 2010 in five provinces (Gauteng, KwaZulu-Natal, Limpopo, Eastern Cape and Western Cape) among 100 adolescents aged 12–15 and 16–19 years found that adolescents were talking to their parents but the topics they were willing to discuss were limited. Whilst they were interested in discussing school work and activities, family issues, future plans and current events, they were not willing to discuss sex or sexuality, relationships and things they do at parties (Foshizi, 2010). Respondents indicated that they did not feel comfortable talking to their parents on the latter issues. Despite the reluctance to talk to their parents about sexuality topics, the adolescents reported among their friends that teen pregnancy, promiscuity, and HIV/AIDS were issues bothering them and those around them (Foshizi, 2010). The discomfort to discuss certain topics remains a serious challenge in parent-adolescent communication. For instance, the study undertaken by Kajula *et al.* (2014) in Tanzania reported that, although some discussions between parents and children took place, neither parents nor adolescents had had discussions about pregnancy, family planning and STI prevention. Topics discussed only included the risk of contracting HIV. This finding shows that the advent of HIV has led to greater awareness among parents as noted by Zimmerman (2011) and Nambambi and Mufune (2011). The authors note that HIV has reduced cultural taboos and embarrassment associated with engaging in sex education and has necessitated that parents' talk to youth about the risks.

6.2.4 Need for further research

In the review by Bastien, Kaluja, and Muhwezi (2011) the focus of parent-child communication was about sexuality and HIV/AIDS. The main finding of this review was that, despite a growing number of studies undertaken to understand and improve parent-child communication in sub-Saharan Africa, there was still a variation in measurement and methods of investigating parent-child communication, which limited the conclusions that could be drawn on the impact of such communication. The authors suggested that it would be good to develop standardised communication measures in order to undertake comparisons across different settings. Notwithstanding, the salient findings from the review were that socio-demographic variables (without distinguishing whether these were for parents or adolescents) such as age, sex, educational level of parents, socio-economic status, geographic location (urban/rural), school attendance, religious affiliation, family size and marital status were important. Additionally, the authors identified commonalities in different contexts which could improve on future interventions. These include the parents' perceptions of whether a child is ready to learn about sexuality, how parents acquire information to assist in educating their children and the responsiveness towards communication about sexuality.

This next section of the chapter will consider the literature, focusing on the qualitative studies that have been conducted, and how the present study intends to fill a gap in the literature, particularly in relation to South Africa. In South Africa, several studies have documented parent-child communication, mainly in the form of quantitative research and assessing the impact of interventions (Salama, 2015; Coetzee *et al.* 2014; Tarantino *et al.* 2014; Bogart *et al.* 2013; loveLife, 2012; Bell *et al.* 2008; Bhana *et al.* 2004; Pettifor *et al.* 2004; Ngobese and Dlamini, 2002; Allen, Bossio and Gilbert, 2001) or the use of mixed methods to show the relationships between parent-child communication and sexual behaviour (Zimmerman, 2011, Phetla *et al.* 2008). These have been discussed in the quantitative chapters of this thesis. The focus of this section will be limited to qualitative studies that have been undertaken and to review how the studies have contributed to the growing body of knowledge on parent-child communication in South Africa.

Delius and Glaser (2002) argued that “the communication gap between South African youth and their parents has widened. Few parents today are willing or able to confront awkward issues around sexuality. More than ever before it seems, youth are being left to negotiate their sexuality on their own” (Delius and Glaser, 2002, p.50). Paruk *et al.* (2002) reported a focused ethnographic study conducted in 2001 aimed at understanding the transmission dynamics underpinning the spread of HIV/AIDS with a specific focus on the role of the family in Kwadedangendlale in KwaZulu-Natal. The results of the study suggested that communication patterns between parents and children were mainly reproaches by the parents to their children. Another finding was that parents felt disempowered with discussing with their children (Paruk *et al.* 2002).

In more recent years, the inability of parents and care-givers to communicate with children on aspects of sexuality has led to efforts to equip parents to communicate with their children, so as to develop their children’s decision-making and negotiation skills at a much younger age and by so doing enable them to avoid negative health outcomes by the time they initiate sex. As such, communication with parents in South Africa has increased over time. In 2003, 44% of adolescents reported having spoken to their parents or guardians about HIV and AIDS, while in 2011 this percentage increased to 49% (Peltzer and Matseke, 2013). Despite the increase, these discussions remain gendered. For instance, in 2011, 65% of young people had spoken to their mothers or female guardians compared to 34% of young people reporting having a conversation with the father or male guardian (Peltzer and Matseke, 2013).

Few studies have looked at both parent and child perspectives simultaneously. The tendency has also been to consider either the maternal (Dindili, 2014) or parental (Lebese *et al.* 2010) or the child (Soon *et al.* 2013) perspective only. One study that undertook parent-child dyads was conducted by Mtikrakra in 2008 (Mtikrakra, 2009). In-depth interviews were conducted with 15–19 year olds and their parents in Port Shepstone in Kwa-Zulu Natal. The adolescent sample consisted of three girls and seven boys. Among the sample of parents, there were nine mothers and one father. In drawing her conclusions the author highlighted the difficulties of being a young researcher interviewing other young girls who perceived her as a bigger sister, whilst boys were more outspoken. Additionally, having only one father did not give an adequate picture of the male perspective. This problem of recruiting fathers into studies reduces the

opportunity to better understand the views of fathers and their role in parent-child communication. More detailed analysis on the structure of families is provided in the methodology section.

Another study that examined the experiences of HIV and sexual health communication between parents and adolescents in SOWETO reported only on the perspectives of the adolescents (Soon *et al.* 2013). The adolescents expressed the desire to communicate with their parents on HIV and sexual health. They also reported that discussions with parents were unidirectional and limited in scope, with parents only preferring to discuss topics on HIV and abstinence. Consequently, these adolescents looked to other sources for additional information. The paper also showed that adolescents identified multiple barriers to HIV and sexual health communication, both emotional and physical barriers and socio-cultural barriers. Whilst the study provides added knowledge to the literature, only seven parents participated in semi-structured interviews and because of this small sample size the research team decided not to include their results in the final paper (Email communication with Soon on 1/06/2015). Additionally, the study recruited adolescents and young people from an adolescent-only health centre, which provides comprehensive reproductive health services to adolescents and young people aged 14–24 years. Thus, the views expressed by these adolescents may be biased by the selectiveness of the point of recruitment.

Two nationally representative studies also looked at parent-child dyads. The 2002 and 2005 HRSC surveys. In the 2005 study, caregivers were asked if they discussed sex, sexual abuse and how HIV was transmitted and prevented with children aged 2–11 years. Only 15.4% of caregivers reported discussing sex with their children, 31.1% discussed sexual abuse, whilst only 18.8% discussed how HIV is transmitted, 17.6% discussed or how it can be prevented (Shisana *et al.* 2008). The 2005 study also found that 53.5% of adolescents aged 12 to 14 years reported that they had spoken to their parents about sexual abuse versus 43.5% who had discussed sex. In 2002, caregivers were asked if they spoke to children aged 2–11 years about sex (10.2%), sexual abuse (28.8%) and HIV transmission (11.9%) and HIV prevention (11.8%). Similar questions were asked to 12–14 year olds, with 41.7% reporting that they had discussed sex with their parents, 50.4% discussed sexual abuse and 42.4% had discussed HIV transmission and prevention (Brookes, Shisana

and Richter, 2004). One of the major shortcomings in these two surveys is that the age groups are not similar hence unable to draw a conclusion on the parent-child dyads.

The use of mixed methods has also helped in developing interventions and better understanding of parent-child communication. For example, the study by Zimmerman (2011) on South African youth and parents: A mixed-methods examination of family communication about sex, HIV, and violence used the qualitative element to develop the intervention and to extend the scope of parent-child communication by considering the views of both parents and children. The study was conducted among adolescents aged 10–14 years and their care-givers to examine how sex, HIV and violence were discussed in South African families. The study was undertaken in Langa Township among Xhosa speaking participants. It enriched the literature through its mixed method approach and ability to show the reports of both caregivers and young adolescents, therefore allowing for comparability between generations. Such methods are useful in furthering the understanding of parent-child communication and identifying where the gaps lie within methodological approaches. Therefore the author reports that one of the most useful contributions by her work, is that her study examined the diversity in qualitative data and looked for confirmation in the larger qualitative study and returned to the qualitative data to improve on the interpretations of the quantitative findings (p.56).

In light of this review, this chapter aims to investigate parent-child communication. While many studies have documented parent-child communication from a quantitative perspective, understanding the nature of these conversations is limited. We hope to add to the growing body of literature on the role of parent-child communication in the sexual socialisation of adolescents and to the development of culturally specific approaches intended to improve sexual behaviour in young adolescents (10–14 years). By so doing the aim is to provide a better understanding of the context of parent-child communication in South Africa. Additionally, this study will show whether parents can be an effective source of sexual and reproductive health information for their children.

6.3 Methodology

6.3.1 Fieldwork location

The study was undertaken in eThekweni metro in the province of KwaZulu-Natal (KZN). KwaZulu-Natal was selected because it has the highest prevalence of HIV in South Africa 16.9% (Shisana *et al.* 2014). It also has the highest (12%) HIV prevalence in the age group 15–24 (Shisana *et al.* 2014), whilst eThekweni metro had a prevalence of 14.5% in 2012 surpassing the national average of 12.2%. Two sites were identified for the parent and adolescent qualitative fieldwork. Both sites are situated in eThekweni metro and are located south west of Durban. The two areas are predominantly rural areas.

Site A

Site A is situated 23 kilometres south-west of Durban. It covers an area of 3.66 km². In 2011, there were 12 882 people living in this area. Of these, 99% were of African descent and 93% spoke isiZulu. There were 50.8% females compared to 49.2% males. In total 3 362 households were in the area. The area is predominantly rural and underdeveloped.

Site B

This site is located 40 kilometres from Durban. It is a rural area where most people survive on subsistence farming. In 2011 there were 12 684 people residing in the area. There were slightly more females compared to males (53.8% versus 46.2%). The predominant population group were Africans comprising 98.7% of the population and 93.4% were Zulu speaking. According to the 2011 census there were 416 households in 2011. The area is 23.72 km² wide (www.durban.gov.za, 2017).

Figure 6.1: Map of study sites in KwaZulu-Natal



Source: Statistics South Africa, Geography Unit

6.3.2 Data collection

Data collection began in June 2006 and was completed in September 2006. A qualitative approach was adopted to get a better understanding of the social and cultural factors associated with parent-child communication in South Africa. This approach was used because of the culturally specific and contextually rich data produced (Mack *et al.* 2011, p.vi).

The study was a cross-sectional non-probability sample using focus group discussions (FGDs) and in-depth interviews (IDIs). All interviews were semi-structured. This allowed the interviewer to prepare questions in advance but also have the flexibility to explore other topics that the interviewees mentioned, which were not thought about by the interviewer but were important for the discussion. All interviews were conducted by the researcher. A note-taker was also hired for all the interviews. Both the researcher and note-taker were familiar with conducting research as they were employed by a research agency at the time of data collection and had been recently trained for another qualitative project conducted by the employer. The researcher had also completed a

qualitative project, where she participated in conducting focus group discussions, in-depth interviews and key informant interviews. The two field team members were African females. Although they were not responsible for the recruitment of participants, it is possible that this might have impacted on the recruitment of males even though adult male absenteeism is prevalent in South African households. More details on the recruitment of fathers is given in the section on recruitment of participants.

6.3.3 Ethical considerations

Before initiating the study, approval to conduct the study was obtained from the Ethics Committee in the School of Psychology at the University of Southampton. Ethics number PG/03/79. Verbal and written consent was sought from all participants. The forms were translated into isiZulu. Parents/caregivers and those over the age of 18 years completed consent forms. Parents/caregivers of the adolescents aged less than 18 years were also requested to give approval for their children to participate in the study. Each of the parents completed consent forms for their children and the adolescents under the age of 18 years completed assent forms. After explaining the purpose and background of the study, participants were informed about the procedures to be followed and the duration of the interviews or discussions. Participants were also informed of their right to participate and the opportunity to withdraw at any time during the interview or focus group discussion. The benefits and risks associated with the study were communicated to the participants. The participants were assured of confidentiality and that their names would not be mentioned in the reporting of information. Participants were also informed that all proceedings would be recorded.

6.3.4 Recruitment of participants

When the study was conceptualised it was important to recognise the structure of families in South Africa and recruit adolescents and their parents or caregivers. The inclusion of caregivers was because many South African families are not traditional families consisting of married parents and their children. In their description of South African families, Holborn and Eddy (2011, p.1) note that “we are not only talking of nuclear family, but also of extended families, as well as caregiver or guardians”. For

example, in 2001 42.2% of children aged 5–13 years lived with both parents, 29.1% lived with their mother only, 22.7% lived with neither parents and 6% lived with father only (Stats SA, 2005). When considering living arrangements among adolescents aged 14–19 years, 41.7% lived both parents, 27.0% lived with neither parents, 24.9% lived with mother only and 6.4% lived with their father (Stats SA, 2005).

Hallman (2015, p.91) provides some of the reasons why many children do not live with their biological parents. The author points to “factors including historic population controls, labour migration, poverty, housing and educational opportunities, low marriage rates and cultural practice”. She further states that “it is common for relatives to play a substantial role in child-rearing. The HIV/AIDS pandemic has also had an impact on families leading to orphans and child-headed households. Many children experience a sequence of different caregivers, are raised without fathers, or live in different households to their biological siblings” (2014, p.91). For example, analysis of living arrangements by relationship to the head of household show that 57.8% of children aged 5–13 years old were the child, followed by 28.7% who were the grandchildren/great grandchildren and 11.3% lived with other relative. There were more African children living with their grandparents 31.1% compared to 23.4% coloureds, 15.1% Indians and 5.1% whites (Stats SA, 2005 cited in Holborn and Eddy, 2011).

Table 6.1 shows the proportion of living arrangements among 14–19 years. The white population group had higher proportions of being the child compared to the other population groups with 84.6% of whites being the child, followed by Indians or Asians at 83.9%, Coloureds 69.7% and 57.7% of Africans. Africans had higher proportions being the grandchild at 18.3%, then Coloureds at 13.0%. Indian and white population groups had the least proportions of adolescents residing with the grandparents or great grandparents 6.3% and 2.7% respectively (Stats SA, 2005 cited in Holborn and Eddy, 2011).

Table 6.1: Living arrangements by relationship to household head among children aged 14–19 years

Relationship to the head of household	Africans	Coloureds	Whites	Asians
Child	57.7	69.7	84.6	83.9
Grandchildren/great grand children	18.3	13.0	6.3	2.7

Source: Statistics South Africa cited in Holborn and Eddy 2011

The importance of living arrangements and how this might affect a child's behaviour is highlighted in Nyirenda *et al.* (2010). The authors found that females that had lost a mother before age 15 were likely to have sexually debuted by the time they were 15. Consequently the authors acknowledge that mothers play a potential role in the sexual lives of the female children, whilst fathers might have a role in the lives of both male and female children (Nyirenda *et al.* 2010, p.284). It is against this context that recruitment of participants resulted in households with a majority of single parents and caregivers.

Among married or cohabiting couples, the recruitment of fathers was difficult. The study by Lesch and Sheffler (2015), also found that recruitment of fathers was challenging and slow. They also cite that this experience was similar to other studies conducted by Helfenbaum-Kun and Ortiz (2007) and Tiano and McNeil (2005) cited in Lesch and Sheffler (2015). However, the biggest reason for not being able to recruit fathers was because they were generally absent from the home. This is because marriage in South Africa is not universal, as such children are born out of wedlock or fathers were absent because they were living away from their families due to work or other reasons. Hosegood, McGrath and Moultrie (2009, p.281) explain that the decline in marriage has been largely due to the oppressive social and political structures and processes created during the apartheid era. The authors further state that not only did the labour migration policies weaken the institution of marriage but that in KwaZulu-Natal marital instability and non-marriage led to female headed households. However, the authors also note that this did not deter women from childbearing given that "in Zulu culture, the value placed on childbearing and its precedence over marriage has had the most influence in shaping contemporary

Zulu family life (Hosegood, McGrath and Moultrie 2009, p.284). Thus, it is not surprising that fathers in these communities were few or absent.

Participants were recruited using purposive sampling techniques. This technique was chosen because the research question was to understand parent and child communication between adolescents and their parents/caregivers. Recruitment for adolescent participants was based on ages 10 to 19 years; residence in that particular area and should be residing with the parent or primary caregiver. The parents or caregivers must have had at least one child aged 10–19 years old and living with that child. As such, if a parent worked away from the home the primary caregivers was recruited into the study. The inclusion of those aged 10–14 years was crucial because very little is known about younger adolescents. On the other hand, the exclusion of those aged 15–17 years was decided during recruitment by the teacher who was assisting with the recruitment. The teacher indicated that she would only be able to recruit students in the senior classes because of the sensitivity of the topic and that those aged 18 to 19 years would be able to give their parents the information letter.

6.3.4.1 Focus group discussions

The focus group method allows for establishing group norms and a better understanding of the views of a particular community. In this study, the focus groups were also used to refine the semi-structured interview guides. The discussion interview guides were written in English and then translated into *isiZulu*.

Six focus group discussions were conducted. Of these, four focus groups were held with adolescents and two with their parents or caregivers. All but one of the groups were gender specific. All focus groups were conducted in *isiZulu*. Adolescents were divided into boys and girls aged 10–14 years and 18–19 years. The parents and caregivers of the 10–14 year olds were recruited using the assistance of a community member and were interviewed first in order to gain consent for their children to participate in the study. Parents and caregivers were informed about the study and were requested to read and sign consent forms for themselves and their children. Participants who were illiterate were read to and used an X and wrote their names to give consent. The 10–14 year olds were requested to give written assent. The focus groups were held in a facility provided by the community member.

The 18–19 year olds were recruited through the assistance of a teacher in one of the schools in Site B. Adolescents were provided with information sheets about the study and asked to share these with their parents. Parents who were interested in participating in the focus group discussions communicated with the recruitment assistant. The principal of the school was also informed of the study and consented to the research team conducting the focus group discussions on the school premises with students after school. Students' parents and caregivers were also invited to participate in focus groups, which were held in a facility provided by one of the parents/caregivers.

The groups commenced with the facilitator introducing herself and gave background about her age, marital status, where she lived, birth order, religion, occupation and then provided background to the study, why the information was being collected and how it would be used as part of the discourse of promoting sexual and reproductive health among young people in South Africa. The facilitator also informed participants about the procedures of the focus group discussions. Each of the participants including the assistant were asked to provide their personal information which included age, marital status, education attained, number of children they have, their children's ages, employment status and religion.

The focus group discussions lasted approximately one and half hours, though actual durations ranged from 45 minutes to 2 hours 30 minutes. Focus group discussion guides were semi-structured to guide the discussion process. Topics included types of relationships between parents and children, sources of information on sexual and reproductive health issues, extent of parent-child communication, information communicated by parents, barriers to parent-child communication and how to overcome these barriers and when parent-child communication should start. Additional information sought from older adolescents was whether there was a desire to talk to parents about sexual issues, who should provide sex education and their assessments of parents as sexuality educators. Whilst among parents other information asked was on sex education in the past and present, their perceptions and attitudes towards sexuality education. Separate discussion guides were used for adults and their children.

When recruitment was done there was no prior knowledge of the parents' ages. The recruitment was based on the adolescent's ages. As such, there were parents who were much younger than the average age (aged 21, 25, 26, 27, 33 and 35 years) than the other group participants (average age above 45 years). Before starting the focus group discussions the researcher wanted to divide the groups into two so that there would a group of young parents and another of older ages. However, the numbers did not allow for this separation. Therefore, the facilitator cautioned the participants that she recognised this problem and requested that there should be no domination of participants and that the younger mothers should be not be afraid to participate in the discussions despite that some of the mothers were old enough to be their mothers. Despite this pre-warning, one of the major observations from the focus groups among parents is that the older women had a tendency to dominate the discussions and this required intervention from the facilitator so that younger women were not excluded from the discussions. One technique that worked which is suggested by Mack *et al.* (2007) is to "pose questions directly to individuals who have been especially quiet, thank them afterward for sharing their experience, and encourage them with body language, such as smiling" (p.62).

One of the biggest challengers in the focus group discussion was that one of the group participants from the parents' group had a baby and as times the baby would cry and this also impacted on the quality of the recordings. In both parent groups, the parents had to be combined because the recruitment assistant gave them one time for the group so this led to a huge group of 12 parents for younger adolescents and eight for older adolescents.

6.3.4.2 In-depth interviews

The purpose of undertaking in-depth interviews is because these allow for a deeper understanding of social phenomena which is generally absent from quantitative analysis. In this study the researcher wanted to better understand the context, content and timing of parent-child sexual and reproductive health communication as this could not be explained by the quantitative results. Therefore the in-depth interview allowed the exploration of the views of participants and the understanding of their experiences and

how this might influence parent-child communication on sexual and reproductive health matters.

Four pilot interviews were conducted to pre-test the interview guides. Two families were interviewed. In both families, the adolescents were aged 10–14 years and lived with their parents/caregivers. Sixteen in-depth interviews were held resulting to eight parent-child pairs. Participants for the in-depth interviews were identified during the focus group discussions. Eight were conducted with parents/caregivers and eight were conducted with adolescents (four with adolescents aged 10–14 years and four with adolescents aged 18–19 years). Three interviews were held with adult female-adolescent male dyads, four were held with adult female-adolescent female dyads and only one was a male adult-adolescent male pair. Among the younger adolescents, parents were identified and then invited to take part with their children. Among the adolescents aged 18–19 years, participants were identified during the focus group discussions with the adolescents, invited to participate in the in-depth interviews, and further asked to invite their parents or guardians to participate in the in-depth interviews. Separate interviews were conducted with the parent/caregiver and the adolescent. Interviews were conducted in the respondents' homes so as to provide a familiar and comfortable environment for the interviewees. Interviews were conducted in isiZulu and lasted approximately one hour. Interviews with boys were much shorter than interviews with girls because the boys' responses were short. Generally, the boys did not elaborate on their responses and the interview was more like a question and answer session rather than a conversation between the interviewer and the interviewee. All interviews were audio recorded and notes were taken by a note taker. The recordings were transcribed verbatim in isiZulu and then translated to English.

6.3.5 Rigour of the qualitative study

Lincoln and Guba, (1985) list four areas in which the rigour of a qualitative study can be evaluated for trustworthiness. These include credibility, transferability, dependability and confirmability. In this study the following steps were undertaken to meet the evaluation criteria. Credibility for the results have been supported by literature undertaken in South Africa. The research has reviewed literature and also examined similar topics to show

how the current study fits into the wider research context. Triangulation methods have also been used. The second criteria that Lincoln and Guba (1985) propose refers to the transferability of the research. The methods used have been outlined and can be replicated in other settings to better understand the socio-cultural factors of parent-child communication in South Africa. Third, the authors require that the research should be dependable to ensure that findings are consistent and can be repeated. The results were presented at a conference and positive feedback was provided. The chapter will also be peer reviewed by other scholars. Lastly, to ensure confirmability all processes followed in the data collection and analysis have been provided in detail. Data collection tools and audit trail will also be shared.

6.3.6 Data analysis

All processes were audiotaped and field notes were taken. Four research assistants transcribed the audio-recordings verbatim from *isiZulu*. The transcriptionists were trained by the researcher. Two of the transcribers were unemployed university graduates and the other were high school graduates (Mack *et al.* 2005). The transcripts were translated into English by the researcher and two other research assistants. All transcriptions that were not translated by the researcher were also checked and verified. The researcher was required to listen to all the audio recordings to validate the accuracy of the transcripts while reading the English transcript.

After the transcribing process was completed, thematic analysis was undertaken (Braun and Clarke, 2006). The choice of this method of analysis was largely due to its flexibility as it allows for theoretical freedom yet providing rich and detailed data (2006, p.78). In other words, unlike *Interpretative Phenomenological Analysis* (IPA) or grounded theory, it is not wedded to any pre-existing theoretical framework (Braun and Clarke, 2006). In other words, IPA and grounded theory Thematic analysis allows for the identification, analysis and reporting of patterns and themes within the data. It allows for minimal organisation and description of the data in (rich) detail (Braun and Clarke, 2006).

The analysis process began with the familiarisation of the data. The researcher listened to each recording, while verifying against each transcript to check for accuracy and to ensure that nuances in *isiZulu* were correctly translated. In the initial analysis themes that the researcher looked for were those developed deductively from the interview guides that

were used in the data collection process. These *a priori* themes were identified as part of the literature review undertaken to inform some of the gaps from the quantitative analysis. During the reading of transcripts to search for meanings and patterns other themes emerged from the data; as such some themes were developed inductively. The combining of the two approaches helped in the refining of the codebook. Some codes that were created *a priori* were replaced by those that emerged from the data. Once themes were identified, the next step in the analysis stage was coding of the transcripts. Coding of data was done by the primary researcher. The codebook (Appendix L on page 362) was developed and codes were organised into different themes. Once themes were established, the researcher began writing up the results and interpreting the findings. The results are presented in themes.

In addition to the themes identified, where possible the following comparisons were made:

- (i) Differences between younger adolescents and older adolescents;
- (ii) Differences between girls and boys intra-group (males versus females in younger or older adolescents);
- (iii) Differences between girls and boys inter-group (males versus females in general).

6.4 Results

6.4.1 Characteristics of focus group discussion respondents

6.4.1.1 Characteristics of adolescents

In total, four focus group discussions were conducted with adolescents. All adolescents were attending school at the time of data collection. There were 22 adolescents in total. Each focus group had at least five participants. The mean age of the children's ages was 15.2 years old. The younger adolescents were between Grades 5 and 10, whereas the older adolescents were in Grades 10 to 12. Each of the adolescents had more than one sibling. Living arrangements showed that 32% (n=7) of the adolescents lived with both parents, of which four were adolescents aged 10–14 years old. Thirty-two per cent of

respondents lived with their mothers only (n=7). Again more (five) 10–14 year olds lived with their mothers compared to two of the 18–19 year olds. An additional 23% of the adolescents lived with other relatives (brother, sister, aunt, uncle or grandmother or a combination of these), whilst the remaining 14% lived with their mother and a female relative (grandmother or aunt). The number of children per family ranged from 2–12 children. Nine adolescents lived in families where there were two to three children and 12 came from families where there were four to 12 children.

With regards to the in-depth interviews, eight adolescents were interviewed: four aged 10–14 years and four aged 18–19 years old with each age group consisting of two girls and two boys. All were in school with younger adolescents in primary school and the older ones in secondary school. Three of the adolescents lived with the grandmothers, whilst two lived with their mother, two lived with both parents and one lived with an uncle.

6.4.1.2 Characteristics of parents and caregivers

Two focus group discussions were conducted with parents. There were 21 parents in total. The characteristics of the parents show that the mean age of the parents was 41.1 years old, Most parents had children out of wedlock (50%) and did not live with their partners (50%). This is common in the South African context as highlighted in an earlier discussion. A large proportion of the parents were unemployed (85%) and reported that they had not completed high school. Most parents belonged to a certain religious group with many citing Christianity as their religion. The number of children ranged from one to nine, with an average of 4 children (See Table 6.1 Appendix K on pages 360 and 361).

With regards to the in-depth interviews, three of the caregivers lived with the grandchildren, whilst two lived with their children as single parents and, two lived with their spouses and one was a nephew.

6.4.2 Context of socio-cultural communication

As mentioned in the data collection section, separate discussion guides were used for younger adolescents and the older ones. Therefore the analysis was split to capture findings from the different age groups. Parents/caregivers responses were separated only if there were glaring differences. In order to better understand the socio-cultural contexts

of parent-child communication it was important to understand other parent constructs that might have an impact on communication. These include parent-child relationships, parental attitudes and parental-monitoring.

6.4.2.1 Parent-child relationships

Adolescents and parents were first asked about relationships to better understand how they relate with each other. Parent-child relationships are important as communication is usually difficult if there are strained relationships. Research has shown that the effectiveness of communication can be influenced by the parent-child relationship (Ogunsanmi *et al.* 2014).

This is further supported by Trinh *et al.* (2009, p.376), who argue that “a good parent–adolescent relationship enabled and reinforced effective communication about sexual topics”. Hence, it was important to first establish the views on the parent-child relationship from both parents and adolescents. In general, the dominant theme in the description of relationships was that relationships were good. Good relationships were defined mainly as getting along well, good, close, nice and that relationships were alright.

Both adolescents and their parents from the focus group discussions and the in-depth interviews reported that they have good relationships with one another. Whilst most relationships were good, the perceptions of the adolescents varied by gender and also differed by living arrangements. However, these differences were independent of the age group of the adolescent. For example, good relationships were defined differently by girls and boys. Further, boys who lived with their fathers reported being closer to their fathers and this was common among both the younger and older adolescents. Similarly, girls reported being close to their mothers. It was not clear from the discussions whether girls who lived with their fathers were still closer to their mothers or not. Parents’ views on good relationships were based on creating closeness through talking and discussing issues as well as providing advice to the adolescents on how to behave.

Perceptions of adolescents about relationships with their parents/caregivers

Younger Adolescents

Most young adolescents from the focus group discussions and in-depth interviews reported that they had good relationships with their parents/caregivers. In this study, both girls and boys shared this sentiment, albeit with differences in how these were defined. For the girls, the ability to talk to their mothers about anything and seeking guidance was a demonstration of the quality of the relationship. Whereas among the boys, the quality of the relationship was measured by their performance such as doing a good job or following instructions. In other words, showing obedience was an important element of the relationship. For example, this young boy describes his relationship with his mother:

P6, Boy 10-14: 'We get along well'.

F: How? What do you mean when you say well? I do not know what you mean by well?

P6, Boy 10-14: 'She asks me whether I've done anything (in the house), if I have then I tell her. Then she sends me to the shop and I go'.

F: Ehhe (meaning yes), so how do you view your relationship?

P6, Boy 10-14: 'I think we have a nice relationship'.

F: Nice relationship, why do you say that? '

P6, Boy 10-14: 'Because she treats me right she doesn't abuse me'.

A similar observation was made with the in-depth interviews, where respect was important. For example, the young adolescent boy pointed that a good relationship was shown by not quarrelling and respecting each other.

Other boys in the focus group also mentioned their performance as a way to describe their relationship with their parents. This meant that if asked to do something and they followed the instructions or the orders then it cemented the relationship. Perhaps this could be indicative of a sign of respect and obedience for the parent and thus improved on relations between the adolescent and the parent. As mentioned earlier, the boys that lived with their fathers mentioned being close to their fathers rather than being close to

their mothers. The following excerpt illustrates a description from one boy on the good relationship shared with his father.

P3, Boy 10–14: “We are in good terms with my father because when I come from school he sends me wherever. Then I wash dishes, clean the house, clean the garden and sweep the yard.”

F: Okay, let us say you are not coming back from school, it is school holidays, how do relate with each other when you are not coming back from school?

P3, Boy 10–14: “We have a good relationship”.

Another participant responded in the same fashion showing that good relationships were defined by whether the son obeyed his father as shown below:

P2, Boy 10–14: “Hhayi (meaning No), my father and I we get along very well. He will send me at night and when I return from where he sent me, he goes to bed happy”.

The girls’ perspective differed slightly as good relationships were about the ability to talk with their parents. More specifically, the relationships were described as cordial and that communication was open, with topics ranging from discouraging girls to have relationships with boys, to providing guidance on how they should conduct themselves or having open conversations about life’s issues. This is shown in the following excerpts:

P5, Girl 10–14: “We get along very well with my mother, she talks to me about boys that I must not have a relationship because they get you pregnant and leave you (mhh)”.

P1, Girl, 10–14: “I live with my mother and we get along very well, she guides me on many things. We talk and there is nothing that I do not talk to her about. If I have a problem, I tell her”.

F: Like what kind of a problem?

P1, Girl, 10–14: “For example, maybe at school (mmh), they have asked me a question or maybe a schoolmate beat me (mm), I go and ask (my mother) and mmh my mother explains”.

P2, Girl, 10–14: “Me and my mother get along very well. If I don’t understand what other people are saying, I go and ask her, also she guides me about many things.”

The above conversation was also mentioned in the in-depth interviews as these were the same participants. These results demonstrate positive behaviour as young adolescents talk about ‘life’ with parents and this lays a solid foundation and trust for discussion for ‘deeper topics’ such as sexual and reproductive health. This also shows that these conversations about life start early. Indeed the finding also corroborates findings from the quantitative research where general communication was much higher than sexual risk communication and thus presents opportunities to initiate communication on other topics.

Older adolescents

The perceptions of the older adolescent boys were similar to the younger adolescents’ boys in that if a father was present, the adolescent boy reported being closer to his father. Further, like with the younger adolescents, the types of relationships girls and boys had with their parents differed by gender. Hence, suggesting a gendered pattern to relationships.

The following responses illustrate this pattern of relationships:

P4, Boy 18–19: “The person that I am very close to is my father”.

P5, Boy 18–19: “For me it (relationship) is alright”

F: What do you mean when you say ‘it’s alright’?

P5, Boy 18–19: “We talk with each other about things similar to the ones we were talking about”

What can be deduced from the abovementioned text is that the close relationship with the father, promotes open communication and therefore indicative feeling close creates opportunities to discuss issues, for fathers and sons.

Although relationships among adolescents who were residing with their biological parents’ were close, a different picture emerged from one respondent who lived with his

sister. The excerpt from the boy shows that the relationship between him and his caregiver was less open although they discussed life issues. Whilst this is the view of one respondent it could imply that biological parents have closer relationships with adolescents compared to caregivers. Such dynamics are important to understand because many children in South Africa do not live with their parents. In 2012, only 23% of children lived with both biological parents. Hall and Meintjies (2014) attribute this to the “long-established feature of childhoods in South Africa, and is related to many factors including historic population controls, labour migration, poverty, housing and educational opportunities, low marriage rates and cultural practice. Children are raised by caregivers due to orphan hood from HIV or because of the long existing labour migration system that has separated many families” (Accessed 24/09/2015). The excerpt below illustrates how some relationships with caregivers might be guarded but one needs to recognise that this type of pattern can also be observed with parents as well.

P3, Boy 18-19: “Hhayi, it is right, we just sit together and talk about life and because if she tells me to do something, I do it”.

What comes through from the above text is that whilst conversations revolved around life, this can also present an opportunity to talk about sexual and reproductive health as the pair was already talking about life.

Among the adolescent girls, relationships were described as good particularly with the mother. The quality of the relationship was similar to that described by the younger adolescents in that being able to talk and approach the parent were important aspects of the relationship. The importance of being able to approach the mother is highlighted below:

P3, Girl 18-19: ‘We live well’

P5, Girl 18-19: “It’s my mother, because all that I need I get it from her”

P5, Girl 18-19: "No I agree with the speaker that the relationship with the mother exists because when there is something you want to know and the mother is there, you are able to ask her and she will tell you and she will also ask you and you will just talk".

While some respondents acknowledged that their mothers were helpful, it appears that some of the relationships were more about parental supervision and monitoring as illustrated by the dialogue below:

F: Ah so tell me how is the relationship with your parent?

P3, Girl 18-19: "My mother helps me, because whatever I do, she shouts at me. Like she told me that she mentioned that when I claim that I am going to work at (Madam name mentioned) She tells me that although I say I am going there, it might happen that I'm not going there but instead go elsewhere".

Protection is part of love, which lays a foundation for open discussion on topics of life and also demonstrates that when children revere their parents they might be afraid to engage in behaviours that would put them at loggerheads with their parents. Thus the supervision and monitoring of the adolescents behaviour is important in reducing deviant behaviours.

Intra-group differences

The above illustrations show that there were differences in how younger adolescent boys and older adolescent boys described their relationships with the parents. For younger boys, a hierarchy existed, which suggested that respect for the father and doing what was right was the key to a good relationship, whereas with the older adolescent boys less hierarchy was observed but a more relaxed relationship was noted particularly with fathers. Among girls, the differences were non-existent as both younger and older adolescents emphasised the ability to talk and receive guidance from their mothers. The presence of mothers at home and ability to talk and receive guidance from them is another indication of existence of positive practise for girls.

With regard to living arrangements, the older adolescent girls who lived with both biological parents, did not mention close relations with fathers. It could be a characteristic of the rural setting from which these girls lived in, as fathers were revered.

As described by one of the older adolescent girls *“The father is heaven”*. The girl further pointed out that she never wants to cross paths with the father. Again, an indication of respect and fear.

Parents’ perceptions about relationships with their children

Younger adolescents’ parents

A similar question on relationships was asked to the parents/caregivers of the adolescents in the focus group discussions and in-depth interviews. Among the parents of the younger adolescents, parents also reported good relationships with their children. Some of the characteristics of a good relationship include problem-solving as a family, talking freely about issues, listening to each other and how adolescents should behave. The findings demonstrate a positive impact on communication as the relationship allows others to learn from an all-inclusive relationship which is conducive for talking freely about issues. For example, the parent below described her relationship with her adolescent as good because they solved problems together as shown below:

P5, Mother of girl, 10–14: “With me, relations are good, but there are problems here and there. However, most of the time you need to sit down with the children to solve problems. I do that. We try to resolve problems together and discuss how to manage it once we have identified what the problem is. I think that’s the right way.”

This caregiver responded to her relationship with her children by emphasising on listening to each other and that she had to start the discussion as the parent. This suggest that she demands respect from her children as stated:

P9, Caregiver of Boy10-14 “Me and my children, especially the older ones and also the little ones, we listen to each other. They don’t start the discussion because I’m the parent, in fact they will not say anything but then I will notice something and call them and sit down with them to talk about what ever needs to be discussed”.

It is not clear from the above excerpt whether relationships were good or bad but perhaps one can deduce that there was a level of respect between the parent and children. Given the above, it can be said that parents of the younger adolescents

commanded respect from their children in order to have a good relationship. Respect promotes good relationships.

The majority of the women that participated in the focus group discussion were not married. Further insights using the in-depth interviews on how perceptions differed by living arrangements show that women who lived with their children and no father seemed to be closer than those with partners in the house.

Older adolescents' parents

Among the parents of the older adolescents, parents also reported that their relationships with their children were good. The description of a good relationship was based on bonding as a family, being ok and closeness is a sign of connectedness. Close relationships were characterized by talking to each other and counselling children about behaviour as stated by some parents:

P8, Uncle of boy, 18–19: "The way we bond at home is by talking to each other. We discuss things. We always talk freely on how to behave, that you have to go to school, and if you don't go to school, what will happen to your life" .

P2, Mother of girl, 18–19: "We are ok. We tell children about how to behave and the way we were brought up".

P6, Mother of boy, 18–19: "We are close at home but sometimes you talk to your child as a parent though they don't listen to you, sometimes they do their own things. We talk to each other".

The perception of parents regarding relationships did not differ by the gender of the adolescent. Similarly, there were no differences in terms of living arrangements. Another observation from this group is that the caregiver highlighted being close to the adolescent as opposed to the adolescent whose relationship was less convincing with his sister. Perhaps this could be an indication of the dynamics between the same gender versus different gender. For example, the boy lived with his sister and the uncle lived with his nephew. Apart from the age difference between the siblings it is also possible that the uncle and nephew's relationship was stronger because they were of the same gender. The findings from the in-depth interviews tend to mirror those of the focus group discussions.

6.4.2.2 Do good parent-child relationships facilitate communication?

This question was not part of the initial discussion guide but became a follow up question to the relationships question as it allowed for a flow from the discussion on relationships to how these relationships facilitate communication between parents and adolescents. Adolescents had to explain how their relationships with their parents facilitated or hindered communication. Generally, the experiences of adolescents varied by age and sex. Among the younger adolescents good relationships with their parents did not necessarily translate to easier communication about sexual and reproductive health (SRH) issues. This is not a positive finding as it suggests that a good relationship is not necessarily associated with communication on SRH. This was mainly due to their age and that parents perceived them to be naughty if they asked questions about SRH. Younger boys reported that they would not ask their parents because they fear being reprimanded. Similarly older girls also experienced the same challenges where they felt that they could be scolded at or beaten if they asked questions relating to sexuality. By contrast, older boys reported that their close relationships with their fathers facilitated discussions on SRH communication as illustrated below:

P2, Boy 18–19: “It depends on the type of relationship you have with your parent”.

P5, Boy 18–19: “No for me, it is right. We talk, we talk about things similar to the ones we were talking about here. There is no problem and we respect each other”.

P4, Boy 18–19: “The person that I am very close to is my father. This means that he is the person that I talk to”.

The conversation below shows how young girls who reported having good relationships with their parents found it difficult to communicate with their parents on sexual and reproductive health issues.

F: Okay, alright okay. When I started I asked about your relationship with your parents and you said it’s ok because when you want to know anything from your parents, you ask them. Didn’t you say that?

P All Girls, 10–14: “We did”.

F: What do you say now?

P1, Girl 10–14: “With some things they tell us but with other things they do not want to tell us about, that’s what we said”.

The relationship and communication disconnect was also observed among the older girls. In an earlier discussion they mentioned that they lived well with their parents. However, subsequent discussions showed that they were not getting any information from their parents. This is shown in the following discussion:

P1, Girl 18-19: “We live well”.

P: (Cross talk): “We don’t get it mh mh they don’t mention that, they don’t talk about that”.

The adolescents attributed the problem to the parent as shown in the next statement:

P5, Girl 18-19: “Then your parent will blame you about that but yet they have never advised when you were growing up about how to prevent these things related to sex”.

The view pertaining to the disconnect between a good relationship was also identified among an older adolescent residing with his sister.

P3, Boy 18–19: “No, it is right, we are fine, life is fine. Even though she has never told me anything regarding AIDS”

F: Even the development of a boy’s body?

P3, Boy 18–19: “No, she has never”

It is however ironical that good relationships were not associated with communication on sexual and reproductive health. Therefore there is a need for parents to enhance their skills for positive communication. Further insights into the challenges will be highlighted in other sections specifically exploring communication between parents and adolescents.

6.4.2.1 Adolescents sources of sexual and reproductive health information

The participants were asked about the sources of information on sexual education. This question was asked because it is important to know where adolescents get information on sexual and reproductive health. Mothers, school, teachers, peers, older girls or

amaqhikiza and the media (radio, loveLife) were mentioned as sources of information. Mothers and the life skills programme were the main sources of information on sex education for the young adolescents. This was similar for both girls and boys. The sources varied by the age of the adolescents as well as by living arrangements.

Younger adolescents

For the young adolescents, the sources for HIV/AIDS information were mothers and teachers in the Life Orientation programme. This illustrates the interconnectedness described in the ecological model of an enabling environment for adolescent sexual behaviour. The findings show how individual, relationship and community are needed in promoting sexual health of adolescents.

There were no differences between girls and boys.

P6, Boy, 10–14: “My mother told me”.

P2, Girl 10–14: “My mother tells me.”

P5, Boy, 10–14: “My teacher told me”.

P2, Girl 10–14: “From our teachers. Like our principal comes to our classes and give us information about HIV and advises us. Teachers are not saying much but teach although they are the ones that advise us at school”.

This finding was also confirmed by in-depth interviews. For example, one of the boys was asked if he thinks there’s a person he can go to and talk about changes in his body, and he identified his mother.

Participants were also asked about other sources of information on sex education and the school was mentioned as one of the additional sources. Most of the younger adolescents were exposed to the life orientation programme offered at their school. The early exposure to life skills for adolescents is another resource that adolescents can use to supplement the lack of information from their parents on sexual and reproductive health. The following are examples of responses to the question, where else do you get information on sexuality issues?

P5, Boy 10–14: “Life Orientation.”

P1, Girl 10–14: “At school.”

While some of the young girls appreciated the information they received from school and how it validated the questions they had, younger boys were reluctant to follow up on information that they had received at school as they feared being reprimanded by their parents. This is reflected in the excerpts below:

P5, Boy 10–14: “She will scold at me”.

P2, Boy 10–14: “They will beat us. ...They even ask why you kept that information in your mind because you are still a child”.

Accordingly, some younger boys mentioned that it would be difficult to ask their parents about information on sexual issues.

P5, Boy 10–14: “It can be difficult”.

On the other hand, girls were reluctant to ask their parents because parents hid information or gave misleading information. In some instances, the young adolescent girls also felt that asking parents would be perceived as being naughty. This becomes a barrier in the quest to improve parent-child communication.

“That’s why we don’t like asking them questions because they will say we are a nuisance and we ask inappropriate things” (P2: girl 10–14).

One of the reasons cited for it being difficult to ask their parents about sexual issues is because parents were likely to say that they were still young. Some girls also indicated that the parent was the one hindering the communication on sexual issues.

Older adolescents

Older adolescents tend to have various sources of information. The main sources of information for older adolescent boys and girls were their peers and their parents. For older adolescents, the combination of parents and peers as sources of information demonstrates interrelatedness in the relationship level and fits in with the mesosystem as espoused by the bio-systems ecological theory, which shows the various influences that can affect an adolescent through individual and relationship .

Whereas some girls indicated that they did not receive any information from their parents, others stated that they obtained information from the older teachers at school but not during class lessons. Additionally, some girls mentioned that they approached older girls in their communities. Other girls also narrated that they received information from radio (loveLife programmes) and television. This positive practice of adolescents to seek information when it cannot be obtained from home also confirms that the enabling environment in the ecological model is necessary as individual and community provide other platforms for providing information.

Among those that reported that they discussed with their peers, this took place when they were hanging out as peers as illustrated by the two excerpts:

P2, Boy 18–19: “With us boys when we are alone we talk, like here in the rural areas we herd cattle... when we are together as boys, these are the things that we talk about”.

P6, Girl 18-19: “I have not discussed with any teacher. It’s only when I discuss with you (referring to her peers) at school or with other girls but not my siblings”.

P5, Girl 18-19: “We talk amongst ourselves”.

Among the older adolescent boys, fathers were also mentioned as a source, whilst some girls mentioned their mothers. However, few girls reported having spoken to their mothers.

P4, Boy 18–19: “From my father”.

P3, Girl 18–19: “My mother once told me”.

The girls also reported additional sources including teachers, older girls in the community and listening to the radio:

P4 Girl 18–19: “No we get it when we chat with other teachers at school that are older. I have not discussed with younger teachers”.

P: (Cross talk) Girls 18-19 “inokwama and listening to radio also”.

Another sub theme that emerged from the discussions was the role of culture. This was particularly true for the older adolescents’ girls. Three topics were mentioned which were

communicated to girls or girls were expected to observe. These were virginity testing. Culture required that girls remained as *izintombi* (virgins). This was not only a cultural practise to prevent pregnancy but also to keep the family pride. If however, girls decided to have a relationship it was expected that the relationship would be known formally through the practice of *ukumisi duku*. This meant that the boy was known in the family and allowed to visit the girl in her hut. The last practise that was communicated to girls was *ukusoma* (thigh sex) but it seems that this practice is no longer practised. Below is an illustration from one of the girls:

P2 Girl, 18-19: "So she also tells me (some things) but sometimes she tells me things that I know I wouldn't be able to do them. Because in my family there is culture. That you must not date. You must publicize your relationship, so she wants me to publicize the relationship by hanging up the doek (ukumisi duku). But I know that when I publicize my relationship I will be getting myself in trouble".

The fear of not being open because one might get into trouble is not good for adolescent girls as they would be receiving correct information if allowed to discuss with their parents on sexual and reproductive health issues.

6.4.2.2 Parents sources of sexual and reproductive health information

Parents were also asked where they received sexual and reproductive health information. Various sources were mentioned. These include among others the workplace and traditional sources. Parents also mentioned television, radio and church as other sources of information on sex education. Below are some of the responses provided to the question where do you get information on SRH.

P11, Mother of girl 10–14: "I got the information from work. They usually talk about it".

F: Ok so you learnt about it from the work place. When you were growing up, who taught you about sexual issues?

P11, Mother of girl 10–14: "My grandmother taught me".

F: Other parents, how were you socialised?

P5, Mother of boy 10–14: ‘In fact this is how we were brought up, we were not brought up using condoms but we practiced thigh sex (ukusoma). A girl was a virgin (intombi) and a boy would be a virgin (intsizwa)’.

Not all parents received information on sexuality issues as shown by the excerpt below:

P4, Mother of girl 10–14: “My mother does not talk to me about sexuality. My mother is old-fashioned, she does not talk about what a girl would do if she has a boyfriend”.

Parents were further asked to elaborate on the differences between sex education in the present and in the past. The question asked was how sex education took place in African communities? One mother said:

P2, Mother of girl 10–14: “They told us not just to stand anywhere or anyhow with a boyfriend. You had to tell your older sister so that there would be some good given by your family. The boy was not allowed to touch you. And (you were told) to have thigh sex as we were told to do so. We tell them (our children) that they must do the same but we don’t know whether they are doing it because they deny having relationships. But some of them have babies”.

The text shows that some parents were only familiar with old wives’ tales about sexual and reproductive health and thus not having the sufficient information to assist their children.

6.4.2.1 Triggers for communication

Both parents and adolescents were asked what triggers communication on sexual and reproductive health. Responses from both the younger adolescents and older adolescents suggest that parents react to an event or something that they observed. For example, the parent of the young adolescent was triggered by the start of menarche, whilst a trigger for among older adolescents were triggered by TV.

Younger adolescents

P2, Girl 10–14: “My mother once told me, what can I say? I was still young. She noticed that I was about to reach puberty”.

Older adolescents

P2, Boy 18–19: “Well sometimes is when maybe let’s say we are watching television then we see (something) on TV, then that’s how the conversation will start”.

This positive behaviour of seize the moment and media exposure is again an indication that parent-child communication is influenced and informed by various such as media exposure.

P4, Boy 18–19: “I can go and talk/approach my father”.

P5, Boy 18–19: “In my case something frightening would have happened and then he thinks that this thing would happen to his kids. Then he tells me to watch out.”

P1, Boy 18–19: “There are so many things that I tell him/her about (not clear 0:20:31) s/he also tells me that I should behave myself”.

P3, Boy 18–19: “She tells us that if it happens that I impregnate a girl, who will pay them”.

Parents

P11, Mother of boy 10–14: “Me, I have always been afraid to talk with my children about sexual issues but now with the TV thing and the nonsense, now I know that it is important that I talk with my children about things like HIV. I did not know”.

P5, Mother of Boy 18–19: “I was scared of talking to my children about sex, but because of these radios and TVs, I can talk freely about sexual issues”.

P6, Mother of Boy 10–14: “I see that the situation out there is not good for our children. emphasize on having one partner. You’ll never know where you got this disease”.

The role of the media as a facilitator is demonstrated in this positive behaviour where the parent seized the moment after exposure to the media. In the quantitative study the exposure to loveLife increased the opportunity to discuss about HIV and sex.

6.4.2.2 How difficult or easy is it for parents to talk to you as their children about issues related to sex?

Generally, there were mixed views about the difficulty in talking to parents. Some adolescents were of the view that it would be easy to talk to their parents because they would be discussing something that they had already experienced. As demonstrated by the response below.

P4, Boy 18–19: “It is easy”.

P5, Boy 18–19: “No I don’t see any difficulties because already she would be talking about something that she has already experienced”.

P2, Boy 18–19: “It usually depends on the type of relationship you have with your parent”.

However, others felt that it would not be as easy to do. As demonstrated by the excerpt below:

P2, Girl, 18–19: “It is not easy for me look my parent in the eyes and ask him/her about these questions”.

6.4.2.3 Who should provide information on sexual and reproductive health?

When parents were asked who should be providing information on sex education and why? Most responded that it should be the parent. However, one cannot deduce from the conversations why children should be receiving information from them and not other sources.

P8, mother, 10–14: “Children should come to parents and get information”.

Adolescents were also asked if there was a need for their parents to discuss sexuality issues with them. The majority of the respondents agreed that there was a need. One of the reasons cited by the older girls was that:

“it is because if you are a girl and then perhaps say find yourself dating a guy and then end up falling pregnant. Your parent will then blame you about it yet they had never alerted you when you were growing up. Let alone tell you what you need to do to abstain from sex” (P1, Girl 18–19).

Another respondent alluded to the fact that currently their sources of information were the older girls. However, these girls may not always give the correct information. As indicated in the excerpt below

“Because right now we are talking with the girls that are older than us. These girls may have a way of misleading us. Yet your parent would not tell you something that is wrong. Whereas the older girls may say do that. Like perhaps she could say ‘hey it’s ok to have sex but you must use a condom’, whilst your parent will not say that to you. Instead she will advise you and say my child refrain from ABC” (P3, Girl 18–19).

Among those who felt that they didn’t want their parents to give them information about sexuality issues, the main reason was that it would be very difficult to approach their parents as they feared them and thus would be unable to ask them everything. As indicated by the response below:

“You can’t ask too many things. There are words that you are afraid to say in front of her” (P4, Girl 18–19).

Boys also believed that there was a need for parents to educate them on sexuality issues. The reasons cited were that a parent will tell you what he already knows. That is has already experienced this and thus will be talking about something they already know. The respondent further indicated that the parents had more insight and because they are their children, parents had their best interest.

Another respondent also indicated that it is possible that you will get the wrong information from ones connections (i.e. friends).

6.4.2.4 Adolescents perspectives on sexual and reproductive health information provided by parents

The participants were asked about the type of information that they received from the parents. The results show that parents provide conflicting messages and at times are not forthcoming with information.

It is for this reason that some of the participants felt that even though they would like parents to give them information, school was the preferred source since they were given the correct information. It can also be noted that messages given to girls and boys differed. Among girls, parents were less factual but yet for boys practical information was provided such as usage of condoms, sticking to one partner to avoid HIV/AIDS or abstinence.

Younger adolescents

Generally female adolescents felt that their parents were not giving them the correct information and that there was a tendency to hide some of the information. The adolescents felt that it did not help them in learning more about sexual and reproductive health issues. This is demonstrated below:

P1, Girl 10–14: “My mother told me that a baby comes from an aeroplane while at school they told us that a baby is conceived by two people, (a boy and a girl) who are having sex”.

P5, Girl 10–14: “We get along very well with my mother, she talks to me about boys that I must not have a relationship because they get you pregnant and leave you (mhh)”

P6, Boy 10–14: “My mother told me that if a boy reaches a stage where he dreams about sleeping with a girl but don’t know what happens then”.

P6, Boy 10–14: “My mother told me that it is not good to date while you’re still at school because you’ll impregnate a girl while you don’t have money. Sometimes you can get HIV/AIDS”.

However not all adolescents get good counsel. For, example the following adolescent lamented: *P3, Girl 10–14: “they say they’ll kill us with their bare hands and tell us that we will see what you are going to do with the babies if you get pregnant”*

Older adolescents

For both sexes it is clear that the information received was about puberty, HIV and the likely events that might take place. For example, some daughters mentioned that prior to menstruation their mothers sat them down and told them that once they start menstruating they should inform them. Accordingly when the girls began to menstruate this created an opportunity for their mothers to tell them about menstruation. The beginning of menarche is an opportunity to discuss sexual and reproductive issues. Though it might be late, it is a positive behaviour from the parents’ side as it creates an opportunity to prepare and provide timely information or help to their adolescent girls.

For one of the girls at the age of 13, her mother informed her that when she is on her period, she should keep herself busy with household chores. This, her mother argued would prevent her from being lazy. In addition, she was told that she should not talk to boys whilst on her period as she would then like them (*uzodlula*). She was also advised that on the last day of her period she should polish the floor with cow dung.

Another girl mentioned that her mother told her that when she gets her period, she should inform her and she will then advise her accordingly. As such when her period started the girl informed her mother. For this girl, her mother said she should not sleep with boys. This meant that she must not have sex. She further told her that she must not talk to boys when she had her period as this would result in her engaging in activities that she doesn’t want to do.

For another girl, her mother started to have the conversation at the age 14. However at the time her mother had the discussion with her, she felt that her mother was abusing her since she did not understand what her mother was talking about. It was only after she had her period that she realised that her mother was in fact helping her.

P3, Girl 18–19: “I felt that she was abusing me”.

F: So you felt that she was abusing you?

P3, Girl, 18–19: “I only realised after it (menstruation) had happened. However when she told me initially, I became afraid. I was afraid that such things are still going to happen in my life”.

In essence, the common trigger for having discussions with the daughters was mainly the anticipation of the beginning of menarche or the commencement of menarche. For the majority of the girls, the conversation revolved around staying away from the boys and not befriending them lest they become loose. The concept of ‘uzodlula’ was mentioned mainly by the older girls whilst the young girls referred to a girl ‘ewuvanzi’. The former refers to being fast and the latter means being loose. Both show that culturally there was this perception that talking to boys especially at the first age of menarche was considered to be a curse.

Among boys the conversations differed with both mothers and fathers emphasising on using protection.

P4, Boy 18–19: “He told me that if you are a boy you must always watch out because I do not stay with her and I do not know what she is doing there. So this means that when I will have sex with her I must use a protection because I can be infected”.

F: So what do you use?”

P4, Boy 18–19: “A condom”

P2, Boy 18–19: “My parent told me to abstain”.

F: Why did she say you must abstain?

P2, Boy 18–19: “That is the way she wants to raise me”.

F: But why does she say you should abstain?

P2, Boy 18–19: “I think it is because she is a born again (F-Mhh) Everything has its own time in this world, so you should not be in a hurry”.

The information provided to younger adolescents versus older adolescents’ did not differ much. However, there were major differences in the information provided to boys and girls. Boys were provided with more factual information particularly in relation to

HIV/AIDS, whilst girls were given less information even in relation to handling menstruation and avoiding pregnancy. This behaviour by parents of providing conflicting messages to adolescent girls can be countered positively by equipping parents with information through the media, parental fora and parent-child dyad interventions.

6.4.2.1 Adolescents perspectives on sexual and reproductive health information provided in school (Life Orientation)

To answer this question, adolescent participants were probed about the type of information they received from the programme? This was done to better understand if there were gaps in what the school was offering and whether opportunities exist for parents to complement the programme. Some adolescents reported that the Life Orientation (LO) programme was more like a biology class. Others highlighted that the educator or facilitator of the programme also warned them about the dangers of early sexual initiation. As one respondent said:

P1, Girl 10–14: “They told us about HIV and that because we are young we are not supposed to do things that we are not allowed to do” .Crosstalk, Girls 10–14: “They explained that we should not have sex. They also explained how AIDS is transmitted. They also explained that you should not be a girl that is loose (ewuvanzi)”.

P6, Boy 10-14: “Yes at school they tell us that you can get HIV through unprotected sex”.

While adolescents in South Africa are exposed to life orientation, if regarded as a biology class it becomes more scientific and perhaps doesn't provide the adolescents with sufficient information and agency to negotiate with partners on protecting themselves from risky behaviour. However, when comparing how the information offered by parents differed from that provided by the school programme, some adolescents lamented that their parents were not always forthcoming with the truth. This was evident among the female participants. As one girl explained:

P1, Girl 10–14: “My mother does not explain well, while at school they give a full explanation even on how a baby is conceived. My mother told me that a baby comes from an aeroplane while at school they told us that a baby is conceived by two people, (a boy and a girl) who are having sex”.

P4, Girl 10–14: “Because there are many things that our parents do not tell, (they hide things) and tell us that they will tell us when we have grown”.

F: What do they hide exactly? And what do you want to know that they are hiding from you?

P4, Girl 10–14: “I want to know where I came from, how I was made. She tells me that I came from an aeroplane”.

P2, Girl 10–14: “Like how a baby is conceived, what you do with a boy to get a baby. Mom does not want to tell us what happens but at school they tell me what happens, and how it happens”.

On the other hand, there were also some adolescents who felt that the information they received at home was more informative compared to life orientation. Thus, sexual and reproductive health information from parents was more comprehensive than LO. For example, one respondent stated:

P2, Girl 10–14: “Our teacher doesn’t talk too much about HIV but my mother talks about it more, (she) advises us about it. Our teacher just talks about our body and she never talks about HIV and sex. Even in science we learn about it but it is not talked about a lot”.

All, Boys 18–19: “They are helping us”.

P5, Boy 18–19: “Because in this era there are so many diseases and are transmitted easily and also this thing of getting pregnant is easy”.

It is clear from these findings that the role of parents and school as complementary sources and also fits well into the ecological model of the different domains that are needed to improve the sexual and reproductive health so adolescents.

6.4.2.2 Parents perspectives on sexual and reproductive health information provided to adolescents

Parents were asked if they talk to their children about sexual issues. Some parents indicated that they taught their children about sexual issues. This is another indication of where TV or media facilitates SRH communication. For others it has been difficult to have such discussions but the advent of HIV and information on television has reduced the shame associated with talking about sexuality issues.

Parent of younger adolescents

P9, Mother, Boy 10–14: “Me and my children, especially the older ones and also the little ones, we listen to each other. They don’t start the discussion because I’m the parent. In fact, they will not say anything but then I notice something I call them and sit down with them to talk about what ever needs to be discussed”.

P7, Mother of Boy/girl 10–14: “You sit down with your children and tell them how you grew up and that you wish for them to be good. Girls are taught that if they want to enter a relationship they must consult their older sisters. You always tell them to have an open relationship. So we can know their boyfriend’s family’s home and the boys know the girlfriend’s family. But I still treat them as kids though they are 18 years old. Because if a relationship is hidden it won’t end up in a right way”.

Parents were asked what information they provide to their children. For younger girls the nature of discussions on sexuality issues tend to be out of fear rather than from a loving and developmental view. Some examples of the scare tactics used include:

P5, Mother of Girl, 10–14: “I’ll tell her if someone touches that (referring to female genital organs), I would kill her. I scare them so no one would touch her”

P3, Mother of Girl, 10–14: “I make her to be afraid so that there should not be anyone touching in here (referring to private parts)”.

This approach is not the best but it appears that it a common phenomenon as some of the girls reported:

Parent of older adolescents

The majority of parents' discussions centred around HIV and more specifically how to protect oneself as shown in the excerpt below:

P11, Uncle Boy 18–19: . (Laughing) “Even with the boys, it is the same thing. I tell them that when they have started dating other people’s kids, they must use condoms because you will trust that person only to find that the person is cheating. You might be faithful to her and yet she might not be faithful to you”.

P5, Mother Boy 18–19: “We talk to them a lot until we reach the part that when they have a girlfriend they should use protection when having sex”.

These sentiments were also shared by another parent in the group

P3, Mother of Girl 18–19: “To stick to one partner. She must not go from partner to partner”.

P6, Mother of Boy, 18–19: “I see that the situation out there is not good for our children. I emphasize on having one partner. You’ll never know where you got this disease”.

6.4.3 Timing of communication

The timing of communication is divided into two themes. The first theme focuses on the time the communication took place as presented by the adolescents. The second theme is the timing suggested by adolescents and parents as to when sexual education should take place.

6.4.3.1 At what age did communication on Sexual and Reproductive Health (SRH) take place with parents ?

The question on what age information did communication take place was asked to both adolescents and parents. Among the girls conversation began around puberty.

Older adolescents

P2, Girl 18–19: “No I talked to my mother when I started having my periods because she saw me and she sat me down and told me that I must not be close to boys because I had now started menstruating. I was 13 years”.

P 4, Girl 18–19: “No she just told me that when I start having periods I must tell her that it is now so, she will then advise me and she advised me that I’m not supposed to sleep with boys but the tradition stuff she never told me. Maybe I was 14 years”.

6.4.3.2 At what age should communication on Sexual and Reproductive Health (SRH) take place with parents ?

Younger adolescents

The boys and girls were unanimous in their views about when sex education should start. Most felt that sex education should be given in the pre-teen years.

P6, Boy 10–14: “Maybe you should get it from the age of 9, 10,11 years”.

P4, Girl, 10–14: “I think when we say you are old, that is when you are 10 years. I think she is old enough to do anything and that is the time to talk with her”.

Parents Perspectives

The age at which sex education is offered is important in promoting sexual behaviour. Unlike the adolescents, parents response to the question when should sex education start was varied. Some parents thought it would be better to educate the child when they were still young (age 7). Other others felt that parents needed to wait until the child reached puberty. Reasons for this were that a child may not be able to understand the conversation. Below are some of the reasons cited by one parent:

P3, Mother of Girl, 10–14: “to be able to talk to a child like she’s 10 (talking) years she’s always dirty but at about 13 she bathes 3 times a day. She is always shining. If you want her to go somewhere she bathes first and iron sometimes, a child backchats. And when puberty starts, you see a change you tell her how to do things, always looking through the window. Sit down with her and talk. Tell her how to behave before she has a baby”

From the findings, it was established that Life Orientation at schools starts at an early, around age nine as most of these adolescents indicated that they were exposed to the programme in the early grades of elementary schooling. This suggests that there have been significant changes in the implementation of the programme, as younger learners were now getting exposed to the programme at school. The question then is why does a country like South Africa continue to have high levels of risky sexual behaviour?

6.5 Discussion and Conclusion

The study examined the socio-cultural factors associated with parent-child communication in two rural communities in KwaZulu-Natal South Africa. The study allowed for discussions between young adolescents (10–14years) and their parents/caregivers and older adolescents (18–19 years) and their parents/caregivers. The findings from this study show that the socio-cultural context of parent-child communication is imbedded in an ecological framework that shows the role of parents and extended to other areas such as school, peers, and school and community factors. The study examined parent-child relationships among parents and children, sources of information on sexual and reproductive health for both parents and children, information received from school based programmes and information received from parents, reasons why adolescents were not talking to their parents about sexual and reproductive health matters and who should be teaching children on sexual and reproductive health issues and timing for such conversations.

With regard to understanding the type of relationships parents had with their children, the findings show that both parents and adolescents reported positive relationships between themselves. This finding is consistent with the ecological systems theory that shows that in the microsystem relationships and interactions are bi-directional

(Bronfenbrenner, 1995). However, these relationships differed by sex, adolescent age group and by living arrangements. For young adolescent girls, good relationships meant the ability to talk with their parents, whilst among the young adolescent boys good relationships were measured by 'good behaviour'. In other words, as long as they behaved in an acceptable manner then relations would be good. Among the older adolescents relationships were perceived to be good although this also depended on the sex of the participants. The older adolescent boys who resided with their fathers, reported being closer to the fathers. This finding shows that the role of fathers is important for the boys particularly boys that are in their late adolescent ages. Studies that have examined parent-child relationships have supported the hypothesis that having a resident father has positive effects on adolescent behaviour and this can be true for both girls and boys (Carlson, 2006).

Among the older adolescent girls, mothers were cited as those with closer relationships. However in some instances these relationships were illustrative of how mothers supervise and monitor their children's activities. For parents, good relationships were defined by the ability to talk to each other and to listen to each other. This finding conforms to a study on parent-child connectedness conducted in rural Tanzania by Wamoyi and Wright (2014). Parents reported that one way they showed love was through talking and spending time together for both genders. Young people also reported living in harmony as an indication of being in a good relationship.

Although both adolescents and parents indicated that they have good relationships, these did not seem to enhance communication between them. This was particularly evident among the female adolescents who reported that they were reluctant to ask their parents about sexual information because parents did not provide them with the correct information or would scold them if they enquired about information that they had learnt from school. This finding reiterates Somers, Tolia and Anargurthi (2012) that "simply having close relationships may not be sufficient for sexual communication to occur" (2012, p.67). Similarly, Muhammad and Mamdouh (2012, p.2) noted among mothers and daughters in Egypt that "even mothers and daughters who considered their relationships

close and their communication good admitted that there were many taboo subjects that they could never discuss together”.

Further showing the disconnection between good relationships and sexual and reproductive communication is a study conducted by Isenberg (2011, p.30) in Zambia. This study concluded that “although a few of the adolescents said they had an open relationship with their parents, the overwhelming majority reported that they would rather seek information from other sources than their parents. This is in spite of the adolescents believing that having conversations with their parents was important and wished more frequent conversations with their parents (p. 30). The findings tend to contradict Lukolo and van Dyk’s (2014). This gap between communication on sexual and reproductive health between parents and children is an important finding for policy and programming perspective and provides an opportunity to build skills for communication as good relationship already exists.

Parents and adolescents were asked about the sources of information on sexual and reproductive health. A main outcome in the research was the multiple sources that were used by adolescents and parents to gain information on sexual and reproductive health. For younger adolescents these were mainly teachers and parents (albeit with limited information provided). Whilst among the older adolescents, peers and parents were the main sources. Additionally, adolescents used these sources to supplement information obtained from one source. This illustrates how the mesosystem operates through the interaction of structures in the microsystem. For example, if one considers the family-peer mesosystem, it shows that adolescents do not only rely on parents for information but also acquire it from friends. Thus, improving on their sexual and reproductive health knowledge base. Similarly, when one considers the family-school system adolescents mentioned school and teachers as sources of reproductive health information. This shows that there is not one source on sexual and reproductive health information but also that there are interlinkages between the sources.

Both male and female adolescents mentioned mothers as the main. These findings are consistent with other studies (Manu *et al.* 2015; Wilson and Koo 2010; Atienzo *et al.* 2009; Sneed, 2008). While there is sufficient evidence that mothers are generally the ones who have been communicators on sexual and reproductive health matters, it is also possible that in this community the majority of the adolescents only lived with their mothers as such the communication with fathers could not be determined. For example, in one of the focus groups a substantial number of mothers reported not being married, which is quite common in the South African context where fertility takes place outside of marriage (Posel and Rudwick, 2012; Palamuleni *et al.* 2007). Another factor that has been pervasive in the literature is the absence of fathers or non-recruitment of fathers. During recruitment of parents, concerted effort was made to recruit fathers for the male pairs. However, this became a challenge as fathers were not available to participate in the focus group discussions. The 2011 survey of young people reported that low communication among fathers could be due to the absence of fathers. In the study, 68.6% of fathers were alive but only 66.3% lived with their adolescent children (loveLife, 2012).

The results also showed that the boys' responses were laconic, thus not giving sufficient information to better understand parent-child communication from a male perspective. On the contrary, the young girls were vocal about the challenges they had and the role that their parents played. Many parents reported that they provided information to their children. However, the conversations were usually threatening or raising fear in the child. Though parents were socialised differently from their children, there was a huge understanding of the present day challenges that young people were facing. As such they have embraced and learnt the need to provide information to their children. Notwithstanding, there is still an opportunity to equip parents to talk more freely and honestly about sexual issues.

Another source on sexual and reproductive health that was mentioned by adolescents, were schools and teachers. Adolescents also mentioned that at times it was easier to talk to their teachers than their parents because of the type of information that they received from their parents, which was sometimes perceived to be incorrect. There is no doubt that school teachers' play a critical role as a source of information given the focus on school based sexual and reproductive health programmes in South Africa and elsewhere.

In addition, the reliance on different sources of information points to the need to address sexual and reproductive health matters collectively and across multiple sectors. Many other studies have also found that the school and teachers were an important source (Wilson *et al.* 2010; Bankole *et al.* 2007). In this study, adolescents noted that preference for schools and teachers was because parents did not always provide them with the correct information but also feared reprisal from their parents in case they wanted to know more about something they had learnt at school. Parents in this study reported work, grandmother, traditional sources and never having had a discussion on sexual and reproductive and health information.

The findings also show that parents did not necessarily have conversations with their children and used fear to communicate about sexual issues. Such findings have been observed in other studies (Lebese *et al.*, 2011).

The majority of teenagers' mothers viewed that the lack of parental supervision contributed to teenage pregnancy. The inability of parents and caregivers to communicate with children on aspects of sexuality is a contributing factor.

The findings from this study show that triggers for communication were mainly a result of puberty or when there was something that had happened on TV. Indeed, these findings point to the fact that it not easy to initiate discussions on sexual and reproductive health. It is even more difficult in a society where culturally parent-child communication is not the norm.

6.6 Policy Implications

The study found that limited communication on sexual and reproductive health exists between parents and their children. This creates an opportunity for future interventions to develop modules that will encourage further communication and later on translate to moving towards discussion on sexual and reproductive health as discussions about other issues were already in place. Expanding the content on communication topics remains paramount. For example, girls were likely to receive information about menstruation,

abstinence and HIV, yet are faced with challenges of coerced sex, gender based violence and unintended pregnancies.

Boys in the study also believed that there was a need for parents to educate them on sexuality issues. Indeed many interventions focus on girls and leave boys from the programme, which then disadvantages them from acquiring knowledge like their peers. Empowering girls alone doesn't help with changing gender norms and the culture of sexual and gender based violence in adolescent relationships.

The timing of parent-child communication happens late when adolescents have reached puberty or engaged in sexual activities, future interventions must recognise that early interventions are likely to curb risky sexual behaviour. The positive relationship between parent child communication and risky sex observed in the quantitative study may be indicative of communication happening after sexual debut. However, the quantitative findings showed that higher levels of parent child communication between parents and their children, whilst the qualitative findings found that young adolescents were less informed and needed information.

6.7 Limitations of the study

Although the study considered younger adolescents 10–14 and older adolescents 18–19, the age group 15–17 years was excluded. Therefore, views presented in this paper cannot be generalised for adolescents. Additionally, given the nature of qualitative research, the findings are not generalizable to South African adolescents as sampling was done purposefully and the study is located in a specific area in KwaZulu-Natal. A further limitation of the study is that only adolescents that were in school were recruited, despite that recruitment for the younger adolescents took place in their communities.

A major limitation in this study is the missing voice of the father. This could have helped corroborate the findings from the quantitative study. Failure to recruit fathers into the study may have been a result that recruitment teams and the interviewers were females, thus interviewing men on sexual and reproductive health topics was culturally inappropriate. Further the age of the researcher could have been an issue, especially in a rural setting. Thus in future, research teams need to be matched by gender. Another limitation in this study was that the focus was on African adolescents and their families. It

would have been helpful to get a wider perspective including other races so as to learn more about their context. However, given time and finances this was not possible.

6.8 Suggested Future Research

Singhal and Dura (2017 p.1), note that “every community has individuals or groups whose uncommon behaviours and strategies enable them to find better solutions to the problems than their peers, although everyone has access to the same resources and challenges”(p.1). In this chapter, there were positive practices that help young people and parents to engage in sexual and reproductive health communication. The behaviours identified were parents enforcing discipline, rules and family values; children and parents listening to radio or TV programmes that promote sexual and reproductive health. This information was used either to initiate discussions on sexual risk communication or for learning. The parent-child quality relationship was also evident despite not encouraging parent-adolescent communication. Self-regulation and self-control and having adult role models who provide information to girls in the school or community was practiced by older girls. Adolescents also mentioned discussing with friends about sexual and reproductive health issues. Parents/caregivers mentioned parental monitoring and regulation was by mentioned both of parents of younger and older adolescents. Whilst these behaviours do not demonstrate positive deviance, it would be worth considering a positive deviance approach in future research so as to inform future interventions.

Chapter 7: A literature review on selected parent-child communication interventions in South Africa

7.1 Introduction

7.1.1 Interventions to reduce adolescent sexual risk behaviour

Several behavioural interventions have been undertaken to influence adolescent sexual and reproductive health. However, the impact of these interventions continues to produce mixed results. Given that resources are limited, it is important to understand why some interventions have failed to meet their objectives and begin to identify possible strategies that can be developed or enhanced to meet the sexual and reproductive health of adolescents. Chandra-Mouli, Lane and Wang (2015)'s review of what does not work in adolescent sexual and reproductive health identified five thematic areas that inhibit the demonstration of positive impacts on adolescent risk behaviour. These include poor coverage (i.e. the majority of adolescents are hardly reached by the interventions that are intended for them); the consistent continuation of implementing ineffective interventions; the ineffective delivery of effective interventions; interventions delivered piecemeal thus showing limited effects; and limited exposure leading to limited intensity impact. Each of these thematic areas will be discussed in detail in order to better understand the context in which interventions are delivered with limited impact. Although the scope of this chapter pertains to interventions on parent-child communication, it is important that a broader discussion on interventions is undertaken before focusing on the primary purpose of the chapter. This is done to give some context, specifically pertaining to interventions, as I have not given it in-depth coverage in the previous chapters.

Poor coverage. One of the areas identified by Chandra-Mouli, Lane and Wang (2015) is that adolescent interventions fail to show a positive impact because of poor coverage. Poor coverage may hamper the success of the intervention because only a few people are able to access the service. Erulkar, Beksinska and Cebekhulu's (2001) assessment of twelve youth centres from loveLife, the United Nations Population Fund-Department for International Development (UNFPA-DfID), the Youth and Adolescent Reproductive Health

Programme (YARHP), and KwaZulu-Natal (KZN) Provincial Department of Health in South Africa found that only 30% of adolescents were reached by youth-friendly services (YFS) within their vicinity. Similarly, Geary *et al.* (2014), found that in the Agincourt district of Bushbuckridge in Mpumalanga, only one of eight publicly funded primary health care (PHC) facilities provided YFS, which was well below the target of 70% set by the National Department of Health (NDOH) in 2012/2013 for PHC facilities to implement the YFS programme. The two studies do not only reflect low coverage for a country like South Africa which has high sexual risk behaviour among young people, but also show that there is a decline in YFS. So rather than scaling up facilities, there has been a scaling down of YFS between the two periods when the assessments were made. One of the reasons why there has been a decline in access to YFS is the move towards funding HIV programmes at the expense of sexual and reproductive health programmes.

Ineffectiveness. A second shortcoming identified by Chandra-Mouli, Lane and Wang (2015) is interventions that have shown to be ineffective but yet continue to be implemented, such as youth centres aimed at increasing the uptake of contraceptives and other health facilities; peer education to encourage safe sex behaviours; and high profile public meetings to inform communities about harmful sexual and reproductive health practices and to urge them to abandon these practices (Chandra-Mouli, Lane and Wang, 2015). For example, peer education is one of the strategies used in promoting adolescent sexual and reproductive health. However, these interventions have had limited impact in meeting their objectives (Tolli, 2012; Harrison *et al.* 2010). In fact, studies have shown that peer-education benefits the peer educators more than the intended beneficiaries (Chandra-Mouli, Lane and Wang, 2015). Some authors have also noted that peer educators are expected to impart positive behaviour towards their counterparts, and to do this they need to apply these prevention methods in their own lives. This therefore, “burdens the peer educators with role conflicts as trainers, learners and social beings who struggle with their needs and expectations of others” (Maleta, 2006, p. 15). Further, peer educators may come from the same community or school as those they are educating and so might not be taken seriously by their peers. The review on peer education effectiveness for young people of member countries of the European Union by Tolli (2012) found no clear evidence that it does work with regard to HIV prevention,

adolescent pregnancy prevention and sexual health promotion. Tolli concluded that “the benefits of peer education are not as evident as the popularity of the method suggests” (p. 911).

Inadequate delivery. The third challenge identified was that some interventions that were effective were delivered inadequately. A case in point is that of providing adolescents with comprehensive sexuality education (CSE), which is akin to Life Orientation (LO) programme in South Africa. In South Africa, teachers have been found to be reluctant to teach sex education. According to Beyers (2013, p. 551), “teachers are unwilling to engage in dialogues, because they themselves are uncomfortable in the teaching of sexuality”. While teachers recognised the need for openness with youth about sexuality, they were also not comfortable in addressing all issues that young people might need to be taught regarding sexual health (Beyers, 2013).

This view has also been supported by Thaver and Leao (2012), who suggested that studies showed that some educators felt uncomfortable when teaching safe sexual behaviour, as the concept can conflict with their beliefs or the beliefs of the community. Therefore, “these educators experience a constant dilemma between providing safe sex education and adhering to their own personal or community values” (Ahmed, 2006, quoted in Thaver and Leao, 2012, p. 89). The studies by Beyers (2013) and Thaver and Leao (2012) show that there is a conflict of interest between teachers’ value systems and delivering their mandate as educators, which results in a failure to deliver the curriculum effectively. As Beyers (2013, p. 551) concludes: “in theory the life orientation curriculum should empower youth for their future lives but in practise there is a need to address inconsistent implementation, the content taught, as well as the limited time spent on sexuality education nationwide”.

A further shortcoming that has been identified with the life orientation programme is that, even if it might have made an impact on HIV and AIDS knowledge and awareness levels, it has not had a significant impact on the behaviour and attitudes of young people as envisioned by national policy on promoting behaviour (Thaver and Leao, 2012). One explanation that can be provided for the lacklustre performance of the programme comes from the results of the 10-country review on the sexuality education curriculum

conducted by the United Nations Educational, Scientific and Cultural Organization (UNESCO), which identified that the main problems with the sexuality education curriculum were gaps in content and approach.

In South Africa, eight topics were found to be moderate to seriously weak in the curriculum. These topics were self and others; relationships, including power in relationships; human development, puberty, body and reproduction; sexuality and sexual behaviour; communication, negotiation and decision-making skills; gender focus, human rights base, age appropriateness; empowering young people/amplifying young people's voices; and sexually transmitted infections/human immunodeficiency syndrome: prevention, including condoms. Two topics: treatment and care; and personalizing content, diverse methods were minor to moderate in terms of weakness, while no significant gaps or concerns were found on pregnancy, contraception and abortion; and critical thinking skills (UNESCO, 2013, p.23). These weaknesses would suggest that on average the sexuality education curriculum in South Africa has failed to inculcate the skills necessary to change and influence behaviour.

Apart from the weaknesses highlighted in the curriculum and delivery of the curriculum by educators, teachers have also faced opposition from parents, religious and community leaders when implementing the life skills curriculum (Thaver, 2012). In Namibia, sexual and reproductive health education is not examined, and hence neither learners nor teachers take it seriously (Nambambi and Mufune, 2011). Further, many young people are not in school and access to school-based health education may not be accessible to these young people (Nambambi and Mufune, 2011).

The timing of the provision of sexuality education in schools has also been cited as one of the reasons why it is difficult to influence behaviour. For example, teachers interviewed by Beyers (2013) proposed that youth should be taught about sexuality issues before they become sexually involved. This confirms Haberland and Rogow's (2015) view that many experts recommend starting (age-appropriate) sexuality education as early as the age of five years (Haberland and Rogow, 2015). On the other hand, Thaver and Leao (2012, p. 89) suggest that "parents must also take the lead in teaching their children about sex and sexuality as part of their socialisation processes". The challenges faced in the

implementation of comprehensive sexuality education in schools have resulted in a need for parents to also contribute as sexuality educators and is an important strategy in meeting the unmet need of sexuality education among young people.

Another intervention that has been found to be effective but yet delivered inadequately is that of providing adolescents with appropriate sexual and reproductive health services (Chandra-Mouli, Lane and Wang, 2015). A literature review undertaken by MietAfrica on youth-friendly health services reported that barriers experienced by adolescents in accessing these services were mainly related to cost, the non-youth-friendly attitude of staff, clinics not being accessible in terms of distance, and clinics not providing privacy and confidentiality (MietAfrica, 2011). A study conducted in Malawi on the capacity of facility-based youth-friendly reproductive health services to promote sexual and reproductive health among unmarried adolescents found that these facilities were not sufficiently able to empower the adolescents, communities and health workers to take responsibility for adolescent reproductive health (Jimmy-Gama, 2009).

Part of the reason for this was because Malawian society is culturally conservative, and “it is difficult for health care workers to become cultural change agents as training policies do not empower them but emphasise on the provision of sexual and reproductive health education, life skills development and community participation ”(Jimmy-Gama, 2009, p.246). Similarly, in a more recent study conducted in 2012 in SOWETO, South Africa, young people visiting health care facilities reported that communicating with health care providers about their real concerns was a challenge (Lince-Deroche *et al.* 2013). This finding is supported by results from simulated client visits to youth-friendly health services in urban South Africa, which showed no evidence that the experience of young people making use of these services was more positive than that of young people attending health services which were not badged as ‘youth-friendly’ (Geary *et al.* 2014). This means that success of interventions does not only lie in the provision of services but also in the quality of the service provided to adolescents.

Piecemeal delivery. The fourth reason cited by Chandra-Mouli, Lane and Wang (2015) in discussing interventions that have not worked with adolescents is that some interventions are delivered piecemeal. The authors argue that in many instances

interventions are not coordinated and are fragmented, hence resulting in negative outcomes. For example, Beksinska, Pillay and Smit (2014) highlight that one of the challenges faced by the HIV and AIDS life skills education programme was that it was not integrated into the school systems and policies when introduced in 2000. This then led to the 2003 National School Health Policy as discussed in Chapter two. Although this allowed for the integration of school and other district services, there was still an absence of referral services to respond to problems identified in the screening. Therefore in 2009, the HIV and AIDS life skills education programme was revised to make way for the introduction of school based support teams and school management teams. This led to an integrated school health policy in 2012.

Low intensity and lack of follow-up. The final reason put forward by Chandra-Mouli, Lane and Wang (2015) is that interventions are delivered in a low dosage' and are not sustained. A comparison of the safe-from-harm pilot programme to improve parent/child communication about sexual health in South Africa and Zambia showed that the Zambian pilot was more successful than the South African programme because meetings in South Africa were held once a week compared to multiple times per week in Zambia (Greene *et al.* 2008). In a study conducted by Jemmott *et al.* (2014) among adolescents in the Eastern Cape, the authors highlight how long-term follow up is important in evaluating interventions. The intervention was 4.5 years long and allowed investigators to evaluate the intervention over time. This enabled the researchers to conclude that it was important to have longer interventions so as to be able to assess the impact.

In the light of this background, "it has become increasingly clear that strengthening access to, and the quality of, services, does not alone suffice to improve health outcomes" (Svanemyr *et al.* 2015, p.57). Thus, it has become important to build enabling environments at multiple levels with adolescents, families, communities and society at large in order for adolescents to realise their sexual and reproductive health and rights (Svanemyr *et al.* 2015). Kuo *et al.* (2016) also point out the paucity of family-based approaches in HIV prevention science, particularly in the South African context. Therefore, this chapter focuses on family-based approaches, and specifically on the interventions that have been assessed to measure the impact of parent-child communication on sexual and reproductive health and adolescent sexual risk behaviours.

7.1.2 Interventions on parent-child communication and their impact on adolescent sexual risk behaviours

The evidence about interventions on parent-child communication and their impact on reducing adolescent sexual risk behaviours remains limited. Among the systematic reviews that have been undertaken, the majority have been in developed countries, especially the United States (US) (Santa Maria *et al.* 2015; Ryan, Roman and Okwany, 2015; Sutton *et al.* 2014; Wight *et al.* 2011; Downing *et al.* 2011). For example, Santa Maria *et al.* (2015) undertook a systematic review and meta-analyses of parent-based adolescent sexual health interventions and the effect these had on parent-child sexual health communication and parental comfort with sexual health. The interventions reviewed were intended to reduce sexual risk behaviours by bolstering parent protective behaviours such as parent-child communication about sexual health and parental monitoring (Santa Maria *et al.* 2015). One of the questions the authors sought to answer was ‘what is the impact of parent-based interventions on parent communication and sexual behaviour?’ The authors reviewed 28 published trials undertaken in the US between 1998 and 2013.

Although the review showed an effect of the intervention on communication, it was unable to illustrate how improving communication directly affects adolescent sexual behaviour even though these interventions were intended to reduce sexual risk behaviours in adolescents. In contrast, a review by Wight and Fullerton (2013) identified three studies where parental involvement had an impact on sexual behaviour. These studies targeted African-American parents of adolescent children and encouraged abstinence. Similarly, a review by Sutton *et al.* (2014) on 14 US-based parent-child communication interventions among African- American and Latino young people between 1998 and 2012, illustrated that parent-child interventions that included parents of youth who are disproportionately affected by HIV/STIs were able to reduce sexual risk in young people. They led to increased condom use, decreased sexual activity and had longer follow-up times. Downing *et al.* (2011) reviewed studies in the United Kingdom, Western Europe, Australia, New Zealand, Canada and the US, but found no evidence to

suggest that improved communication had an effect on the sexual risk behaviour of the young people subject to the interventions.

The studies above are on developed countries. There is a huge gap in the literature on the effect of parent-based interventions on influencing adolescent sexual risk behaviour in low and middle income countries, and a particular dearth of studies focusing on sub-Saharan African countries. The study by Wamoyi *et al.* (2014) is among a few that evaluated the impact of a parent-based intervention on sexual behaviour in Africa. The authors discussed two studies implemented in Kenya and Tanzania but did not show the impact of these interventions on adolescent sexual risk behaviour. The review by Bastien, Kaluja, and Muhwezi (2011) was more comprehensive but limited to parent-child communication interventions and did not demonstrate how these influence behaviour, which would be the ultimate aim of most interventions.

In South Africa, a few interventions have been evaluated. Bogart *et al.* (2013) tested a worksite parent programme aimed at improving parent-child communication about HIV and sexual health, and parent condom use self-efficacy and behaviour. As observed in the study by Wamoyi *et al.* (2014), Bogart *et al.* (2013) show that the intervention led to an improvement in communication but are silent on whether increased communication had an effect on the adolescents' behaviour. Tarantino *et al.* (2014) examined factors influencing the effectiveness of a parent-based HIV prevention intervention implemented in Cape Town, South Africa. The intervention randomized 99 caregiver-youth dyads into intervention or control conditions and assessed them longitudinally. As seen in previous evaluations, there was an improvement in parent-child communication about sex and HIV, but no mention of whether these conversations led to the reduction in sexual risk behaviour. On the whole, it appears that among the evaluations undertaken, the big gap is in measuring the effectiveness of parent-child communication programmes on adolescent sexual risk behaviour. It is possible that one of the reasons for this is because the impact on behaviour takes time to work through, and the short duration of the projects thus does not allow enough time for it to be assessed. This chapter attempts to address some of the limitations observed in the evaluations considered above.

7.2 Research aims and objectives

The aim of the chapter is to identify alternative ways to enhance prevention strategies aimed at promoting parent-child communication on sexual and reproductive health issues. It is important to note that the study was undertaken before most of the reviews referred to in section 7.1.2 were conducted. However, the context remains largely the same because there are still a few interventions to promote parent-child communication in South Africa. To date, published interventions include the Collaborative HIV Adolescent Mental Health Program (CHAMP), *Imbadu Ekhaya*, VUKA family programme, *IMAGE* project, Safe from harm pilot and the *Let's Talk* work-based pilot (Kuo *et al.* 2016; Armistead *et al.* 2014; Bana *et al.* 2014; Tarantino *et al.* 2014; Bogart *et al.* 2013; Bhana *et al.* 2010; Phetla *et al.* 2008; Greene *et al.* 2008;; Bell *et al.* 2008). The findings from this study can still be used to contribute to the discourse on family-based interventions, particularly because parent-child communication remains taboo in most South African societies and it is therefore important to recommend culturally sensitive strategies that will enhance such interventions.

Specific research objectives were to:

1. interview selected service providers on certain parent education programmes to establish whether these programmes reduce sexual risk behaviours;
2. review the resources on parent-child communication used by the service providers mentioned in objective 1;
3. recommend culturally sensitive strategies that can be used to promote parental involvement.

Research questions

1. Do existing programmes aimed at improving parent-child communication meet their objectives to reduce adolescent sexual risk behaviours?
2. What culturally sensitive strategies can be identified from the data that can promote parental involvement in promoting the sexual and reproductive health of adolescents?

7.3 Data collection

Key informants were identified from two interventions and two programmes and conducted as part of the qualitative study in 2006. These were selected on the basis that they targeted young people and involved the participation of parents to enhance communication with their children. This was done to better understand how young people communicate with their parents and also to identify the barriers, so as to recommend strategies to enhance parent-child communication and its impact on adolescent sexual behaviour. The two interventions were the Collaborative HIV Adolescent Mental Health Program (CHAMP) in KwaZulu-Natal and the South Africa Tanzania project SATZ in Cape Town in Western Cape and Mankweng in Limpopo. The two programmes were the parent education programme implemented by the Planned Parenthood Association of South Africa (PPASA) in Wentworth and an informal settlement on Quarry road in Durban, and the No Apologies programme by Focus on the Family in the Valley Trust in Durban.

All key informants were sent information sheets in advance by email, and then contacted telephonically to secure an appointment for the interviews. Six key informant interviews were conducted. Of these, four interviews were face to face interviews and two were conducted telephonically. The latter were carried telephonically because the participants were not located in KwaZulu-Natal and because there was no budget for long distance travel. Interviews were conducted mainly in English. Four of the key informants were males and two were females. Interviews lasted approximately 90 minutes. See Appendix D for the interview guides for the key informant interviews

The topics discussed were the perceptions of stakeholders with regard to efforts aimed at improving parent-child communication, and existing barriers to attracting parents in enrolling in the interventions or programmes. Additionally, the researcher wanted to know if these studies had been successful in meeting their objectives, particularly in relation to promoting parent-child communication and whether it had an impact on the adolescents' sexual behaviour. The researcher also acquired educational materials so as to acquaint herself with the resources used in the interventions and programmes. A

review of published evaluations was also undertaken, given that at the time of data collection none of the evaluations had been undertaken.

7.4 Interventions and Programmes

In this section, a brief description of each project is provided. The overview presented covers the purpose of the project, the study location, target group, sample size (if available), duration of the project and how the project was implemented.

7.4.1 Interventions

Collaborative HIV Adolescent Mental Health Program (CHAMP) Amaqhawe

The Collaborative HIV Adolescent Mental Health Program (CHAMP) KwaZulu-Natal, CHAMP was a community-collaborative developmentally timed intervention (Bhana *et al.* 2010). CHAMP was introduced into South Africa in 2001 through a collaborative partnership between the University of Durban-Westville, the Human Sciences Research Council and its USA partners in Chicago and New York (Bhana *et al.* 2010). The purpose of the intervention was to reduce HIV risk behaviours by strengthening family relationship processes, and targeting peer influences through enhancing social problem solving and peer negotiation skills for youths. More specifically, CHAMP adopted the “principle of multiple levels targeting individual influences such as attitudes, knowledge and skills within the personal context, interpersonal and family influences within the proximal context, and community level influences within the distal context” (Bhana *et al.* 2004, p. 34).

The intervention targeted youths aged 9–13 years old and their families. The intervention was a randomized control trial conducted in KwaDedangendlale, 40 km outside of Durban in KwaZulu-Natal. There were 245 intervention families and 233 control families with 281 intervention and 298 control children (Bell *et al.* 2008). Data collection was conducted between May 2003 and April 2006.

Implementation was undertaken through 10-90 minute sessions held over 10 weekends conducted by three or four facilitators (Bhana *et al.* 2010). Separate sessions were held for adults and young people. The sessions were designed to increase HIV knowledge and

decrease stigma surrounding HIV infections; increase authoritative parenting, caregiver decision-making and caregiver monitoring of children; increase family frequency and comfort discussing hard-to-discuss subjects (e.g. sexuality and risky behaviours); increase connectedness to social networks of caregivers; decrease neighbourhood disorganization, and increase social control and cohesion (Bhana *et al.* 2010). A cartoon-based storyline about the story of *Xakekile*, which suggests being unfortunate was used to introduce the skills. The cartoon characters were used mainly because of the low literacy levels in the study area.

South Africa Tanzania project

This intervention was implemented in schools to promote sexual and reproductive health in early adolescence in South Africa and Tanzania. The aim of the project was to develop, implement, and evaluate a school-based health programme among Grade 8 learners aged 12-14 years. The project had two objectives: to delay commencement of sexual intercourse among young people that were not sexually active (abstinence); and to increase condom use among those that were sexually active. The study was a multi-site cluster randomized controlled experiment. Selected demographic characteristics were used to match and assign schools to intervention and control arms. In Cape Town, 26 public schools were selected, with 11 matched pairs; and in Mankweng 30 public schools were identified with 15 matched pairs (Aaro *et al.* 2005). A total of 5,368 pupils were enrolled in the project in Cape Town and 5,387 students were recruited in Mankweng (Namisi *et al.* 2009). The project was implemented between 2002 and 2006.

The programme was delivered by teachers and focused on delaying sexual debut, promoting condom use and influencing attitudes, social norms, and self-efficacy. A teachers' manual and learners' workbook were used for activities. The teachers' manual had 16 learning experience topics. These included topics on: values clarification with regard to adolescent sexuality; self-esteem and sexual decision-making; how our bodies function reproductively; dimensions of sexuality; boys don't cry! girls are soft!; responsible decisions for sexual safety; promoting the sexual health of young people; how do I handle this?; situations that carry the risk of sexual intercourse; coercion and violence in romantic relationships; not for me, not now!; how to use condoms; negative

consequences of sexual intercourse; HIV and AIDS and the future; substance use and sexual decision-making; and self-esteem. Fifty-nine students were given a workbook and were required to undertake activities based on these learning experience topics. Activities ranged from one to five per learning experience. Other topics included: words and their meanings; sexual and reproductive rights of young people; and sexually transmitted infections and HIV/AIDS: the facts and myths.

The learning experience on values clarification with regard to adolescent sexuality had an element where students had to undertake an activity with a parent/guardian. Parents/guardians were also requested to comment on the activity. Group assessments were also part of the programme. Sessions lasted between 45 minutes and two hours.

7.4.2 Programmes

Parent education programme Planned Parenthood Association of South Africa

The parent education programme was implemented by the Planned Parenthood Association of South Africa (PPASA) in Wentworth and in an informal settlement on Quarry road in Durban and was introduced in November 2005. This programme targeted parents in order to teach them how to communicate with their children on life issues from as early as four years old. By the end of the programme parents were expected to have: an increased knowledge and understanding of sex and sexuality, sexual orientation and specifically of being gay and lesbian; and a more positive attitude towards family life education. They were also expected to be able to dispel myths regarding sex and sexuality; to be better able to communicate on sexual issues related to sex and sexuality; to minimise conflict in the family; to be better positioned to reduce the chance of an unplanned pregnancy or sexually transmitted infection among their own children; and to have increased awareness of the difficulties their children face and their role in helping them and effects of population growth on family life and society in general (PPASA, 2005).

When the programme was initiated, 54 parents were recruited but by the time of data collection only 15 were still part of the programme. In this programme, parents were taught age-appropriate activities when relating with their children. Additionally, parents were made aware of how their behaviour affected their children, particularly with regard

to rape and drinking in the communities and how their own behaviour led to child neglect.

A training manual was used to impart skills. The manual had four sections. Section One, included guidelines for the parent facilitator. In this section, various participatory methods were described and guidelines provided to trainers on how to apply these methods. The section also demonstrated how planning, implementation, monitoring and evaluation of activities should be done. Section Two was on the parent education programme and comprised six modules: communication and consultation, teaching your child about sex and sexuality, helping your child make the right choices, sexually transmitted infections, basic information on HIV/AIDS and understanding sexual abuse. Each module provided ideas, activities and resources with the purpose of facilitating effective teaching and learning on the subject of family life education and related topics contained in the programme. Section Three described action activities that were used during the training sessions. Section Four provided a glossary of terms.

Six sessions were held with parents. Sessions were divided into two topics per afternoon and were conducted over two months. The facilitator led the session and then a question and answer session ensued. Once the six sessions were completed with one group, the facilitator moved to the next group of parents. Participants were selected unsystematically and invited to participate. Despite asking the informant several times how recruitment was done, it was still not clear. However, recruitment in Wentworth was facilitated by social workers who would identify foster parents in the area and then invite them to their offices. On Quarry Road, only mothers participated. According to the key informant, men did not participate because "*they like to be left behind*". This view is similar to other studies where despite high levels of absenteeism, South African men choose not to participate in studies (see Chapter Six).

Parents from Wentworth were mainly guardians of the Coloured race, whilst those from Quarry Road were of Black African origin. The sessions in Wentworth were conducted in English, whilst the ones on Quarry road were conducted in *isiZulu*. The majority of the parents were unemployed and sessions were held in the afternoon. The programme was unstructured, including recruitment of parents/guardians.

Focus on the Family

The second programme was undertaken by Focus on the Family. The programme was a character-building abstinence based programme, called 'No apologies' and was implemented in schools and communities in the Valley Trust in Durban. According to the informant the *"No apologies programme was an abstinence before marriage curriculum based on teaching young people to develop a strong character and helping them with prevention of HIV"*. Further the programme was *"to help young people to be able to make wise choices specifically regarding sexuality or sex as well as all other areas behaviours, and to do that by ensuring character obviously"*. The programme targeted primary school children, particularly those in Grades 6 and 7. There was no sample size provided in terms of the number of schools nor was there an indication of how the schools were recruited. Perhaps it was an oversight of the interviewer to fail to elicit details of the recruitment criteria.

The student workbook had six units, namely: video review and questions, we all want healthy relationships, media literacy, premarital sex has consequences, abstinence: it works every time, and marriage does matter. The programme dealt with individual worth, the significance of maintaining purity until marriage, family and marriage. Each unit had several activities. Unit Two, which focused on health relationships, also had parent/teen discussion questions discussing experiences of infatuation, lust and or unconditional love and how these were dealt with. Additionally, there was an activity on setting standards, parents and teenagers sharing dreams and goals and how parents and teenagers can help support each other (Focus on the Family, 2000, p. 2.13). Unit Three posed questions to both parents and teenagers on how much time families spent talking compared to watching television or listening to the radio, how parents experienced negative peer pressure and their coping mechanisms (and likewise with the teens). Lastly, parents and teenagers were required to watch a movie or television show together and talk about the messages portrayed by these media channels (Focus on the family, 2000, p. 3.8).

In Unit Four, parents and teenagers discussed why sexually transmitted infections had increased over the past 20 years, whether consistent and correct condom use was realistic for teenagers, and whether HIV and Human Papilloma Virus (HPV) were

acceptable risks. A question on the fact that when you sleep with someone, you sleep with him and every other person he has been with sexually was explored. An additional activity on 'if pillows could talk' were discussed with the parent (Focus on the Family, 2000, p.4.9). Unit Five of the parent-teenager discussion dealt on how parents learned from past successes or failures in dating relationships and guidelines for dating within their home; the concept of 'state it, sell it, move it' was practised to impart refusal skills to unhealthy relationships. Lastly, there was discussion on benefits of abstinence and future goals and dreams (Focus on the Family, 2000, p. 5.8).

At the end of the programme participants were urged to make an oath to remain pure until marriage by signing a pledge card declaring to save sex for marriage. According to the informant, educators were trained to implement the programme in the schools. Further, the informant highlighted that the curriculum was set in a progressive way. Lessons began with general issues like 'who you are' and 'where you grow'. The second unit was about relationships such as what you do with their friends, identity and the media. Participants then progressed to talking about sexuality and discussing marriage and families.

7.5 Results

7.5.1 Key informant interviews

The six key informant interviews with service providers were intended to establish which interventions on parent-child communication were being offered and whether these had any impact on reducing sexual risk behaviours among adolescents. It is clear that during the time of data collection no evaluation of the interventions and programmes had been undertaken or published. However, the principal investigators for each programme narrated how the interventions had succeeded in increasing parent-child communication or failed to do so because it was not the objective of the project. For example, informant 1 from the Collaborative HIV Adolescent Mental Health Program (CHAMP) mentioned that the project had been successful because it had managed to educate parents from disadvantaged communities on HIV and AIDS, as well as on other societal issues facing their communities. The programme had ten sessions and used cartoon characters to

narrate the story of *Xakelile*. During the sessions parents and children were tasked to go through the stories and learn to talk about the problems and how young people might become resilient. During the time of data collection it was not clear whether the programme had achieved its objectives. However, the principal investigator acknowledged that communication between parents and children had increased. What could not be established was whether the communication had translated to behaviour change among the target population.

The second intervention—the SATZ project, did not target parents directly but involved them as stakeholders. Two key informants were interviewed, one from each site in South Africa and the focus of the interviews was what the intervention aimed to achieve. According to informant 3 parents participated in some of the activities but in general the intervention was not targeting them. The informant further mentioned that parental involvement in school based interventions was limited. This, he argued, was because *“parents post their children off to school and expect the school to get them to a good job of schooling them”*.

At the time of data collection, the outcome evaluation was still underway. However, according to informant 3, the programme was not implemented as expected and hence had no impact on the behaviour of the target audience. This could be because teachers did not have sufficient time to implement the curriculum, or because of lack of effort from the teachers or because there was no continuity in programme implementation since trained teachers might have left the school. Another reason put forward was that the students might have been playing truant, which would suggest that they were not exposed to the programme. Hence the *“programme did not reach as many students with the intensity that they had intended”*. Another explanation cited was that the programme focused to a large extent on changing individual-level behaviour and did not look into cultural factors. According to informant 3, structural factors such as poverty and urbanization played a role in the success of the programme. In addition, he argued that the non-inclusion of parents and families may have also affected the programme adversely. For example, he stated that *“if learning that had occurred during school hours had continued into family time, this might have increased the probability of the programme as a whole”*. Indeed this might be true given that the CHAMP programme

involved both parents and their pre-adolescents. The informant was also asked about what should be done to strengthen the programme.

Let us now move on to consider Focus on the Family. When the informant was asked about the success of the programme, the response was that the programme had not been evaluated. However there was an anecdotal indication of success based on the positive responses gained from the stakeholders. This is illustrated below:

“That probably I would say ehm, it’s very successful but eh there is no conclusive study that we have done ourselves, that’s what we busy doing at the moment (okay). Eh but from the responses basically eh we receive from parents or educators or whatever the case may be, we are seeing or we are hearing that the programme is very effective in their schools, home and stuff like that. But we are busy now, we just had a lady who came from United States of America to do an American study. In terms of the impact of the programme (okay). Ja so we are busy with that at the moment”.

In addition, the key informant from Focus on the Family acknowledged that parents played a big part in the socialisation of their children. According to the key informant *“There is a big part that parents play because we encourage young people to go back home (mhh) to talk to their parents. But before teachers could implement the programme in the schools they also invited parents (F: okay) to basically explain and also to get their buy-in for them, to be able to talk to their children when they go back home with their home works you know (F: mhh) regarding the sexuality area (F: okay) of the programme”.* Further discussion showed that the ‘No apologies’ programme was for students and work was done in the class. Children were requested to go back home to discuss some of the units mentioned in the work. Parents played a big part of the programme and were encouraged to talk to their children to improve communication between child and parent. In this programme parents were not a direct target for the intervention although they were involved in the programme. Discussions with the informant showed that there was parental involvement and engagement as described below:

“Alright now in each and every single unit of which we have about 6-7 units in that book, all of them have parenting-teen questions. Basically what we trying to do there

is after we've done work in the class we want the kids to go back home because we already spoken to the parents prior (F: alright). So we invited the parents first, (F: mhh) telling them what we gonna be doing during the course of the year or during the course of the month (F: mhh) or whatever the case may be (F:mhh) with their children and we ask them to get involved (F:okay) to discuss, to talk. Basically the activities there are just (F: mhh) put there to improve communications between a child and a parent“.

The PPASA programme was not evaluated. However discussions with the key informant suggest that the programme was effective in promoting behaviour change in the children due to the intervention she made in the areas, as shown below:

“They have improved very well because when I first I went there the children, they've been scattered you know let's say late hours in a way that they were not looking after them“.

This quotation suggests that parents were failing to monitor their children and children would be found loitering the streets during the night. However, after communicating with these parents, parents were more aware of their children's whereabouts. Another example given that illustrates behaviour change was that of a parent whose child was a heavy smoker. Once the parent started participating she felt that she had been assisted by participating in the programme as shown in the following excerpt: *“one told us that her child was too much of a smoker but she sat him down and they talked and she said he needs to start this particular programme. Although he never stopped smoking but he did cut down“.*

Further insights gleaned from the discussion suggest that it was difficult for parents to talk to their children about sexuality issues, as illustrated by the excerpt: *“they even say it's not easy to talk about sex. Because some say they can't even verbalise anything“.* As such would even request that the programme should be extended to their children as mentioned by the informant: *“we must start teaching their children about sexuality“.* This, the informant argued would make it easy for the parents to respond to their children's questions:

“So if the child ask them it would be easy for them to discuss“ (informant 2).

Parents who did talk to their children were not explicit enough to engage on the topic *“they could not speak in those terms, but they told their children to control themselves and behave good in this way or that way but without getting to the point”*.

One of the ways in which the success of the programme was measured is through the increased level of awareness gained by participants as illustrated in the text below: *“when a parent can tell us that you know when I started on this programme I knew nothing but since November I’ve been exposed to this”*. Other parents also said that they were able to talk to their children about sexual and reproductive health issues and this was partly due to the mother approaching her daughter and giving her the confidence to broach the subject on menstruation. Once the daughter began to menstruate she reminded her mother of the subject and she was then able to advise her accordingly.

A comparison of the two sites showed that the programme on Quarry Road had more participants, whilst in Wentworth the uptake was slow and therefore the ‘impact’ of the programme was not visible. This could largely be attributed to the fact that parents in Wentworth were not motivated and required constant follow up, whereas the parents on Quarry Road were eager to participate in the sessions. Some of the other barriers to participation identified in Wentworth were that some parents preferred to stay at home and drink alcohol and were of the view that they were not interested in the programme unless they were invited by the social workers.

In view of the findings from the key informants, it can be concluded that only two programmes targeted parents directly to improve parent-child communication: CHAMP and the PPASA’s parent education programme.

7.5.2 Review of published material

The CHAMP project and the PPASA’s parent education programme targeted parents whereas SATZ targeted the adolescents. No evaluations have been undertaken on the PPASA project to measure its effectiveness on improving communication and its association with adolescent sexual behaviour. This is because the programme was not an experimental study hence an evaluation component could not be added. Similarly, the ‘No apologies’ programme was not a randomized control study. Only two studies used

experimental designs: the SATZ project and CHAMP. Accordingly, the focus of this section will be on the CHAMP and SATZ projects as these were the only two designs which permit evaluation.

In 2008, Bell *et al.* (2008) tested the effectiveness of the CHAMP project among black South Africans in KwaZulu-Natal. They found that the intervention group reported increased comfort in frequency in talking about sensitive issues such as HIV, AIDS, sexuality and substance abuse with children. Bhana *et al.* (2010) noted that the impact of CHAMPS+SA showed that families that participated in the programme reported positive experiences in coping strategies for HIV and were able to identify problems and solutions. Both Bhana *et al.* (2010) and Bell *et al.* (2008) demonstrate increased awareness and communication between parents and children.

In the SATZ project, a review of published material provides further insight into adolescents' perspectives on communication with parents/guardians. Namisi *et al.* (2009) interviewed adolescents about whom they preferred to communicate with regarding sexuality. Adolescents were asked three topics on interpersonal communication with parents/ guardians, other adults' family members and teachers on HIV/AIDS, abstinence and condoms. Participants were asked how often they discussed the three topics, being asked to reply using a five point scale from 'hardly ever' to 'all the time'. Adolescents were also asked to whom they preferred to talk about HIV/AIDS, abstinence, and condoms. Adolescents in Cape Town and Mankweng preferred, overall, to talk to their mothers rather than their fathers. However, in Mankweng more males preferred talking to their father (27.2%) and in Cape Town more males preferred to talk to their mothers (30.7%). It must be noted that Mankweng is a rural site and Cape Town an urban site. These contrasting preferences could therefore result from absent fathers in the urban areas or cultural factors in the rural site. Another observation from this study was that generally more males had never or hardly ever talked to parents/guardians on topics pertaining to HIV/AIDS, abstinence and condoms. Adolescents also had fewer discussions with their parents or family members compared to their teachers. Of the three topics, there was hardly any difference between sites among males and females on HIV/AIDS and abstinence. However, more males in Mankweng than in Cape Town reported never or

hardly ever talking to parents, family members and teachers about condoms. This was also true among females, with females from Mankweng reporting higher proportions never talking or hardly talking to parents, family members and teachers about condoms.

In view of the above, it would be concluded that, of the interventions that were reviewed none measured parent-child communication and its impact on adolescent sexual and reproductive health behaviour. However, the CHAMP programme was the only study that involved parents and could have been able to assess the impact of the programme over time.

7.6 Discussion and conclusion

The study set out to establish if interventions or programmes targeting parent child-communication had an impact on adolescent sexual behaviour. The study reviewed four projects, of which two were interventions and two were programmes. One intervention targeted parents and adolescents and another targeted adolescents in school but allowed for parental involvement at school. One programme targeted parents only and the other programme targeted adolescents with limited parental involvement. The programmes could not demonstrate any impact because they were not designed to do so. Despite that neither of the interventions could demonstrate that they were effective since no evaluations had been undertaken during the time of data collection, a few lessons can be learnt. The CHAMP intervention showed promising results because of the experimental design and involvement of both adolescents and parents. It also increased knowledge levels and opportunities for parents and caregivers to discuss with their children. In doing so, it reduced the stigma associated with talking about taboo topics among parents and their children. This finding is similar to that of Phetla *et al.* (2008). However, results from the 'Safe from Harm' pilot program to improve parent/child communication about sexual health in South Africa and Zambia implemented in 2005 showed mixed results. This programme targeted parents/caregivers and their children aged 12-20 years and aimed to improve parent/child communication so as to encourage non-sexually active youth to delay sex and sexually active youth to adopt risk reduction behaviours (Greene *et al.* 2008). More positive programme effects were observed among the parents and youth

from Zambia compared to those from South Africa. Recruitment strategies, programme timing, facilitators and quality of data collection were better in Zambia than in South Africa. This finding is similar to the SATZ programme in that the programme did not achieve its objectives largely due to the way it was implemented.

The findings from this study suggest some important general points. First, interventions and programmes should be designed in such a way as to allow evaluation of their effectiveness. In most HIV prevention programmes, causal effects cannot be demonstrated because the programmes were not designed to allow this. In other studies, the effectiveness of parent-child communication on adolescent risk behaviour could not be measured because of their (too short) duration. In some programmes/interventions, there are additional players, and other programmes and interventions going on simultaneously, and it becomes difficult to attribute the changes in the behaviour to any one particular intervention. Thus the need is for randomized control studies. Second, there is a need for targeted outcomes which should be clearly articulated when designing programmes. What is the ultimate goal of an intervention and what behaviour does it set out to change? For example, in one of the programmes it could not be established what the programme would achieve eventually because the design was not intended to be evaluated.

It is also clear from this study that schools and families need to work together to be able to develop stronger relationships between parents/caregivers and their children so as to provide a conducive environment for learning and improving communication. The CHAMP design was a good design in that it brought together the parents/caregivers and children to discuss social issues, which under normal circumstances does not happen in many families. O'Donnell *et al.* (2005, p. 172) explain that "schools have been receptive in welcoming innovative approaches to reach parents and reinforce the central role of families in sex education". It would also be worth considering interventions that are theory based like the ecological model by Svanemyr *et al.* (2015), who proposed interventions that work at multiple levels and provide clarity by identifying examples of promising programmatic interventions. These include programmes that include Parental and mentoring and positive role modelling.

Given that family interventions are being promoted to reduce sexual risk behaviours, evaluations should focus on whether these interventions indeed reduce risky sexual behaviour. Such interventions may require huge funding but there is a dearth of information suggesting that indeed increased parent/child communication will have an impact on the reduction of certain risk behaviours.

7.7 Limitations of the study

One major limitation of this study is that the study did not fulfil what it set out to do. In other words, none of the six informants were able to provide scientific evidence on how increasing parent-child communication impacted on adolescent sexual behaviour. The reason for this is twofold: first, two studies were not designed to show any impact and second, the two interventions with evaluation designs had not undertaken any evaluations during the time of data collection. Another limitation from this study pertains to the methodology used to select studies for the review. The selection of studies to review was not systematic because the researcher only identified the projects that were in the field at that time and in particular was only interested in local studies because it was important to build on existing interventions and to identify shortfalls in order to recommend strengthening of the interventions that have been developed for the local context. Additionally, the researcher was keen on understanding the cultural environment so that recommendations for interventions would build on the experiences of the projects on the ground. Having said that however, the author acknowledges that the non-use of search engines introduced a selection bias and might have missed other studies. Despite not undertaking a wider literature review, studies had to meet the following criteria: (i) targeting both parents and children and (ii) intending to improve parent-child communication. Although the author acknowledges that there were few studies pertaining to the topic at that time of data collection, the current study could have been strengthened by a more detailed literature search of interventions. The study also targeted key informants and did not include the beneficiaries of the projects. This

can be seen as a limitation because the key informants' perspectives or views could be subjective.

This study also failed to show how parental involvement programmes can affect adolescent sexual and reproductive health. One reason for this lies in the design of the study and the line of questioning employed. In the same vein, only two of the programmes/interventions analysed had an experimental design and at the time of data collection the impact of these could not be measured. The findings of this chapter are in line with those of other studies that target parents in order to influence the sexual and reproductive health of adolescents but their effectiveness in the latter could not be measured because the study only focused on improving communication and not on assessing whether new knowledge and comfort to discuss sexuality issues has an impact of young people's behaviour.

Chapter 8: Conclusion

8.1 Key findings

This chapter draws conclusions based on the four analytical chapters and provides implications for both policy and further research. The main objective was to establish the role of parents in promoting sexual health among young people in South Africa and to gather information on how best parent-child communication can be enhanced. To fulfil the main objective, triangulation methods in the form of survey analysis and qualitative data collection were used to investigate the patterns of communication between parents and adolescents and to determine the factors that facilitate or inhibit communication on sex and related topics between parents and adolescents, from both the parents and teenagers perspectives. Another objective was to determine whether parent-child communication about sexual and reproductive health issues help to reduce risky sexual behaviours. The qualitative analysis was undertaken to better understand the context through which parent-child communication took place within a community in South Africa; and to review selected interventions and programmes on parent-child communication so as to recommend improvements for developing other interventions.

Overall, findings from Chapter Four show that parent-child communication in South Africa is high with parents reporting more communication than their children. Parent-child comparisons showed that parents demonstrated higher levels of discussions on sex related topics, while adolescents reported a combination of general and sexual topics. This finding is supported by Atienzio *et al's* study (2009) among Mexican adolescents, which suggested that Mexican parents discussed fundamental aspects of sexuality and reproduction with their adolescent children.

Another finding from Chapter Four is that topics related to general communication were discussed more than those related to sexual and reproductive health as depicted by the higher proportions shown in Table 4.1. These findings were also validated by the quantitative research which showed that there was limited information on sexual and reproductive health. However, given that adolescents in the qualitative research

mentioned that they were close to their parents. There are opportunities to develop more nurturing relationships and this would assist adolescents in increasing their agency and negotiation power. It can therefore be concluded that any programme or intervention that attempts to increase parent-child communication should ensure that sexual related topics are part of a broader focus and not specifically on sexual and reproductive health issues. Beginning a conversation on sex related issues is challenging but building rapport through discussion of general issues is a good start to introduce such discussions. In both the qualitative and quantitative studies young people had limited information compared to older adolescents. This would be a great opportunity begin at a much younger age. Indeed this is huge policy gap as parents are relying on the school system.

Based on the conceptual framework and theoretical model discussed in Chapter Two, this study also sought to investigate differences by gender, age and ethnicity for both parents and teenagers. Further the association between source variables and communication was undertaken to determine whether communication with the adolescent took place or not. In addition, individual characteristics of the adolescents' known as audience variables that is age, ethnic group and sex of the adolescent were key variables in understanding parent-adolescent communication pointing to the importance of individual factors in parent-child communication. Additional variables referred to as context variables including education, marital status, wealth, living arrangements and geographical settings were included in the analysis. It is interesting to note that in the quantitative study more girls reported to have communication on sexual and reproductive health. However, in the focus groups and in-depth interviews, boys reported having conversations with their parents. It would appear that this unusual finding in the qualitative study was because of the context –predominantly a rural area and thus the boys may have asserted themselves when in groups and in indepth interviews.

At the individual level conclusions relating to *audience* variables in the conceptual framework analysed in Chapter Four demonstrated that gender, age and population group were significant. This was also true at the relationship level where *source* variables which include the parents' age, gender and population group were significant. At both the

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individual and relationship level, females reported higher levels of communication for both parents and adolescents. Thus among parents, mothers have been found to communicate more with their children as compared to fathers (Kunnuji, 2012; Byers, Sears and Weaver, 2008; Gallegos *et al.* 2007; Jaccard and Dodge, 2002), whilst daughters have been reported to receive more communication from their parents (particularly from their mothers) as compared to sons (Kunnuji, 2012; Byers, Sears and Weaver, 2008; Rafaelli and Green, 2003; Jaccard and Dodge, 2002).

Non-Africans reported higher patterns of communication compared to Africans, whilst older adolescents reported higher levels of communication than younger adolescents' and. Few differences were noted between older and younger parents. As such, factors associated with parent-child communication were significant by gender and ethnicity and not age. The multivariate analysis confirmed the bivariate analysis and thus for the section on Chapter four, only race and gender were considered. The findings tend to contradict those of Coetzee *et al* (2014), where Indians and whites reported lower communication than Blacks and Coloureds.

With regards to sexual behaviour and parent-child communication studied in Chapter Five, a general finding for males and females for the three parent-child communication scales (global, sexual risk and general communication) and ever had sex was non-existent, except among females, where parent-child risky sexual communication was positively correlated with ever had sex. Age was a significant variable for both males and females in all the communication topics at the individual level. On the contrary, the relationship between the three communication scales and risky sex was significant for sexual risk communication and general communication. Both males and females were less likely to engage in risky sex if they had discussed sexual risk and general topics. Apart from males on sexual risk communication, the relationship remained statistically significant even after all the controls were considered.

The qualitative results in Chapter Six showed that even though young people would like to receive information from their parents, this was rare. However, both parents and

adolescents believed that parents were the best source and thus interventions to promote such conversations were necessary. Indeed, this is shown by the review of interventions and programmes on parent-child communication in Chapter Seven, whereby the involvement of parents promoted communication and therefore further research should be undertaken to enhance existing programmes and identify strategies that will promote parent-child communication. Peers, school and the media were some of the important factors identified as sources of information as shown in Chapter Six. This shows that the ecological model is indeed a useful model in developing interventions as the different environments are important and play different roles in promoting sexual health behaviours among young people. This finding is supported by Brookes, Shisana and Richter (2004), which showed that 12–14 year olds listed school (85.9%); as the most important source of information about sex, sexual abuse and HIV/AIDS followed by parents/caregivers (39.9%) and faith based organisation (25.5%).

One of the findings noted in Chapter Four was the low parent-child communication among young adolescents and their parents especially sexual risk communication. Again this is confirmed by the qualitative study, which showed that communication on sexual topics was low among the 10–14 years. However, when it comes to topics discussed with girls and boys, both qualitative and quantitative studies show that different messages were provided by parents. The results from the qualitative and quantitative studies don't agree. In the quantitative study, daughters were provided with more sexual risk topics compared to adolescent boys. However, in the qualitative study, boys were provided with more factual information about HIV/AIDS, abstinence and condoms, whereas girls were not provided with much information. Other findings that can be gleaned from the mixed methods are the different reports between parents and adolescents. As observed in Chapter Four, parents reported communicating more than adolescents. This was also found in the qualitative results thus confirming that in general parents might over report on communication their children.

8.2 Contribution of thesis

The main reason for undertaking this study was to fill the knowledge gap on parent-child communication in South Africa but also to inform policy with regards to the role of parents in sexual and reproductive health and promoting healthier behaviours among their children. The need for involvement of parents comes at a time when South Africa continues to grapple with HIV infection among young people, particularly among girls and young women as well as teenage pregnancies. There are several contributions to knowledge that have been demonstrated in this thesis.

The main contribution is the study on parent-child dyads, which enabled one to study reports on communication for both parents and their children which tends to be limited and therefore provided an in-depth understanding of parent-child communication in South Africa. In particular, this study was able to analyse parent-child dyads at a national level but also questions asked to the parent were also directed to a specific teenager who was also interviewed, hence direct comparison of reports between the interviewees. Such focused research removes the ambiguity in which child the parent might have been referring to and similarly, it shows which parent the child was referring to thus highlighting the differences between the parents and the child. This is important for studies on the congruence between parent and adolescent reports on communication as there can be further analysis into why parents and their children don't agree on what they have discussed. Further work on studying parent-child dyads of those with high levels of incongruence might shed more light for improving programmes on parent-child communication.

The large sample sizes allowed for the generalization of findings and allowed for the comparisons by gender, age and population group, thus filled a gap in the literature as perspectives of the mothers and fathers or male and female caregivers were provided, as well as older versus younger adolescents and older versus younger parents. Further, the ability to analyse by race group enhanced the contributions made by this thesis in that the diversity of adolescents and parents should not be ignored as these ethnic groups are exposed to different socio-economic status. A further contribution was that the study

included both mothers and fathers. Generally most studies either consider only females in studies e.g. mother-daughter but in this study sons and fathers were included and broadened the knowledge base on gender differences in parent-child communication. Whilst the study confirmed that females communicate more than males, the finding on the importance of father-daughter communication was very interesting as this shows the important role fathers play in the lives of their girls. In South Africa, where father absenteeism is high these findings demonstrate the need to have more father figures, even if these are role models in society who will be able to guide young men and women.

A further contribution in this thesis was the analysis of a less studied group of teenagers 10–14 years, which showed that communication in this age group was very low and therefore points to the need that in a country where sexual debut before 15 remains high, this age group needs to be targeted by parent interventions, so as to help them with developing negotiation skills and agency in their relationships. The low communication in the age group was confirmed in both the qualitative and quantitative research. The inclusion of non-Africans in the quantitative study makes an additional contribution to the literature as the findings confirm that non-Africans had higher levels of communication than Africans and gives a better understanding of how population group may influence parent-child communication.

Another contribution made is a better understanding of who talks to who and about what topics. As such, advances knowledge on which communication topics promote or inhibit communication between parents and their children. In addition to the list of questions asked and assessed independently, global scores of communication were considered, which provide insight into a global measurement of communication as opposed to single items. In doing so, this allowed for a better understanding on whether importance should be placed on summing up topics to develop scores or identifying specific topics to enhance communication between parents and adolescents. The study helped demonstrate that a single measure of global communication was ineffective in its association with risky sexual behaviour. In other words all 13 topics were ineffective. However, general communication and sexual risk communication were significant and as such highlighted the need that parents' communication with teenagers should be

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initiated through general communication and then develop sexual risk communication. In other words, parents must first be able to talk about general issues with children and then sexual risk communication will become easier.

Finally, the thesis made use of triangulation methods to study parent child communication by utilising a survey on parent-child communication, focus groups and in-depth interviews between parents and their children as well as the review of interventions using key informant interviews. This comprehensive mix of methods adds to the literature on providing strengths in quantitative research and limitations which can be validated by qualitative research. Similarly, with the key informant interviews, where information could not be gleaned from interviews, supporting documentation was used to strengthen the findings from the interviews. Therefore, providing different sources of data, to better understand parent-child communication. The thesis used a combination of framework in the conceptual framework and theoretical framework. This further showed how linkages in the individual, relationship, societal and community environments affect parent-child communication. This demonstrates that interventions are needed to be multi-sectoral.

8.3 Policy Implications

The National Strategic plan (NSP) of TB/HIV and Malaria South Africa 2012-2016 states as its primary goal a reduction of new infections by at least 50% (South African National AIDS Council [SANAC], 2012a). This sets out the foundation for better understanding the sexual risk behaviour of young people and will help in identifying which behaviours put young people at more risk and can be used to better inform future programmes on HIV prevention and risky behaviour among young people in South Africa. As the country prepares for the next National Strategic Plan on HIV, TB and STIs 2017-2022, social and structural factors for HIV and sexual and reproductive continue to drive the HIV epidemic and teenage pregnancies.

The findings from this study suggest some important general points. First, interventions and programmes should be designed in such a way as to allow evaluation of their effectiveness. In most HIV prevention programmes, causal effects cannot be

demonstrated because the programmes were not designed to allow this. In other studies, the effectiveness of parent-child communication on adolescent risk behaviour could not be measured because of their (too short) duration. In some programmes/interventions, there are additional players, and other programmes and interventions going on simultaneously, and it becomes difficult to attribute the changes in the behaviour to any one particular intervention. Accordingly there is a need for more randomized control studies. Second, there is a need for targeted outcomes which should be clearly articulated when designing programmes. What is the ultimate goal of an intervention and what behaviour does it set out to change? For example, in one of the programmes it could not be established what the programme would achieve eventually because the design was not intended to be evaluated.

Multi-sectoral approach to sex education remain paramount as well as the involvement of parents in the everyday lives of their children. As the Department of Basic Education embarks on the school-based sexuality and HIV prevention education activity to reduce HIV infections in students, schools and families need to work together to be able to develop stronger relationships between parents/caregivers and their children and to provide a conducive environment for learning and improving communication. The CHAMP design was a good design in that it brought together the parents/caregivers and children to discuss social issues, which under normal circumstances does not happen in many families. O'Donnel *et al.* (2005, p. 172) explain that "schools have been receptive in welcoming innovative approaches to reach parents and reinforce the central role of families in sex education". Interventions should also target boys so that they discuss more openly about sexual and reproductive health issues as was seen by the girls who had been exposed to loveLife. This has been a call in the DREAMS programme which targets adolescent girls and women.

8.4 Limitations of the study

Several limitations can be identified. Given that the study was intended to measure the impact of loveLife, it only considered those that had heard of loveLife, this may introduce bias into the findings since loveLife is predominantly in urban areas or uses multimedia

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which may not always be accessible to rural communities. Another limitation that can be highlighted from the thesis is that the selection of the interventions was based on the author's knowledge of existing interventions. Perhaps undertaking a systematic review of interventions would have shed more light on other programmes that exist.

8.5 Future Research

Factor analysis is needed to better understand which of the topics should be prioritised in the midst of shrinking resources. It is also necessary to build on this study so that the sample is not biased towards a group of informed respondents about campaigns such as loveLife. Given that family interventions are being promoted to reduce sexual risk behaviours, evaluations should focus on whether these interventions indeed reduce risky sexual behaviour. Such interventions may require huge funding but there is a dearth of information suggesting that indeed increased parent/child communication will have an impact on the reduction of certain risk behaviours. Perhaps a short module on parent-child communication could be added on the DREAMS **Determined, Resilient, Empowered, AIDS-Free, Mentored, and Safe** women programme on parenting/caregiver programme. The DREAMS programme was introduced in 2014 and is expected to end in September 2018. However, the introduction of the 'She Conquers Programme' in one of the core interventions is to strengthen families of adolescent girls and young women aged 10–24 years as well the communities they live in (DREAMS, 2018). The aim of the programme was to address the health and structural factors that either directly or indirectly increase girls HIV risks. In order to do this the goal was to identify innovative approaches. The parenting/caregiver programmes posits that:

“it is vital to young women to have a positive relationship with a parent, caregiver, or other caring adult. This relationship has a consistent protective factor for young women and adolescent girls against a variety of negative health and social outcomes. Programs that involve parents and caregivers have shown to be very effective in changing HIV-related sexual behaviours among all youth (e.g., use of male and female condom, delayed sexual debut, as well as decreased exposure to negative outcomes such as violence and abuse)”(DREAMS, 2018, p3).

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Appendices

Appendix A: Chapter 2: Table 2.1a: Profile of South Africa's young people aged 10–24 years (Number distribution): (Census 2001, Census 2011 and Community Survey (CS) 2016)

Socio-demographic characteristics	Census 2001			Census 2011			CS 2016		
	10–14 years	15–19 years	20–24 years	10–14 years	15–19 years	20–24 years	10–14 years	15–19 years	20–24 years
Sex									
Male	2 518 956	2 453 079	2 099 293	2 344 275	2 498 572	2 694 646	2 604 741	2 555 343	2 658 873
Female	2 542 961	2 528 642	2 195 230	2 250 611	2 504 905	2 679 896	2 585 063	2 549 139	2 643 461
Population Group									
Black African	4 218 592	4 096 260	3 544 596	3 817 863	4 171 450	4 479 848	4 394 841	4 280 505	4 461 738
Coloured	427 277	421 348	353 661	420 683	431 263	428 159	432 046	435 718	429 435
Indian/Asian	99 303	110 310	102 236	85 223	98 556	115 949	94 389	97 503	107 905
White	316 745	353 803	294 030	257 353	284 896	313 616	268 527	290 756	303 257
Other	-	-	-	13 764	17 312	36 970	-	-	-
Marital Status									
Never married	5 034 372	4 838 318	3 663 106	4 511 001	4 763 052	4 514 876	2 955 454	4 904 702	4 627 613
Married	17 670	67 925	318 093	47 086	121 262	416 706	10 238	34 201	185 776
Living together like married partners	3 764	62 626	290 420	24 457	94 656	410 541	3 087	39 846	267 096
Single; but previously cohabiting	-	-	-	-	-	-	50 143	107 528	201 806
Widower/ Widow	3 380	6 397	7 827	2 098	5 106	7 347	1 068	2 306	5 284
Separated/Divorced	2 731	6 455	15 078	10 244	19 402	25 072	7 371	12 254	11 540
Other/Unknown	-	-	-	-	-	-	2 162 442	3 645	3 218
Highest level of education									
No schooling	117 327	153 087	286 286	39 725	45 544	101 664	25 896	45 361	111 682
Some primary	3 902 291	796 497	371 631	3 216 246	355 172	220 060	2 545 315	82 370	147 744
Completed primary	594 068	592 297	211 306	685 399	361 476	142 926	292 042	64 571	115 492
Some secondary	448 231	2 981 730	1 786 501	620 290	3 473 313	2 172 046	2 315 572	4 260 911	2 136 010
Completed secondary	-	420 990	1 369 599	29	591 665	2 113 107	213	583 198	2 323 318
Higher	-	37 120	269 200	-	66 567	451 579	-	42 388	414 857
Other/Unknown	-	-	-	33 197	109 740	173 162	10 765	25 683	53 232
Employment Status									
Employed	-	192 821	930 826	-	275 123	1 400 983	-	-	-
Unemployed	-	654 513	1 815 149	-	972 837	2 020 886	-	-	-
Not economically active	-	4 134 386	1 548 548	-	3 755 518	1 952 673	-	-	-
Not applicable	5 061 917	-	-	4 594 886	-	-	-	-	-

Appendices

Appendix A: Chapter 2: Table 2.1a Profile of South Africa's young people aged 10–24 years (Number distribution): (Census 2001, Census 2011 and Community Survey CS 2016 (concluded))

Socio-demographic characteristics	Census 2001			Census 2011			CS 2016		
	10–14 years	15–19 years	20–24 years	10–14 years	15–19 years	20–24 years	10–14 years	15–19 years	20–24 years
Household Size									
1	4 999	75 579	245 540	12 770	89 788	394 544	-	-	-
2	118 471	231 218	429 430	152 864	301 224	655 418	-	-	-
3	397 393	466 407	532 655	464 618	574 227	743 141	-	-	-
4	797 905	726 664	569 213	857 639	835 885	758 290	-	-	-
5	905 647	803 084	549 565	855 131	829 605	686 026	-	-	-
6	782 708	712 216	488 819	672 543	677 742	571 419	-	-	-
7	600 051	559 515	398 931	488 041	502 065	434 097	-	-	-
8	440 975	416 518	305 261	347 602	359 247	318 349	-	-	-
9	314 402	297 463	224 481	239 875	246 253	222 218	-	-	-
10+	699 365	693 057	550 629	503 803	587 442	591 041	-	-	-
Province of usual residence									
Western Cape	421 952	446 245	430 833	438 843	480 122	583 551	488 303	470 550	532 200
Eastern Cape	862 251	788 895	530 700	684 282	740 514	608 372	780 807	772 526	679 686
Northern Cape	109 941	105 846	85 225	109 448	107 676	104 631	103 118	113 574	106 345
Free State	302 510	305 927	255 810	240 497	262 898	282 479	246 350	260 251	262 713
KwaZulu-Natal	1 168 184	1 148 364	916 547	1 038 857	1 119 535	1 102 388	1 183 679	1 052 407	1 039 617
North West	327 217	316 525	276 486	303 713	316 532	343 391	327 964	339 175	336 513
Gauteng	739 674	808 017	1 030 094	812 012	924 588	1 374 623	933 431	868 776	1 120 025
Mpumalanga	422 980	406 661	318 020	396 348	424 278	427 541	406 663	412 442	416 915
Limpopo	707 207	655 242	450 809	570 885	627 334	547 565	562 609	659 091	582 238
Unspecified	-	-	-	-	-	-	156 878	155 691	226 082
Total	5 061 917	4 981 721	4 294 523	4 594 886	5 003 477	5 374 544	5 189 803	5 104 482	5 302 335

Appendix B: Chapter 2: Table 2.1b: Profile of South Africa's young people aged 10–24 years (Percentage distribution): (Census 2001, Community Survey (CS) 2007, Census 2011 and CS 2016)

Socio-demographic characteristics	Census 2001			Census 2011			CS 2016		
	10–14 years	15–19 years	20–24 years	10–14 years	15–19 years	20–24 years	10–14 years	15–19 years	20–24 years
Sex									
Male	49.8	49.2	48.9	51.0	49.9	50.1	50.2	50.1	50.1
Female	50.2	50.8	51.1	49.0	50.1	49.9	49.8	49.9	49.9
Population Group									
Black African	83.3	82.2	82.5	83.1	83.4	83.4	84.7	83.9	84.1
Coloured	8.4	8.5	8.2	9.2	8.6	8.0	8.3	8.5	8.1
Indian/Asian	2.0	2.2	2.4	1.9	2.0	2.2	1.8	1.9	2.0
White	6.3	7.1	6.8	5.6	5.7	5.8	5.2	5.7	5.7
Other	–	–	–	0.3	0.3	0.7	–	–	–
Marital Status									
Never married	99.5	97.1	85.3	98.2	95.2	84.0	56.9	96.1	87.3
Married	0.3	1.4	7.4	1.0	2.4	7.8	0.2	0.7	3.5
Living together like married partners	0.1	1.3	6.8	0.5	1.9	7.6	0.1	0.8	5.0
Single; but previously cohabiting	–	–	–	–	–	–	1.0	2.1	3.8
Widower/ Widow	0.1	0.1	0.2	0.0	0.1	0.1	0.0	0.0	0.1
Separated/Divorced	0.1	0.1	0.4	0.2	0.4	0.5	0.1	0.2	0.2
Other/Unknown	–	–	–	–	–	–	41.7	0.1	0.1
Highest level of education									
No schooling	2.3	3.1	6.7	0.9	0.9	1.9	0.5	0.9	2.1
Some primary	77.1	16.0	8.7	70.0	7.1	4.1	49.0	1.6	2.8
Completed primary	11.7	11.9	4.9	14.9	7.2	2.7	5.6	1.3	2.2
Some secondary	8.9	59.9	41.6	13.5	69.4	40.4	44.6	83.5	40.3
Completed secondary	–	8.5	31.9	0.0	11.8	39.3	0.0	11.4	43.8
Higher	–	0.7	6.3	–	1.3	8.4	–	0.8	7.8
Other/Unknown	–	–	–	0.7	2.2	3.2	0.2	0.5	1.0
Employment Status									
Employed	–	3.9	21.7	–	5.5	26.1	–	–	–
Unemployed	–	13.1	42.3	–	19.4	37.6	–	–	–
Not economically active	–	83.0	36.1	–	75.1	36.3	–	–	–
Not applicable	100.0	–	–	100.0	–	–			
Total	100.0								

Appendix C: Chapter 2: Table 2.1c: Profile of adult population (ages 18 years and above) in South Africa (Number and percentage distribution): (Census 2001, Community Survey (CS) 2007, Census 2011 and CS 2016)

Socio-demographic characteristics	Census 2001	CS 2007	Census 2011	CS 2016	Census 2001	CS 2007	Census 2011	CS 2016
	Number Distribution				Percentage Distribution			
Sex								
Male	12 775 864	14 314 885	16 068 132	17 253 980	46.6	47.2	47.7	48.2
Female	14 661 034	16 011 651	17 634 457	18 536 541	53.4	52.8	52.3	51.8
Total	27 436 898	30 326 536	33 702 589	35 790 521	100.0	100.0	100.0	100.0
Population Group								
Black African	20 878 161	22 942 579	25 822 437	27 898 889	76.1	75.7	76.6	78.0
Coloured	2 508 804	2 847 082	3 046 905	3 319 165	9.1	9.4	9.0	9.3
Indian/Asian	786 957	905 185	970 260	1 027 006	2.9	3.0	2.9	2.9
White	3 262 976	3 631 690	3 647 466	3 545 461	11.9	12.0	10.8	9.9
Other	-	-	215 519	-	-	-	0.6	-
Total	27 436 898	30 326 536	33 702 589	35 790 521	100.0	100.0	100.0	100.0
Marital Status								
Never married	11 926 318	13 763 198	15 757 529	17 048 034	43.5	45.4	46.8	47.6
Married	10 482 306	10 707 670	11 677 581	10 972 156	38.2	35.3	34.6	30.7
Cohabiting	2 367 835	2 483 497	3 545 879	3 222 195	8.6	8.2	10.5	9.0
Single; but previously cohabiting	-	-	-	1 847 547	-	-	-	5.2
Widower/ Widow	1795945	2018155	1822024	1778193	6.5	6.7	5.4	5.0
Separated/Divorced	864 496	852 086	899 575	902 674	3.2	2.8	2.7	2.5
Other/Unknown	-	501 932	-	19 722	-	1.7	-	0.1
Total	27 436 898	30 326 536	33 702 589	35 790 521	100.0	100.0	100.0	100.0
Highest level of education								
No schooling	4 647 433	2 691 826	2 689 510	2 413 316	16.9	8.9	8.0	6.7
Some primary	4 279 492	4 693 739	3 864 328	3 183 001	15.6	15.5	11.5	8.9
Completed primary	1 768 082	1 688 963	1 489 385	1 414 318	6.4	5.6	4.4	4.0
Some secondary	8 996 403	12 400 300	11 693 993	12 613 635	32.8	40.9	34.7	35.2
Completed secondary	5 560 451	5 458 561	9 345 182	11 570 038	20.3	18.0	27.7	32.3
Higher	2 185 037	2 535 538	3 812 104	3 859 466	8.0	8.4	11.3	10.8
Other/Unknown	-	857 610	808 086	736748	-	2.8	2.4	2.1
Total	27 436 898	30 326 536	33 702 589	35 790 521	100.0	100.0	100.0	100.0

Appendix C: Table 2.1c: Profile of adult population (ages 18 years and above) in South Africa (Number and percentage distribution): (Census 2001, Community Survey (CS) 2007, Census 2011 and CS 2016) (concluded)

Socio-demographic characteristics	Census 2001	Census 2007	Census 2011	CS 2016	Census 2001	Census 2007	Census 2011	CS 2016
Employment Status								
Employed	9 531 213	12 245 656	13 079 396	–	34.7	40.4	38.8	–
Unemployed	8 132 892	5 931 831	8 325 911	–	29.6	19.6	24.7	–
Not economically active	7 745 431	8 895 573	9 531 291	–	28.2	29.3	28.3	–
Not applicable	2 027 363	3 253 477	2 765 991	–	7.4	10.7	8.2	–
Total	27 436 898	30 326 536	33 702 589	–	100.0	100.0	100.0	–
Household Size								
1	2 143 157	–	3 339 313	–	7.8	–	9.9	–
2	3 596 193	–	5 133 460	–	13.1	–	15.2	–
3	3 696 481	–	5 045 066	–	13.5	–	15.0	–
4	4 184 477	–	5 341 426	–	15.3	–	15.8	–
5	3 630 052	–	4 279 552	–	13.2	–	12.7	–
6	2 851 549	–	3 153 951	–	10.4	–	9.4	–
7	2 106 189	–	2 204 812	–	7.7	–	6.5	–
8	1 520 751	–	1 530 525	–	5.5	–	4.5	–
9	1 082 102	–	1 033 276	–	3.9	–	3.1	–
10+	2 625 949	–	2 641 207	–	9.6	–	7.8	–
Total	27 436 898	–	33 702 589	–	100.0	–	100.0	–
Province of usual residence								
Western Cape	3 024 221	3 606 211	4 083 309	4 112 312	11.0	11.9	12.1	11.5
Eastern Cape	3 489 369	3 702 902	3 938 520	3 947 974	12.7	12.2	11.7	11.0
Northern Cape	608 906	684 534	735 104	760 356	2.2	2.3	2.2	2.1
Free State	1 692 997	1 788 054	1 792 205	1 788 686	6.2	5.9	5.3	5.0
KwaZulu-Natal	5 537 396	6 100 234	6 310 572	6 383 675	20.2	20.1	18.7	17.8
North West	1 863 926	2 080 659	2 280 881	2 338 447	6.8	6.9	6.8	6.5
Gauteng	6 680 160	7 326 539	8 849 052	9 009 225	24.3	24.2	26.3	25.2
Mpumalanga	1 911 053	2 165 575	2 524 534	2 624 508	7.0	7.1	7.5	7.3
Limpopo	2 628 871	2 871 829	3 188 411	3 366 450	9.6	9.5	9.5	9.4
Other/Unknown	–	–	–	1 458 888	–	–	–	4.1
Total	27 436 898	30 326 536	33 702 589	35 790 521	100.0	100.0	100.0	100.0

Appendix D: Chapter 4: Distribution of Global, Sexual risk and general communication

i. Sum of teenagers' reports of talking about the 13 topics

Number of topics	Frequency	Per cent	Valid Per cent	Cumulative Per cent
0	41	2.9	3.4	3.4
1	45	3.2	3.7	7.1
2	74	5.2	6.1	13.1
3	99	6.9	8.1	21.2
4	114	8.0	9.4	30.6
5	106	7.5	8.8	39.3
6	109	7.6	8.9	48.3
7	100	7.0	8.2	56.5
8	132	9.2	10.8	67.3
9	121	8.5	10.0	77.3
10	95	6.7	7.8	85.1
11	72	5.1	5.9	91.0
12	56	3.9	4.6	95.6
13	53	3.7	4.4	100.0
Total	1 216	85.3	100.0	
Missing System	209	14.7		
Total	1425	100.0		

Sum of parents reports of talking about the 13 topics

Number of topics	Frequency	Per cent	Valid Per cent	Cumulative Per cent
0	200	14.0	14.6	14.6
1	148	10.4	10.8	25.4
2	136	9.6	9.9	35.3
3	142	9.9	10.3	45.7
4	128	9.0	9.4	55.0
5	123	8.6	8.9	64.0
6	86	6.0	6.3	70.2
7	95	6.7	6.9	77.2
8	81	5.7	5.9	83.1
9	71	5.0	5.2	88.2
10	48	3.4	3.5	91.7
11	33	2.3	2.4	94.1
12	38	2.7	2.8	96.9
13	42	3.0	3.1	100.0
Total	1 370	96.2	100.0	
Missing System	55	3.8		
Total	1 425	100.0		

ii. Sexual risk communication

Sum of teenagers reports of talking about the 9 topics

Number of topics	Frequency	Per cent	Valid Per cent	Cumulative Per cent
0	146	10.2	12.0	12.0
1	149	10.5	12.3	24.3
2	119	8.3	9.8	34.1
3	131	9.2	10.8	44.9
4	125	8.8	10.3	55.2
6	144	10.1	11.8	67.1
6	147	10.3	12.1	79.2
7	98	6.9	8.1	87.3
8	81	5.7	6.7	94.0
9	73	5.1	6.0	100.0
Total	1 214	85.1	100.0	
Missing system	212	14.9		
Total	1 425	100.0		

Sum of parents reports of talking about the 9 topics

Number of topics	Frequency	Per cent	Valid Per cent	Cumulative Per cent
0	11	.8	.8	.8
1	140	9.8	10.2	11.1
2	86	6.1	6.3	17.4
3	126	8.9	9.2	26.6
4	132	9.3	9.7	36.3
6	202	14.1	14.8	51.1
6	183	12.9	13.4	64.5
7	205	14.4	15.0	79.5
8	257	18.1	18.8	98.3
9	23	1.6	1.7	100.0
Total	1 367	95.9	100.0	
Missing system	59	4.1		
Total	1 425	100.0		

iii. General communication

Sum of teenagers' reports of talking about the 4 topics

Number of topics	Frequency	Per cent	Valid Per cent	Cumulative Per cent
0	59	4.1	4.8	4.8
1	144	10.1	11.9	16.7
2	310	21.8	25.5	42.2
3	371	26.0	30.5	72.8
4	331	23.2	27.2	100.0
Total	1215	85.2	100.0	
Missing system	210	14.8		
Total	1425	100.0		

Sum of parents reports of talking about the 4 topics

Number of topics	Frequency	Per cent	Valid Per cent	Cumulative Per cent
0	67	4.7	4.9	4.9
1	106	7.4	7.7	12.6
2	252	17.7	18.4	31.0
3	322	22.6	23.5	54.5
4	624	43.8	45.5	100.0
Total	1370	96.2	100.0	
Missing system	55	3.8		
Total	1425	100.0		

Appendix E: Chapter 4: Table 4.1a: Background characteristics of adolescents by gender

Socio-demographic Characteristics	Male	Female	Total
Mean Age (continuous)	15.1	14.8	14.9
Age **	(n=613)	(n=812)	(n=1 425)
12–14	36.1	44.7	41.0
15–17	63.9	55.3	59.0
Population group	(n=613)	(n=812)	(n=1 425)
African	74.9	78.1	76.7
Non-African	25.1	21.9	23.3
Residence	(n=613)	(n=813)	(n=1 426)
Urban	49.8	52.4	50.9
Rural	50.2	47.6	49.1
In School	(n=612)	(n=812)	(n=1 424)
Yes	92.0	94.5	93.4
No	8.0	5.5	6.6
Living arrangements	(n=613)	(n=813)	(n=1 426)
Both parents	59.4	52.2	55.3
Mother only	30.8	25.3	28.4
Father only	3.1	2.8	2.9
Other guardian	14.0	12.6	13.4
Family wealth status**	(n=614)	(n=813)	(n=1 427)
Very poor/poor	33.1	25.8	29.0
Enough to live on/wealthy	66.9	74.2	71.0
Province	(n=614)	(n=813)	(n=1 427)
Western Cape	8.8	8.8	8.8
Eastern Cape	14.2	12.3	13.1
Northern Cape	3.6	3.1	3.3
Free State	7.0	5.0	5.9
KwaZulu-Natal	19.2	24.9	22.5
North West	9.1	11.1	10.5
Gauteng	19.1	18.8	18.9
Mpumalanga	7.0	6.5	6.7
Limpopo	11.3	9.5	10.2

Gender difference *p<0.05,**p<0.01,***p<0.001

Appendix F: Chapter 4: Table 4. 1b: Background characteristics of parents by gender

Socio-demographic Characteristics	Male	Female	Total
Age***	(n=777)	(n=648)	(n=1 425)
Under 40	24.7	49.4	35.9
Over 40	75.3	50.6	64.1
Population group	(n=777)	(n=648)	(n=1 425)
African	75.9	77.6	76.7
Non-African	24.1	22.4	23.3
Residence*	(n=778)	(n=648)	(n=1 425)
Urban	47.8	54.5	50.9
Rural	52.2	45.5	49.1
Work Status***	(n=777)	(n=647)	(n=1 424)
Working	81.3	45.1	64.9
Not Working	18.7	54.5	35.1
Marital status***	(n=777)	(n=647)	(n=1 424)
Currently married	61.0	36.2	49.7
Not married	39.0	63.8	50.3
Education***	(n=777)	(n=647)	(n=1 424)
None or primary	59.7	49.1	54.9
Matriculation and above ¹	40.3	50.9	45.1
Province***	(n=779)	(n=648)	(n=1 425)
Western Cape	8.5	9.1	8.8
Eastern Cape	14.2	11.7	13.1
Northern Cape	3.9	2.6	3.3
Free State	6.8	4.9	6.0
KwaZulu-Natal	27.2	16.8	22.5
North West	7.8	13.7	10.5
Gauteng	17.2	21.0	18.9
Mpumalanga	7.3	6.0	6.7
Limpopo	7.1	14.0	10.2
Relationship with young person***	(n=777)	(n=648)	(n=1 425)
Parent	87.8	74.7	81.8
Other	12.2	25.3	28.2
Household size***	(n=778)	(n=647)	(n=1 425)
1–4 people	36.0	47.3	41.1
5+ people	64.0	52.7	58.9
Household income***	(n=649)	(n=538)	(n=1 187)
Under R1000	40.4	50.9	45.2
Above R1000	59.6	48.1	54.8
Family wealth status	(n=778)	(n=648)	(n=1 426)
Very poor/poor	27.2	31.0	29.0
Enough to live on/wealthy	72.8	69.0	71.0
Number of children in household	(n=777)	(n=647)	(n=1 424)
One	60.7	61.5	61.1
Two of more	39.3	38.5	38.9

Gender difference *p<0.05, **p<0.01, ***p<0.001; ¹Matriculation refers to the exit examination undertaken by South African students to complete their secondary schooling

Appendix G: Chapter 4: Table 4.2a: Consensus between parents’ reports and teenagers’ reports: percentage distribution of parent-child pairs, by agreement on whether discussions took place

	n ¹	k	95% Confidence intervals	Agreement		Disagreement	
				Both say discussed topic	Both say did not discuss topic	Teen says discussed, parent says did not	Parent says discussed topic, teen says did not
Teenagers dreams and aspirations	1 109	0.10	(0.038-0.168)	71.0	4.1	9.1	15.9
Someone you are dating	1 084	0.22	(0.165-0.279)	24.3	37.1	14.2	24.4
Teenagers friends and the things they do together	1 114	0.18	(0.121-0.243)	53.3	12.6	16.4	17.7
Alcohol and drugs	1 108	0.20	(0.149-0.259)	47.8	15.3	9.7	27.2
HIV/AIDS	1 103	0.20	(0.138-0.260)	60.0	9.6	9.5	20.9
Things that are going on in the teenagers lives	1 089	0.13	(0.064-0.186)	51.0	11.8	15.6	21.6
Dealing with pressure to have sex	1 024	0.16	(0.099-0.217)	17.2	42.5	12.7	27.6
Risks of unprotected sex	1 057	0.15	(0.097-0.211)	33.6	23.5	13.4	29.5
Deciding when you’re ready to have sex	1 041	0.13	(0.068-0.186)	16.9	41.7	15.9	25.6
Relationships between men and women	1 057	0.24	(0.179-0.293)	31.5	30.1	15.4	23.0
Contraception and avoiding pregnancy	1 062	0.18	(0.124-0.242)	33.1	25.9	15.9	25.0
Sexual abuse	1 061	0.29	(0.228-0.342)	44.1	21.7	12.7	21.5
Sexual assault	1 058	0.25	(0.190-0.304)	43.3	20.5	12.2	24.0

Appendix H: Chapter 4: Reliability checks

1. Reliability: Scale: Youth reports on parent-child global communication scale

Case Processing Summary

		N	%
Cases	Valid	941.33630637	66.0
	Excluded ^a	483.90196494	34.0
	Total	1425.23827131	100.0

Weighted by the variable Composite weight factor

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.824	.822	13

Item Statistics

Topic	Mean	Std. Deviation	N
youth report about talking about dreams and aspirations	.7895	.40791	941.33630637
youth report about talking about dating	.3573	.47945	941.33630637
youth report about talking about their friends and what they do together	.6909	.46236	941.33630637
youth report about talking about alcohol and drugs	.5937	.49140	941.33630637
youth report about talking about HIV and AIDS	.7043	.45660	941.33630637
youth report about talking about things going on in their lives	.6744	.46886	941.33630637
youth report about talking about dealing with pressure to have sex	.3108	.46305	941.33630637
youth report about talking about risks of unprotected sex	.4728	.49952	941.33630637
youth report about talking about readiness to have sex	.3361	.47263	941.33630637
youth report about talking relationships between men and women	.4620	.49882	941.33630637
youth report about talking about contraception and how to prevent pregnancy	.4874	.50011	941.33630637
youth report about talking about risks of sexual assault	.5461	.49813	941.33630637
youth report about talking about risk of sexual abuse	.5530	.49745	941.33630637

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	.261	.067	.781	.715	11.718	.014	13

Item-Total Statistics

Topic	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
youth report about talking about dreams and aspirations	6.1887	11.539	.249	.081	.827
youth report about talking about dating	6.6209	11.035	.354	.162	.821
youth report about talking about their friends and what they do together	6.2873	11.207	.314	.131	.823
youth report about talking about alcohol and drugs	6.3845	10.993	.356	.207	.821
youth report about talking about HIV and AIDS	6.2739	10.666	.510	.334	.809
youth report about talking about things going on in their lives	6.3038	10.961	.391	.195	.818
youth report about talking about dealing with pressure to have sex	6.6674	10.752	.470	.316	.812
youth report about talking about risks of unprotected sex	6.5054	10.250	.592	.395	.802

youth report about talking about readiness to have sex	6.6421	10.682	.482	.319	.811
youth report about talking relationships between men and women	6.5161	10.486	.514	.301	.809
youth report about talking about contraception and how to prevent pregnancy	6.4908	10.352	.557	.364	.805
youth report about talking about risks of sexual assault	6.4321	10.198	.612	.638	.801
youth report about talking about risk of sexual abuse	6.4252	10.175	.621	.641	.800

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
6.9782	12.394	3.52053	13

2. Reliability Scale: Youth report on parent-child sexual risk communication scale

Case Processing Summary

		N	%
Cases	Valid	975.02425684	68.4
	Excluded ^a	450.21401447	31.6
	Total	1425.23827131	100.0

Weighted by the variable Composite weight factor

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.822	.821	9

Item Statistics

Topic	Mean	Std. Deviation	N
youth report about talking about dating	.3593	.48005	975.02425684
youth report about talking about HIV and AIDS	.6981	.45933	975.02425684
youth report about talking about dealing with pressure to have sex	.3081	.46195	975.02425684
youth report about talking about risks of unprotected sex	.4667	.49915	975.02425684
youth report about talking about readiness to have sex	.3334	.47167	975.02425684
youth report about talking relationships between men and women	.4587	.49855	975.02425684
youth report about talking about contraception and how to prevent pregnancy	.4900	.50016	975.02425684
youth report about talking about risks of sexual assault	.5419	.49850	975.02425684
youth report about talking about risk of sexual abuse	.5494	.49781	975.02425684

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	.337	.119	.774	.655	6.507	.013	9

Item-Total Statistics

Topic	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
youth report about talking about dating	3.8462	6.811	.331	.141	.826
youth report about talking about HIV and AIDS	3.5074	6.645	.429	.212	.814
youth report about talking about dealing with pressure to have sex	3.8974	6.496	.493	.318	.807
youth report about talking about risks of unprotected sex	3.7388	6.146	.596	.379	.795
youth report about talking about readiness to have sex	3.8721	6.422	.513	.315	.805
youth report about talking relationships between men and women	3.7468	6.325	.518	.291	.804
youth report about talking about contraception and how to prevent pregnancy	3.7155	6.184	.578	.360	.797
youth report about talking about risks of sexual assault	3.6636	6.105	.616	.626	.792
youth report about talking about risk of sexual abuse	3.6561	6.085	.626	.629	.791

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
4.2055	7.871	2.80556	9

3. Reliability Scale: Parent reports on parent-child global communication scale

Case Processing Summary

		N	%
Cases	Valid	1140.63868102	80.0
	Excluded ^a	284.59959029	20.0
	Total	1425.23827131	100.0

Weighted by the variable Composite weight factor

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.869	.868	13

Item Statistics

Topic	Mean	Std. Deviation	N
Parent reports talking to youth about dreams and aspirations	.8637	.34321	1140.63868102
Parent reports talking to youth about someone they are dating	.5009	.50022	1140.63868102
Parent reports talking to youth about their friends	.7155	.45139	1140.63868102
Parent reports talking to youth about alcohol and drugs	.7545	.43057	1140.63868102
Parent talked to teenager about HIV	.7974	.40213	1140.63868102
Parent reports talking to youth about what's going on in their lives	.7210	.44869	1140.63868102
Parent talked with teenager about dealing with pressure to have sex	.4438	.49705	1140.63868102
Parent talked with teenager about risk of unprotected sex	.6308	.48280	1140.63868102
Parent talked with teenager about deciding when ready for sex	.4343	.49588	1140.63868102
Parent reports talking to youth about relationships between men and women	.5419	.49846	1140.63868102
Parent reports talking to youth about contraception	.5831	.49326	1140.63868102
Parent reports talking to youth about the risks of sexual assault	.6584	.47446	1140.63868102
Parent reports talking to youth about the risks of sexual abuse	.6393	.48040	1140.63868102

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	.336	.181	.822	.641	4.546	.010	13

Appendices

Item-Total Statistics					
Topic	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Parent reports talking to youth about dreams and aspirations	7.4210	12.983	.414	.239	.866
Parent reports talking to youth about someone they are dating	7.7838	12.194	.481	.276	.863
Parent reports talking to youth about their friends	7.5692	12.476	.453	.268	.864
Parent reports talking to youth about alcohol and drugs	7.5302	12.589	.442	.306	.865
Parent talked to teenager about HIV	7.4873	12.446	.534	.402	.860
Parent reports talking to youth about what's going on in their lives	7.5637	12.380	.489	.270	.862
Parent talked with teenager about dealing with pressure to have sex	7.8409	11.858	.590	.441	.857
Parent talked with teenager about risk of unprotected sex	7.6539	11.768	.641	.459	.854
Parent talked with teenager about deciding when ready for sex	7.8504	11.853	.593	.463	.856
Parent reports talking to youth about relationships between men and women	7.7428	11.933	.564	.350	.858
Parent reports talking to youth about contraception	7.7016	11.915	.577	.367	.857
Parent reports talking to youth about the risks of sexual assault	7.6263	11.909	.608	.690	.856
Parent reports talking to youth about the risks of sexual abuse	7.6454	11.855	.616	.697	.855

Scale Statistics			
Mean	Variance	Std. Deviation	N of Items
8.2847	14.124	3.75820	13

4. Reliability Scale: Parent report on parent-child sexual risk communication scale

Case Processing Summary

		N	%
Cases	Valid	1177.63035466	82.6
	Excluded ^a	247.60791665	17.4
	Total	1425.23827131	100.0

Weighted by the variable Composite weight factor

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.854	.854	9

Item Statistics

Topic	Mean	Std. Deviation	N
Parent reports talking to youth about someone they are dating	.4948	.50019	1177.63035466
Parent talked to teenager about HIV	.7972	.40228	1177.63035466
Parent talked with teenager about dealing with pressure to have sex	.4435	.49701	1177.63035466
Parent talked with teenager about risk of unprotected sex	.6275	.48369	1177.63035466
Parent talked with teenager about deciding when ready for sex	.4314	.49549	1177.63035466
Parent reports talking to youth about relationships between men and women	.5426	.49840	1177.63035466
Parent reports talking to youth about contraception	.5821	.49342	1177.63035466
Parent reports talking to youth about the risks of sexual assault	.6565	.47509	1177.63035466
Parent reports talking to youth about the risks of sexual abuse	.6385	.48063	1177.63035466

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	.393	.211	.827	.616	3.923	.011	9

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Parent reports talking to youth about someone they are dating	4.7192	7.191	.452	.228	.851
Parent talked to teenager about HIV	4.4169	7.461	.470	.247	.848
Parent talked with teenager about dealing with pressure to have sex	4.7705	6.836	.605	.433	.835
Parent talked with teenager about risk of unprotected sex	4.5866	6.785	.649	.448	.831
Parent talked with teenager about deciding when ready for sex	4.7826	6.807	.620	.462	.834
Parent reports talking to youth about relationships between men and women	4.6715	6.947	.556	.330	.840
Parent reports talking to youth about contraception	4.6320	6.932	.569	.348	.839
Parent reports talking to youth about the risks of sexual assault	4.5576	6.886	.619	.694	.834
Parent reports talking to youth about the risks of sexual abuse	4.5756	6.827	.636	.702	.832

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
5.2141	8.655	2.94191	9

Appendix I: Chapter 4 Linear regression models

Table 4.9a Multiple linear regression for factors associated with parent-child communication among sons, Model Summary^a

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.169 ^b	.029	.016	3.23966	.029	2.231	6	453	.039
2	.272 ^c	.074	.049	3.18393	.046	3.671	6	447	.001
3	.543 ^d	.295	.270	2.79017	.221	34.824	4	443	.000

a. Gender = Male

b. Predictors: (Constant), Youth lives with, Attending school, Age group, Place of residence, living arrangements recoded

c. Predictors: (Constant), Youth lives with, Attending school, Age group, Place of residence, living arrangements recoded, Encourage adolescents to be more responsible, Encourage adolescents to initiate sex, Have no value, Encourage adolescents to delay sex, Help reduce the risk of HIV-AIDS, Help reduce the risk of teen pregnancy

d. Predictors: (Constant), Youth lives with, Attending school, Age group, Place of residence, current grade grouped, living arrangements recoded, Encourage adolescents to be more responsible, Encourage adolescents to initiate sex, Have no value, Encourage adolescents to delay sex, Help reduce the risk of HIV-AIDS, Help reduce the risk of teen pregnancy, Talk to parents about men-women relationship, Talk to parents about other difficult issues, Talk to parents about HIVAIDS, Talk to parents about sex

Table 4.9a Casewise Diagnostics^{a,b} Multiple linear regression for factors associated with parent-child communication among sons

Case Number	Std. Residual	sum of teen reports of talking with 13 topics	Predicted Value	Residual
745	3.200	13.00	4.0716	8.92840

a. Gender = Male

b. Dependent Variable: sum of teen reports of talking with 13 topics

Table 4.9a Multiple linear regression for factors associated with parent-child communication among sons Coefficients^{a,b}

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	5.184	.822		6.305	.000	3.568	6.800
	current grade grouped	.301	.224	.063	1.339	.181	-.141	.742
	living arrangements recoded	.892	.959	.196	.931	.352	-.992	2.776
	Attending school	2.422	1.125	.100	2.152	.032	.210	4.634
	Age group	-.124	.155	-.037	-.802	.423	-.428	.180
	Place of residence	.631	.305	.097	2.068	.039	.031	1.232
	Youth lives with	-.599	.670	-.189	-.894	.372	-1.915	.717
2	(Constant)	7.980	1.340		5.954	.000	5.346	10.613
	current grade grouped	.252	.224	.053	1.128	.260	-.187	.692
	living arrangements recoded	1.485	.955	.326	1.554	.121	-.393	3.362
	Attending school	2.229	1.111	.092	2.005	.046	.045	4.413
	Age group	-.104	.153	-.032	-.683	.495	-.405	.196
	Place of residence	.680	.302	.104	2.251	.025	.086	1.274
	Youth lives with	-1.005	.667	-.317	-1.507	.132	-2.316	.306
	Help reduce the risk of HIV-AIDS	-1.440	.677	-.117	-2.126	.034	-2.771	-.109
	Help reduce the risk of teen pregnancy	-1.263	.692	-.102	-1.824	.069	-2.624	.098
	Encourage adolescents to delay sex	-.518	.436	-.060	-1.188	.235	-1.376	.339
	Encourage adolescents to initiate sex	-.391	.344	-.054	-1.138	.256	-1.067	.284
	Encourage adolescents to be more responsible	.596	.429	.067	1.389	.165	-.247	1.439
	Have no value	.279	.368	.036	.760	.448	-.443	1.002
3	(Constant)	12.692	1.262		10.061	.000	10.213	15.171
	current grade grouped	.041	.197	.009	.210	.833	-.346	.429
	living arrangements recoded	.120	.851	.026	.141	.888	-1.552	1.793
	Attending school	1.729	.978	.072	1.769	.078	-.192	3.651
	Age group	-.150	.135	-.045	-1.117	.265	-.415	.114
	Place of residence	.714	.266	.109	2.682	.008	.191	1.237
	Youth lives with	.019	.596	.006	.032	.975	-1.152	1.190
	Help reduce the risk of HIV-AIDS	-.813	.601	-.066	-1.354	.177	-1.994	.367
	Help reduce the risk of teen pregnancy	-.793	.610	-.064	-1.301	.194	-1.991	.405

Table 4.9a Multiple linear regression for factors associated with parent-child communication among sons, Coefficients^a (cont.)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
	Encourage adolescents to delay sex	-.485	.386	-.056	-1.257	.209	-1.243	.273
	Encourage adolescents to initiate sex	-.326	.303	-.045	-1.079	.281	-.921	.268
	Encourage adolescents to be more responsible	.592	.378	.067	1.565	.118	-.151	1.334
	Have no value	.483	.324	.062	1.492	.136	-.153	1.120
	Talk to parents about sex	-.273	.339	-.042	-.805	.421	-.939	.393
	Talk to parents about HIVAIDS	-2.331	.359	-.329	-6.494	.000	-3.036	-1.626
	Talk to parents about men-women relationship	-1.164	.338	-.178	-3.443	.001	-1.828	-.500
	Talk to parents about other difficult issues	-.212	.305	-.033	-.697	.486	-.812	.387

a. Gender = Male

b. Dependent Variable: sum of teen reports of talking with 13 topics

Appendices

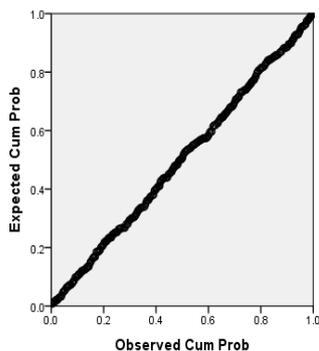
Table 4.9a Multiple linear regression for factors associated with parent-child communication among sons, Residuals Statistics^{a,b}

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.1828	9.6005	6.1073	1.77479	461
Std. Predicted Value	-2.775	1.968	.000	1.000	461
Standard Error of Predicted Value	.301	1.160	.517	.142	461
Adjusted Predicted Value	1.2573	9.7456	5.9762	1.85614	343
Residual	-6.98730	8.92840	.00000	2.74119	461
Std. Residual	-2.504	3.200	.000	.982	461
Stud. Residual	-2.612	3.231	.000	1.001	461
Deleted Residual	-7.60225	9.10189	-.14965	2.75966	343
Stud. Deleted Residual	-2.629	3.266	-.052	.973	343
Mahal. Distance	4.343	78.433	15.965	10.455	461
Cook's Distance	.000	.038	.002	.004	343
Centered Leverage Value	.009	.171	.035	.023	461

a. Gender = Male

b. Dependent Variable: sum of teen reports of talking with 13 topics

Normal P-P Plot of Regression Standardized Residual
 Dependent Variable: sum of teen reports of talking with 13 topics
 Gender: Male



Cases weighted by Composite weight factor

Table 4.9b Model Summary^a Multiple linear regression for factors associated with parent-child communication among daughters

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.125 ^b	.016	.006	3.45303	.016	1.661	6	631	.128
2	.183 ^c	.034	.015	3.43775	.018	1.937	6	625	.073
3	.349 ^d	.122	.099	3.28720	.088	15.649	4	621	.000

a. Gender = Female

b. Predictors: (Constant), Youth lives with, Age group, current grade grouped, Attending school, Place of residence, living arrangements recoded

c. Predictors: (Constant), Youth lives with, Age group, current grade grouped, Attending school, Place of residence, living arrangements recoded, Encourage adolescents to delay sex, Have no value, Encourage adolescents to initiate sex, Help reduce the risk of HIV-AIDS, Encourage adolescents to be more responsible, Help reduce the risk of teen pregnancy

d. Predictors: (Constant), Youth lives with, Age group, current grade grouped, Attending school, Place of residence, living arrangements recoded, Encourage adolescents to delay sex, Have no value, Encourage adolescents to initiate sex, Help reduce the risk of HIV-AIDS, Encourage adolescents to be more responsible, Help reduce the risk of teen pregnancy, Talk to parents about sex, Talk to parents about other difficult issues, Talk to parents about HIVAIDS, Talk to parents about men-women relationship

Table 4:9b Multiple linear regression for factors associated with parent-child communication among daughters, Coefficients^{a,b}

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	5.727	.772		7.421	.000	4.212	7.243
	current grade grouped	.504	.226	.089	2.230	.026	.060	.947
	living arrangements recoded	-.533	.813	-.109	-.655	.512	-2.130	1.064
	Attending school	-.254	1.235	-.008	-.206	.837	-2.679	2.170
	Age group	.071	.135	.021	.525	.600	-.195	.337
	Place of residence	.492	.280	.071	1.757	.079	-.058	1.041
	Youth lives with	.412	.569	.120	.724	.470	-.706	1.529
2	(Constant)	7.761	1.300		5.972	.000	5.209	10.313
	current grade grouped	.438	.229	.078	1.917	.056	-.011	.887
	living arrangements recoded	-.699	.815	-.143	-.858	.391	-2.298	.901
	Attending school	-.285	1.234	-.009	-.231	.818	-2.708	2.139
	Age group	.076	.136	.022	.559	.576	-.191	.343
	Place of residence	.400	.281	.058	1.423	.155	-.152	.952
	Youth lives with	.504	.569	.147	.885	.376	-.614	1.622
	Help reduce the risk of HIV-AIDS	-.072	.607	-.005	-.119	.905	-1.263	1.119
	Help reduce the risk of teen pregnancy	-.017	.524	-.002	-.033	.973	-1.047	1.012
	Encourage adolescents to delay sex	-.251	.392	-.028	-.642	.521	-1.020	.518
	Encourage adolescents to initiate sex	-.621	.291	-.086	-2.139	.033	-1.192	-.051
	Encourage adolescents to be more responsible	-.840	.430	-.083	-1.950	.052	-1.685	.006
	Have no value	.334	.335	.040	.998	.319	-.324	.992
3	(Constant)	10.978	1.311		8.376	.000	8.404	13.552
	current grade grouped	.310	.220	.055	1.413	.158	-.121	.742
	living arrangements recoded	-.388	.781	-.079	-.497	.620	-1.922	1.146
	Attending school	-.416	1.181	-.013	-.353	.724	-2.735	1.902
	Age group	-.027	.132	-.008	-.207	.836	-.287	.232
	Place of residence	.320	.270	.046	1.185	.237	-.210	.850
	Youth lives with	.198	.546	.058	.362	.717	-.875	1.271
	Help reduce the risk of HIV-AIDS	.090	.582	.007	.155	.877	-1.053	1.233
	Help reduce the risk of teen pregnancy	.035	.503	.003	.069	.945	-.953	1.022

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Table 4.9b Multiple linear regression for factors associated with parent-child communication among daughters, Coefficients^{a,b} (cont.)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
Encourage adolescents to delay sex	-.027	.379	-.003	-.072	.943	-.771	.717
Encourage adolescents to initiate sex	-.348	.284	-.048	-1.228	.220	-.905	.209
Encourage adolescents to be more responsible	-.796	.415	-.078	-1.919	.055	-1.610	.018
Have no value	.453	.323	.054	1.400	.162	-.182	1.087
Talk to parents about sex	-.313	.351	-.045	-.894	.372	-1.002	.375
Talk to parents about HIV/AIDS	-1.088	.383	-.137	-2.840	.005	-1.840	-.336
Talk to parents about men-women relationship	-1.047	.343	-.150	-3.055	.002	-1.720	-.374
Talk to parents about other difficult issues	-.346	.323	-.050	-1.072	.284	-.980	.288

a. Gender = Female

b. Dependent Variable: sum of teen reports of talking with 13 topics

Table 4.9b Multiple linear regression for factors associated with parent-child communication among daughters , Residuals Statistics^{a,b}

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.6246	9.0486	7.0022	1.20962	638
Std. Predicted Value	-2.792	1.692	.000	1.000	638
Standard Error of Predicted Value	.299	1.384	.516	.148	638
Adjusted Predicted Value	3.7495	9.1500	6.9479	1.24039	447
Residual	-8.02125	8.09831	.00000	3.24568	638
Std. Residual	-2.440	2.464	.000	.987	638
Stud. Residual	-2.457	2.522	.000	1.001	638
Deleted Residual	-8.05605	8.48837	-.01956	3.37271	447
Stud. Deleted Residual	-2.442	2.533	-.006	1.013	447
Mahal. Distance	4.272	112.026	15.975	12.064	638
Cook's Distance	.000	.023	.002	.003	447
Centered Leverage Value	.007	.176	.025	.019	638

a. Gender = Female

b. Dependent Variable: sum of teen reports of talking with 13 topics

Normal P-P Plot of Regression Standardized Residual
 Dependent Variable: sum of teen reports of talking with 13 topics

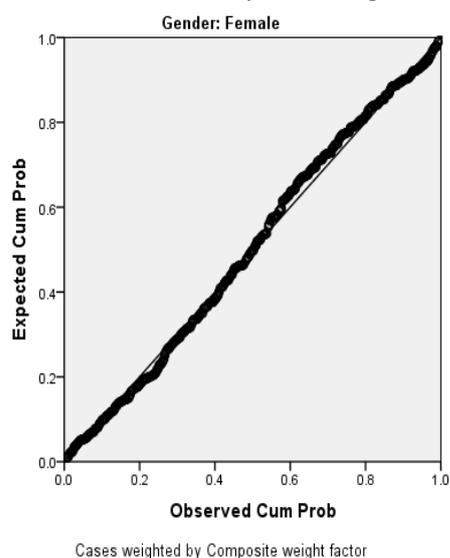


Table 4.10a Multiple linear regression for factors associated with parent-child communication among non-African teenagers', Model Summary^a

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.142 ^b	.020	-.005	3.67765	.020	.806	6	235	.566
2	.203 ^c	.041	-.009	3.68520	.021	.839	6	229	.541
3	.472 ^d	.223	.167	3.34782	.181	13.143	4	225	.000

a. race grouped = non-African

b. Predictors: (Constant), Youth lives with, Place of residence, Age group, Attending school, current grade grouped, living arrangements recoded

c. Predictors: (Constant), Youth lives with, Place of residence, Age group, Attending school, current grade grouped, living arrangements recoded, Help reduce the risk of teen pregnancy, Encourage adolescents to initiate sex, Have no value, Encourage adolescents to delay sex, Encourage adolescents to be more responsible, Help reduce the risk of HIV-AIDS

d. Predictors: (Constant), Youth lives with, Place of residence, Age group, Attending school, current grade grouped, living arrangements recoded, Help reduce the risk of teen pregnancy, Encourage adolescents to initiate sex, Have no value, Encourage adolescents to delay sex, Encourage adolescents to be more responsible, Help reduce the risk of HIV-AIDS, Talk to parents about HIVAIDS, Talk to parents about men-women relationship, Talk to parents about other difficult issues, Talk to parents about sex

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Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	6.564	1.709		3.842	.000	3.199	9.930
	current grade grouped	.005	.382	.001	.012	.991	-.748	.757
	living arrangements recoded	2.639	1.706	.429	1.547	.123	-.722	6.001
	Attending school	.414	1.907	.014	.217	.828	-3.343	4.172
	Age group	.171	.279	.041	.612	.541	-.379	.720
	Place of residence	-1.300	.948	-.089	-1.371	.172	-3.167	.568
	Youth lives with	-1.841	1.252	-.403	-1.470	.143	-4.308	.626
2	(Constant)	7.881	2.911		2.707	.007	2.145	13.616
	current grade grouped	-.035	.404	-.006	-.085	.932	-.831	.762
	living arrangements recoded	2.824	1.827	.459	1.546	.124	-.776	6.425
	Attending school	.642	1.956	.022	.328	.743	-3.212	4.497
	Age group	.200	.284	.048	.705	.481	-.360	.761
	Place of residence	-1.511	.962	-.103	-1.571	.117	-3.406	.384
	Youth lives with	-2.017	1.325	-.441	-1.522	.129	-4.628	.594
	Help reduce the risk of HIV-AIDS	-1.628	1.110	-.107	-1.467	.144	-3.816	.559
	Help reduce the risk of teen pregnancy	.697	1.055	.049	.661	.509	-1.381	2.775
	Encourage adolescents to delay sex	.021	.695	.002	.031	.975	-1.347	1.390
	Encourage adolescents to initiate sex	-.826	.550	-.102	-1.502	.134	-1.910	.257
	Encourage adolescents to be more responsible	.571	.814	.051	.702	.484	-1.033	2.176
	Have no value	.338	.641	.036	.527	.599	-.924	1.600
3	(Constant)	12.568	2.738		4.591	.000	7.173	17.963
	current grade grouped	.008	.371	.001	.022	.982	-.723	.740
	living arrangements recoded	.609	1.690	.099	.360	.719	-2.721	3.939
	Attending school	1.115	1.831	.038	.609	.543	-2.493	4.722
	Age group	.004	.261	.001	.017	.987	-.510	.519
	Place of residence	-1.015	.877	-.069	-1.157	.249	-2.743	.714
	Youth lives with	-.412	1.224	-.090	-.337	.737	-2.825	2.001
	Help reduce the risk of HIV-AIDS	-1.538	1.016	-.102	-1.514	.132	-3.540	.464
	Help reduce the risk of teen pregnancy	.817	.959	.057	.853	.395	-1.071	2.706
	Encourage adolescents to delay sex	.080	.641	.008	.125	.901	-1.184	1.344
	Encourage adolescents to initiate sex	-.677	.503	-.083	-1.346	.180	-1.667	.314
	Encourage adolescents to be more responsible	1.159	.749	.103	1.546	.123	-.318	2.636
	Have no value	.653	.586	.069	1.115	.266	-.501	1.808
	Talk to parents about sex	-1.353	.665	-.185	-2.035	.043	-2.664	-.043
	Talk to parents about HIV/AIDS	-1.251	.614	-.156	-2.038	.043	-2.461	-.041
	Talk to parents about men-women relationship	-.688	.636	-.094	-1.083	.280	-1.940	.564
	Talk to parents about other difficult issues	-.779	.581	-.106	-1.341	.181	-1.924	.366

a. race grouped = non-african
b. Dependent Variable: sum of teen reports of talking with 13 topics

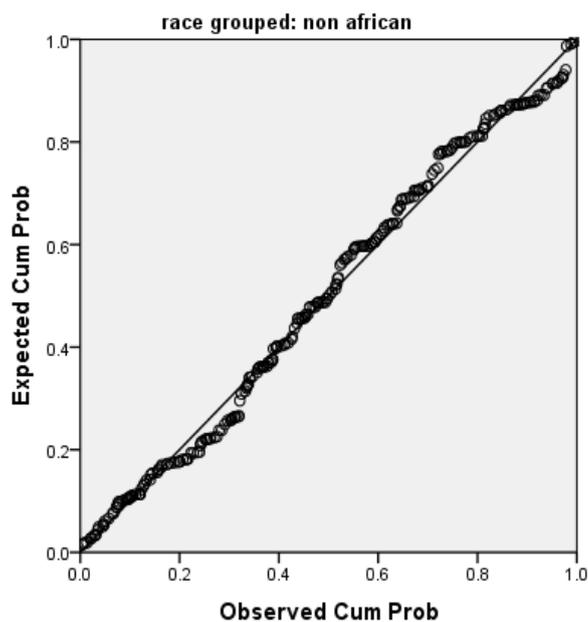
Table 4.10a Multiple linear regression for factors associated with parent-child communication among non-African teenagers', Residuals Statistics^{a,b}

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.3873	10.2834	6.7922	1.73057	242
Std. Predicted Value	-1.968	2.017	.000	1.000	242
Standard Error of Predicted Value	.430	2.183	.837	.293	242
Adjusted Predicted Value	3.5777	10.4120	6.7522	1.75157	183
Residual	-8.33820	8.88425	.00000	3.23500	242
Std. Residual	-2.491	2.654	.000	.966	242
Stud. Residual	-2.666	2.698	.000	1.005	242
Deleted Residual	-7.74435	9.41222	.19715	3.51128	183
Stud. Deleted Residual	-2.251	2.737	.055	1.014	183
Mahal. Distance	2.978	101.702	15.934	13.338	242
Cook's Distance	.000	.052	.005	.008	183
Centered Leverage Value	.012	.421	.066	.055	242

a. race grouped = non-African

b. Dependent Variable: sum of teen reports of talking with 13 topics

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: sum of teen reports of talking with 13 topics



Cases weighted by Composite weight factor

Table 4.10b Multiple linear regression for factors associated with parent-child communication among African teenagers 'Model Summary'^a

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.165 ^b	.027	.020	3.29881	.027	3.973	6	849	.001
2	.231 ^c	.053	.040	3.26593	.026	3.866	6	843	.001
3	.427 ^d	.183	.167	3.04186	.129	33.221	4	839	.000

a. race grouped = African

b. Predictors: (Constant), Youth lives with, current grade grouped, Age group, Place of residence, Attending school, living arrangements recoded

c. Predictors: (Constant), Youth lives with, current grade grouped, Age group, Place of residence, Attending school, living arrangements recoded, Encourage adolescents to delay sex, Encourage adolescents to initiate sex, Have no value, Encourage adolescents to be more responsible, Help reduce the risk of HIV-AIDS, Help reduce the risk of teen pregnancy

d. Predictors: (Constant), Youth lives with, current grade grouped, Age group, Place of residence, Attending school, living arrangements recoded, Encourage adolescents to delay sex, Encourage adolescents to initiate sex, Have no value, Encourage adolescents to be more responsible, Help reduce the risk of HIV-AIDS, Help reduce the risk of teen pregnancy, Talk to parents about sex, Talk to parents about other difficult issues, Talk to parents about men-women relationship, Talk to parents about HIVAIDS

Table 4.10b Multiple linear regression for factors associated with parent-child communication among African teenagers', Coefficients^{a,b}

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	5.535	.607		9.121	.000	4.344	6.727
	current grade grouped	.578	.179	.109	3.229	.001	.227	.929
	living arrangements recoded	-.504	.666	-.110	-.756	.450	-1.811	.804
	Attending school	1.145	.940	.041	1.218	.224	-.700	2.989
	Age group	-.056	.109	-.018	-.516	.606	-.271	.158
	Place of residence	.773	.237	.111	3.263	.001	.308	1.239
	Youth lives with	.359	.461	.114	.779	.436	-.546	1.264
2	(Constant)	7.909	.982		8.050	.000	5.980	9.837
	current grade grouped	.567	.178	.107	3.176	.002	.216	.917
	living arrangements recoded	-.340	.663	-.074	-.512	.608	-1.641	.962
	Attending school	1.004	.932	.036	1.077	.282	-.826	2.834
	Age group	-.043	.109	-.014	-.398	.691	-.257	.170
	Place of residence	.730	.236	.105	3.091	.002	.267	1.194
	Youth lives with	.238	.459	.076	.519	.604	-.663	1.139
	Help reduce the risk of HIV-AIDS	-.510	.497	-.041	-1.026	.305	-1.486	.466
	Help reduce the risk of teen pregnancy	-.436	.454	-.039	-.961	.337	-1.326	.455
	Encourage adolescents to delay sex	-.595	.323	-.069	-1.840	.066	-1.230	.040
	Encourage adolescents to initiate sex	-.528	.243	-.075	-2.178	.030	-1.005	-.052
	Encourage adolescents to be more responsible	-.443	.329	-.048	-1.349	.178	-1.088	.202
	Have no value	.397	.270	.051	1.471	.142	-.133	.928
	3	(Constant)	11.662	.981		11.891	.000	9.737
current grade grouped		.309	.168	.059	1.841	.066	-.020	.638
living arrangements recoded		-.220	.618	-.048	-.355	.723	-1.432	.993
Attending school		.364	.871	.013	.418	.676	-1.346	2.073
Age group		-.100	.103	-.031	-.977	.329	-.302	.101
Place of residence		.601	.222	.086	2.709	.007	.165	1.036
Youth lives with		.120	.428	.038	.281	.779	-.720	.960
Help reduce the risk of HIV-AIDS		-.130	.465	-.010	-.279	.780	-1.043	.783
Help reduce the risk of teen pregnancy		-.306	.424	-.027	-.721	.471	-1.137	.526
Encourage adolescents to delay sex		-.401	.302	-.046	-1.327	.185	-.994	.192
Encourage adolescents to initiate sex		-.281	.229	-.040	-1.226	.220	-.730	.169
Encourage adolescents to be more responsible		-.530	.308	-.057	-1.723	.085	-1.134	.074
Have no value		.483	.254	.062	1.905	.057	-.015	.982
Talk to parents about sex		-.130	.267	-.020	-.488	.625	-.655	.394
Talk to parents about HIVAIDS		-1.726	.298	-.230	-5.786	.000	-2.311	-1.140
Talk to parents about men-women relationship		-1.139	.264	-.170	-4.311	.000	-1.658	-.620
Talk to parents about other difficult issues	-.168	.245	-.025	-.684	.494	-.649	.314	

a. race grouped = African

b. Dependent Variable: sum of teen reports of talking with 13 topics

Table 4.10b Multiple linear regression for factors associated with parent-child communication among African teenagers', Residuals Statistics^{a,b}

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.4339	9.0453	6.5803	1.42447	857
Std. Predicted Value	-2.911	1.730	.000	1.000	857
Standard Error of Predicted Value	.235	1.010	.414	.112	857
Adjusted Predicted Value	2.4798	9.0593	6.4390	1.45667	607
Residual	-8.18896	8.58650	.00000	3.01328	857
Std. Residual	-2.692	2.823	.000	.991	857
Stud. Residual	-2.709	2.841	.000	1.001	857
Deleted Residual	-8.28978	8.69909	-.13945	3.06853	607
Stud. Deleted Residual	-2.719	2.853	-.046	1.000	607
Mahal. Distance	4.118	93.275	15.981	10.868	857
Cook's Distance	.000	.018	.001	.002	607
Centered Leverage Value	.005	.109	.019	.013	857

a. race grouped = African

b. Dependent Variable: sum of teen reports of talking with 13 topics

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: sum of teen reports of talking with 13 topics

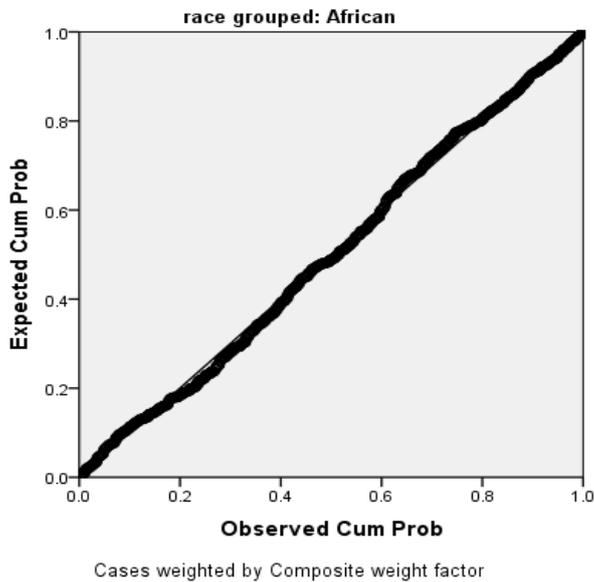


Table 4.11a Multiple linear regression for factors associated with parent-child communication reports by fathers, Model Summary^a

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.294 ^b	.086	.062	3.32946	.086	3.566	9	340	.000
2	.333 ^c	.111	.071	3.31351	.025	1.547	6	334	.162
3	.489 ^d	.239	.196	3.08339	.128	13.940	4	330	.000

a. Gender of head = Male

b. Predictors: (Constant), Relationship with young people, number of children in household aged 12-17, education of parents recoded, wealth status recoded, Work status of head, Household size, Place of residence, Household income, Age group

c. Predictors: (Constant), Relationship with young people, number of children in household aged 12-17, education of parents recoded, wealth status recoded, Work status of head, Household size, Place of residence, Household income, Age group, Encourage adolescents to delay sex, Has no real value, Help reduce the risk of HIV-AIDS, Encourage adolescents to initiate sex, Encourage adolescents to be responsible, Help reduce the risk of teenage pregnancy

d. Predictors: (Constant), Relationship with young people, number of children in household aged 12-17, education of parents recoded, wealth status recoded, Work status of head, Household size, Place of residence, Household income, Age group, Encourage adolescents to delay sex, Has no real value, Help reduce the risk of HIV-AIDS, Encourage adolescents to initiate sex, Encourage adolescents to be responsible, Help reduce the risk of teenage pregnancy, Other difficult issues, Sex, Relationship between men and women, HIV-AIDS

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Table 4.11a Multiple linear regression for factors associated with parent-child communication reports by fathers , Coefficients^{a,b}

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	2.515	1.855		1.356	.176	-1.133	6.164
	Work status of head	1.207	.550	.129	2.193	.029	.124	2.289
	Household size	.465	.437	.065	1.064	.288	-.395	1.325
	Household income	.162	.186	.054	.874	.383	-.203	.528
	Age group	-.296	.226	-.083	-1.307	.192	-.741	.149
	Place of residence	.438	.411	.064	1.068	.286	-.369	1.246
	wealth status recoded	-.876	.290	-.169	-3.026	.003	-1.446	-.307
	education of parents recoded	.622	.252	.158	2.474	.014	.128	1.117
	number of children in household aged 12-17	.051	.352	.008	.146	.884	-.641	.744
	Relationship with young people	-.157	.322	-.027	-.487	.627	-.791	.477
2	(Constant)	.219	2.286		.096	.924	-4.277	4.715
	Work status of head	1.016	.555	.109	1.830	.068	-.076	2.107
	Household size	.469	.437	.065	1.074	.283	-.390	1.329
	Household income	.139	.188	.047	.742	.459	-.230	.509
	Age group	-.261	.230	-.073	-1.134	.258	-.714	.192
	Place of residence	.342	.414	.050	.826	.409	-.472	1.156
	wealth status recoded	-.889	.290	-.171	-3.070	.002	-1.458	-.319
	education of parents recoded	.622	.254	.158	2.444	.015	.121	1.122
	number of children in household aged 12-17	-.078	.356	-.012	-.218	.828	-.777	.622
	Relationship with young people	-.144	.326	-.025	-.442	.659	-.785	.497
	Help reduce the risk of HIV-AIDS	1.598	1.016	.109	1.573	.117	-.400	3.597
	Help reduce the risk of teen preg	-1.215	.917	-.101	-1.325	.186	-3.020	.589
	Encourage adolescents to delay sex	.746	.513	.086	1.453	.147	-.264	1.756
	Encourage adolescents to initiate sex	.334	.389	.047	.858	.392	-.432	1.100
Encourage adolescents to be responsible	.917	.564	.099	1.626	.105	-.193	2.028	
Has no real value	-.094	.494	-.010	-.191	.849	-1.065	.876	
3	(Constant)	-1.828	2.330		-.784	.433	-6.412	2.757
	Work status of head	.606	.520	.065	1.165	.245	-.417	1.628
	Household size	.434	.411	.061	1.055	.292	-.375	1.242
	Household income	.126	.175	.042	.716	.474	-.219	.471
	Age group	-.227	.217	-.064	-1.046	.296	-.654	.200
	Place of residence	.417	.394	.061	1.056	.292	-.359	1.192
	wealth status recoded	-.817	.272	-.157	-3.002	.003	-1.353	-.282
	education of parents recoded	.369	.243	.094	1.517	.130	-.110	.848
	number of children in household aged 12-17	.131	.335	.020	.392	.695	-.527	.790
	Relationship with young people	.078	.305	.014	.257	.798	-.522	.678
	Help reduce the risk of HIV-AIDS	1.212	.972	.083	1.247	.213	-.700	3.123
	Help reduce the risk of teenage pregnancy	-1.495	.860	-.124	-1.738	.083	-3.186	.197
	Encourage adolescents to delay sex	.555	.483	.064	1.149	.252	-.396	1.506
	Encourage adolescents to initiate sex	.350	.364	.049	.964	.336	-.365	1.066
	Encourage adolescents to be responsible	.509	.556	.055	.915	.361	-.585	1.603
	Has no real value	.069	.463	.008	.149	.881	-.842	.980
	Sex	2.449	.524	.324	4.671	.000	1.417	3.480
	HIV-AIDS	.082	.642	.009	.128	.898	-1.181	1.345
Relationship between men and women	.527	.495	.073	1.065	.288	-.446	1.500	
Other difficult issues	-.249	.478	-.026	-.522	.602	-1.190	.691	

a. Gender of head = Male

b. Dependent Variable: Summary variable of all topics parent reports talking to youth about

Table 4.11a Multiple linear regression for factors associated with parent-child communication reports by fathers, Casewise Diagnostics^{a,b}

Case Number	Std. Residual	Summary variable of all topics parent reports talking to youth about	Predicted Value	Residual
693	3.500	13.00	2.2072	10.79279

a. Gender of head = Male

b. Dependent Variable: Summary variable of all topics parent reports talking to youth about

Table 4.11a Multiple linear regression for factors associated with parent-child communication reports by fathers, Residuals Statistics^{a,b}

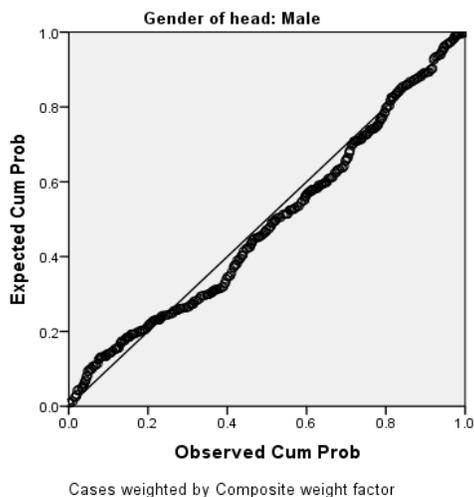
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.2732	9.1810	4.1630	1.68170	350
Std. Predicted Value	-1.718	2.984	.000	1.000	350
Standard Error of Predicted Value	.386	1.310	.716	.175	350
Adjusted Predicted Value	1.1028	8.4300	4.1108	1.71871	244
Residual	-7.34965	10.79279	.00000	2.99836	350
Std. Residual	-2.384	3.500	.000	.972	350
Stud. Residual	-2.474	3.545	.000	1.003	350
Deleted Residual	-7.22814	9.21624	.02927	3.05284	244
Stud. Deleted Residual	-2.295	2.955	.009	.962	244
Mahal. Distance	4.470	62.051	18.946	9.664	350
Cook's Distance	.000	.025	.003	.005	244
Centered Leverage Value	.013	.178	.054	.028	350

a. Gender of head = Male

b. Dependent Variable: Summary variable of all topics parent reports talking to youth about

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: Summary variable of all topics parent reports talking to youth about



Appendices

Table 4.11b Multiple linear regression for factors associated with parent-child communication reports by mothers, Model Summary^a

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.265 ^b	.070	.040	3.51474	.070	2.304	9	274	.016
2	.368 ^c	.135	.087	3.42697	.065	3.377	6	268	.003
3	.549 ^d	.302	.252	3.10304	.166	15.767	4	264	.000

a. Gender of head = Female

b. Predictors: (Constant), Relationship with young people, Place of residence, Household size, Age group, Work status of head, number of children in household aged 12-17, wealth status recoded, Household income, education of parents recoded

c. Predictors: (Constant), Relationship with young people, Place of residence, Household size, Age group, Work status of head, number of children in household aged 12-17, wealth status recoded, Household income, education of parents recoded, Has no real value, Encourage adolescents to delay sex, Encourage adolescents to initiate sex, Help reduce the risk of HIV-AIDS, Encourage adolescents to be responsible, Help reduce the risk of teen preg

d. Predictors: (Constant), Relationship with young people, Place of residence, Household size, Age group, Work status of head, number of children in household aged 12-17, wealth status recoded, Household income, education of parents recoded, Has no real value, Encourage adolescents to delay sex, Encourage adolescents to initiate sex, Help reduce the risk of HIV-AIDS, Encourage adolescents to be responsible, Help reduce the risk of teenage pregnancy, Other difficult issues, Relationship between men and women, HIV-AIDS, Sex

Table 4.11b Multiple linear regression for factors associated with parent-child communication reports by mothers, Coefficients^{a,b}

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	5.149	1.976		2.606	.010	1.259	9.039
	Work status of head	-.702	.503	-.098	-1.395	.164	-1.693	.289
	Household size	.368	.449	.051	.820	.413	-.516	1.253
	Household income	-.010	.213	-.003	-.047	.962	-.429	.409
	Age group	.201	.226	.056	.888	.375	-.245	.647
	Place of residence	1.136	.482	.158	2.355	.019	.186	2.086
	wealth status recoded	-.825	.388	-.137	-2.127	.034	-1.588	-.061
	education of parents recoded	-.102	.266	-.027	-.382	.703	-.626	.422
	number of children in household aged 12-17	.129	.411	.020	.314	.754	-.680	.938
Relationship with young people	-.077	.274	-.017	-.281	.779	-.616	.462	
2	(Constant)	3.813	2.466		1.546	.123	-1.043	8.668
	Work status of head	-.621	.499	-.087	-1.245	.214	-1.604	.361
	Household size	.382	.449	.053	.852	.395	-.501	1.265
	Household income	-.103	.215	-.033	-.480	.631	-.525	.319
	Age group	.138	.222	.039	.623	.534	-.299	.576
	Place of residence	.973	.483	.136	2.012	.045	.021	1.924
	wealth status recoded	-.767	.381	-.127	-2.012	.045	-1.517	-.017
	education of parents recoded	.014	.266	.004	.051	.959	-.510	.537
	number of children in household aged 12-17	.185	.405	.028	.457	.648	-.613	.983
	Relationship with young people	.005	.271	.001	.019	.985	-.528	.538
	Help reduce the risk of HIV-AIDS	.079	1.257	.006	.063	.950	-2.395	2.554
	Help reduce the risk of teenage pregnancy	-1.217	1.187	-.094	-1.025	.306	-3.554	1.121
	Encourage adolescents to delay sex	2.482	.771	.239	3.218	.001	.964	4.000
	Encourage adolescents to initiate sex	.307	.464	.040	.662	.509	-.606	1.220
Encourage adolescents to be responsible	.757	.746	.070	1.014	.311	-.712	2.225	
Has no real value	-1.036	.568	-.108	-1.824	.069	-2.155	.082	
3	(Constant)	-4.283	2.688		-1.593	.112	-9.576	1.010
	Work status of head	.098	.466	.014	.211	.833	-.818	1.015
	Household size	.554	.425	.077	1.305	.193	-.282	1.391
	Household income	.044	.203	.014	.218	.828	-.355	.443
	Age group	.229	.206	.064	1.110	.268	-.177	.636
	Place of residence	.796	.443	.111	1.796	.074	-.077	1.669
	wealth status recoded	-.504	.349	-.083	-1.443	.150	-1.191	.184
education of parents recoded	.356	.247	.093	1.439	.151	-.131	.842	

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number of children in household aged 12-17	.151	.372	.023	.407	.685	-.581	.883
Relationship with young people	.067	.249	.015	.271	.787	-.422	.557
Help reduce the risk of HIV-AIDS	-.839	1.160	-.060	-.723	.470	-3.124	1.446
Help reduce the risk of teenage pregnancy	-.633	1.086	-.049	-.583	.561	-2.772	1.506
Encourage adolescents to delay sex	1.487	.710	.143	2.094	.037	.089	2.885
Encourage adolescents to initiate sex	-.126	.428	-.016	-.293	.770	-.969	.718
Encourage adolescents to be responsible	.411	.681	.038	.603	.547	-.930	1.751
Has no real value	-.028	.533	-.003	-.052	.958	-1.077	1.021
Sex	2.225	.644	.273	3.454	.001	.957	3.494
HIV-AIDS	-.949	.681	-.102	-1.394	.165	-2.290	.392
Relationship between men and women	2.134	.516	.286	4.138	.000	1.119	3.150
Other difficult issues	.510	.555	.053	.918	.359	-.583	1.602

a. Gender of head = Female

b. Dependent Variable: Summary variable of all topics parent reports talking to youth about

Table 4.11b Multiple linear regression for factors associated with parent-child communication reports by mothers, Casewise Diagnostics^{a,b}

Case Number	Std. Residual	Summary variable of all topics parent reports talking to youth about	Predicted Value	Residual
1341	3.302	13.00	2.7522	10.24776
1469	3.162	12.00	2.1872	9.81285
1668	3.171	13.00	3.1598	9.84017

a. Gender of head = Female

b. Dependent Variable: Summary variable of all topics parent reports talking to youth about

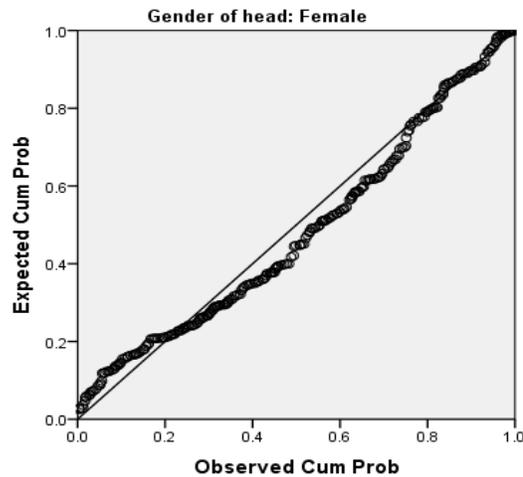
Table 4.11b Multiple linear regression for factors associated with parent-child communication reports by mothers , Residuals Statistics^{a,b}

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	.7877	9.2776	3.9609	1.96972	285
Std. Predicted Value	-1.611	2.699	.000	1.000	285
Standard Error of Predicted Value	.480	1.508	.800	.191	285
Adjusted Predicted Value	.8514	9.2704	4.0469	2.03270	209
Residual	-6.06096	10.24776	.00000	2.99740	285
Std. Residual	-1.953	3.302	.000	.966	285
Stud. Residual	-2.076	3.394	-.001	1.004	285
Deleted Residual	-6.44178	8.77976	-.21971	2.98258	209
Stud. Deleted Residual	-2.025	2.731	-.067	.926	209
Mahal. Distance	5.793	66.093	18.933	10.283	285
Cook's Distance	.000	.036	.004	.006	209
Centered Leverage Value	.020	.233	.067	.036	285

a. Gender of head = Female

b. Dependent Variable: Summary variable of all topics parent reports talking to youth about

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: Summary variable of all topics parent reports talking to youth about



Cases weighted by Composite weight factor

Appendices

Table 4.11b Multiple linear regression for factors associated with parent-child communication reports by non-African parents, Model Summary^a

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.306 ^b	.094	.037	3.03393	.094	1.639	9	142	.110
2	.408 ^c	.166	.074	2.97366	.072	1.971	6	136	.074
3	.543 ^d	.295	.193	2.77623	.128	6.021	4	132	.000

a. Race, black or non-black = not black

b. Predictors: (Constant), Relationship with young people, Age group, wealth status recoded, Place of residence, number of children in household aged 12-17, education of parents recoded, Work status of head, Household size, Household income

c. Predictors: (Constant), Relationship with young people, Age group, wealth status recoded, Place of residence, number of children in household aged 12-17, education of parents recoded, Work status of head, Household size, Household income, Has no real value, Encourage adolescents to delay sex, Encourage adolescents to initiate sex, Help reduce the risk of HIV-AIDS, Encourage adolescents to be responsible, Help reduce the risk of teenage pregnancy

d. Predictors: (Constant), Relationship with young people, Age group, wealth status recoded, Place of residence, number of children in household aged 12-17, education of parents recoded, Work status of head, Household size, Household income, Has no real value, Encourage adolescents to delay sex, Encourage adolescents to initiate sex, Help reduce the risk of HIV-AIDS, Encourage adolescents to be responsible, Help reduce the risk of teen pregnancy, Sex, Other difficult issues, Relationship between men and women, HIV-AIDS

c.

Table 4.12a Multiple linear regression for factors associated with parent-child communication reports by non-African parents, Coefficients^{a,b}

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	1.982	2.242		.884	.378	-2.449	6.414
	Work status of head	-.694	.646	-.104	-1.074	.284	-1.972	.583
	Household size	-.125	.603	-.019	-.207	.836	-1.317	1.067
	Household income	-.014	.291	-.005	-.048	.962	-.589	.561
	Age group	.261	.288	.074	.906	.366	-.308	.829
	Place of residence	1.393	1.238	.093	1.126	.262	-1.053	3.840
	wealth status recoded	-.238	.390	-.053	-.611	.542	-1.008	.532
	education of parents recoded	.858	.314	.245	2.734	.007	.237	1.478
	number of children in household aged 12-17	-.539	.559	-.083	-.964	.337	-1.644	.566
	Relationship with young people	.237	.500	.041	.473	.637	-.752	1.225
2	(Constant)	.155	3.090		.050	.960	-5.955	6.265
	Work status of head	-.581	.653	-.087	-.889	.375	-1.872	.711
	Household size	-.136	.596	-.021	-.229	.820	-1.314	1.042
	Household income	.067	.292	.023	.228	.820	-.510	.643
	Age group	.321	.291	.092	1.104	.272	-.254	.895
	Place of residence	1.116	1.264	.075	.883	.379	-1.384	3.615
	wealth status recoded	-.070	.394	-.015	-.177	.860	-.848	.709
	education of parents recoded	.641	.320	.183	2.001	.047	.007	1.274
	number of children in household aged 12-17	-.559	.551	-.087	-1.015	.312	-1.650	.531
	Relationship with young people	.302	.492	.053	.613	.541	-.671	1.274
	Help reduce the risk of HIV-AIDS	-.769	1.968	-.044	-.391	.697	-4.661	3.122
	Help reduce the risk of teenage pregnancy	1.863	1.486	.157	1.253	.212	-1.076	4.801
	Encourage adolescents to delay sex	1.174	.766	.146	1.532	.128	-.341	2.688
	Encourage adolescents to initiate sex	1.058	.553	.164	1.914	.058	-.035	2.152
	Encourage adolescents to be responsible	-1.744	.825	-.202	-2.115	.036	-3.375	-.113
	Has no real value	-.492	.658	-.063	-.748	.456	-1.792	.809
3	(Constant)	-7.564	3.887		-1.946	.054	-15.252	.124
	Work status of head	-.416	.630	-.062	-.661	.510	-1.663	.830
	Household size	-.112	.563	-.017	-.199	.843	-1.225	1.001
	Household income	.236	.275	.080	.859	.392	-.308	.780
	Age group	.316	.274	.090	1.152	.251	-.227	.859
	Place of residence	.953	1.182	.064	.807	.421	-1.384	3.291
	wealth status recoded	-.241	.373	-.053	-.647	.519	-.979	.497
	education of parents recoded	.623	.311	.178	2.004	.047	.008	1.238

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number of children in household aged 12-17	-.387	.532	-.060	-.728	.468	-1.440	.665
Relationship with young people	.565	.485	.099	1.165	.246	-.394	1.524
Help reduce the risk of HIV-AIDS	-.289	1.867	-.016	-.155	.877	-3.981	3.403
Help reduce the risk of teenage pregnancy	.711	1.408	.060	.505	.615	-2.075	3.496
Encourage adolescents to delay sex	1.407	.722	.175	1.949	.053	-.021	2.835
Encourage adolescents to initiate sex	.933	.540	.145	1.728	.086	-.135	2.001
Encourage adolescents to be responsible	-1.956	.781	-.226	-2.504	.014	-3.501	-.411
Has no real value	.305	.653	.039	.467	.641	-.986	1.595
Sex	2.369	.763	.346	3.103	.002	.859	3.879
HIV-AIDS	-.707	.848	-.088	-.833	.406	-2.384	.971
Relationship between men and women	.301	.691	.045	.435	.664	-1.065	1.667
Other difficult issues	1.934	1.014	.159	1.907	.059	-.072	3.940

- a. Race, black or non-black = not black
- b. Dependent Variable: Summary variable of all topics parent reports talking to youth about

Table 4.12a Multiple linear regression for factors associated with parent-child communication reports by non-African parents Casewise Diagnostics^{a,b}

Case Number	Std. Residual	Summary variable of all topics parent reports talking to youth about	Predicted Value	Residual
544	3.365	9.00	-.3419	9.34192

a. Race, black or non-black = not black

b. Dependent Variable: Summary variable of all topics parent reports talking to youth about

Table 4.12a Multiple linear regression for factors associated with parent-child communication reports by non-African parents, Residuals Statistics^{a,b}

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-.3419	7.7544	3.0624	1.67765	152
Std. Predicted Value	-2.029	2.797	.000	1.000	152
Standard Error of Predicted Value	.479	2.005	.971	.265	152
Adjusted Predicted Value	-.2400	8.3246	2.9442	1.72862	110
Residual	-7.52749	9.34192	.00000	2.59614	152
Std. Residual	-2.711	3.365	.000	.935	152
Stud. Residual	-3.920	3.779	-.001	1.010	152
Deleted Residual	-5.47766	7.26126	-.40398	2.48826	110
Stud. Deleted Residual	-1.816	2.445	-.136	.845	110
Mahal. Distance	3.505	77.954	18.875	11.160	152
Cook's Distance	.000	.054	.005	.009	110
Centered Leverage Value	.023	.515	.125	.074	152

a. Race, black or non-black = not black

b. Dependent Variable: Summary variable of all topics parent reports talking to youth about

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Normal P-P Plot of Regression Standardized Residual

Dependent Variable: Summary variable of all topics parent reports talking to youth about

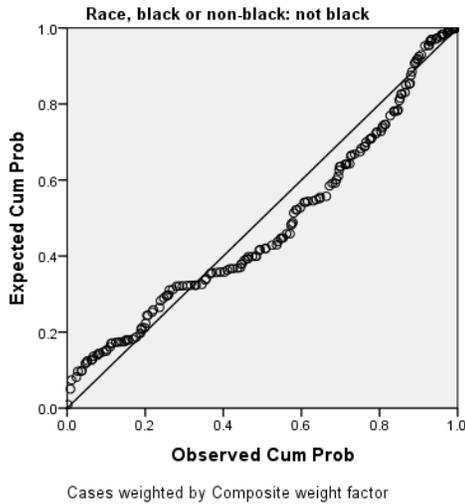


Table 4.12b Multiple linear regression for factors associated with parent-child communication reports by African parents, Model Summary^a

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.208 ^b	.043	.025	3.52390	.043	2.366	9	472	.013
2	.325 ^c	.106	.077	3.42829	.063	5.456	6	466	.000
3	.522 ^d	.272	.242	3.10611	.166	26.466	4	462	.000

a. Race, black or non-black = black

b. Predictors: (Constant), Relationship with young people, Place of residence, number of children in household aged 12-17, Household size, wealth status recoded, Work status of head, Household income, education of parents recoded, Age group

c. Predictors: (Constant), Relationship with young people, Place of residence, number of children in household aged 12-17, Household size, wealth status recoded, Work status of head, Household income, education of parents recoded, Age group, Encourage adolescents to initiate sex, Help reduce the risk of HIV-AIDS, Has no real value, Encourage adolescents to be responsible, Encourage adolescents to delay sex, Help reduce the risk of teenage pregnancy

d. Predictors: (Constant), Relationship with young people, Place of residence, number of children in household aged 12-17, Household size, wealth status recoded, Work status of head, Household income, education of parents recoded, Age group, Encourage adolescents to initiate sex, Help reduce the risk of HIV-AIDS, Has no real value, Encourage adolescents to be responsible, Encourage adolescents to delay sex, Help reduce the risk of teenage pregnancy, Other difficult issues, Sex, Relationship between men and women, HIV-AIDS

Table 4.12b Multiple linear regression for factors associated with parent-child communication reports by African parents
Coefficients^{a,b}

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	4.794	1.632		2.938	.003	1.588	8.000
	Work status of head	.342	.418	.045	.816	.415	-.481	1.164
	Household size	.463	.386	.061	1.197	.232	-.297	1.222
	Household income	.179	.157	.058	1.137	.256	-.130	.488
	Age group	-.196	.191	-.060	-1.025	.306	-.572	.180
	Place of residence	.166	.353	.023	.472	.637	-.527	.860
	wealth status recoded	-1.089	.299	-.170	-3.642	.000	-1.677	-.501
	education of parents recoded	.035	.221	.009	.157	.875	-.400	.469
	number of children in household aged 12-17	.248	.304	.038	.818	.414	-.348	.845
	Relationship with young people	-.137	.228	-.028	-.602	.548	-.586	.311
2	(Constant)	2.277	1.941		1.173	.241	-1.536	6.090
	Work status of head	.234	.414	.031	.564	.573	-.579	1.046
	Household size	.343	.379	.045	.904	.367	-.402	1.088
	Household income	.083	.157	.027	.532	.595	-.225	.391
	Age group	-.156	.188	-.048	-.831	.407	-.525	.213
	Place of residence	-.005	.347	-.001	-.015	.988	-.687	.677
	wealth status recoded	-1.076	.292	-.168	-3.681	.000	-1.650	-.502
	education of parents recoded	.121	.217	.031	.556	.578	-.306	.547
	number of children in household aged 12-17	.075	.301	.012	.249	.803	-.516	.666
	Relationship with young people	-.094	.224	-.019	-.422	.674	-.535	.346
	Help reduce the risk of HIV-AIDS	1.319	.866	.096	1.523	.128	-.382	3.020
	Help reduce the risk of teenage pregnancy	-1.909	.824	-.155	-2.318	.021	-3.529	-.290
	Encourage adolescents to delay sex	1.297	.505	.135	2.566	.011	.304	2.290
	Encourage adolescents to initiate sex	.373	.342	.050	1.090	.276	-.300	1.046
	Encourage adolescents to be responsible	1.859	.524	.184	3.548	.000	.830	2.889
Has no real value	-.294	.442	-.030	-.665	.506	-1.162	.574	
3	(Constant)	-2.284	1.973		-1.158	.248	-6.161	1.593
	Work status of head	.402	.377	.053	1.067	.286	-.338	1.143
	Household size	.374	.350	.049	1.068	.286	-.314	1.061
	Household income	.068	.144	.022	.469	.640	-.216	.351
	Age group	-.061	.172	-.019	-.356	.722	-.399	.277
	Place of residence	.161	.316	.022	.508	.611	-.461	.782
	wealth status recoded	-.699	.270	-.109	-2.584	.010	-1.230	-.167

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education of parents recoded	.194	.198	.049	.980	.328	-.195	.583
number of children in household aged 12-17	.077	.274	.012	.279	.780	-.462	.615
Relationship with young people	.084	.204	.017	.411	.681	-.317	.485
Help reduce the risk of HIV-AIDS	.226	.807	.017	.281	.779	-1.360	1.812
Help reduce the risk of teenage pregnancy	-1.513	.754	-.122	-2.008	.045	-2.994	-.032
Encourage adolescents to delay sex	.584	.467	.061	1.249	.212	-.335	1.502
Encourage adolescents to initiate sex	.047	.312	.006	.151	.880	-.566	.660
Encourage adolescents to be responsible	1.389	.496	.137	2.801	.005	.414	2.363
Has no real value	.073	.403	.008	.180	.857	-.719	.865
Sex	2.470	.450	.310	5.483	.000	1.585	3.355
HIV-AIDS	-.246	.541	-.026	-.454	.650	-1.309	.817
Relationship between men and women	1.412	.405	.191	3.486	.001	.616	2.208
Other difficult issues	.024	.378	.003	.063	.950	-.719	.767

a. Race, black or non-black = black

b. Dependent Variable: Summary variable of all topics parent reports talking to youth about

Table 4.12b Multiple linear regression for factors associated with parent-child communication reports by African parents Casewise Diagnostics^{a,b}

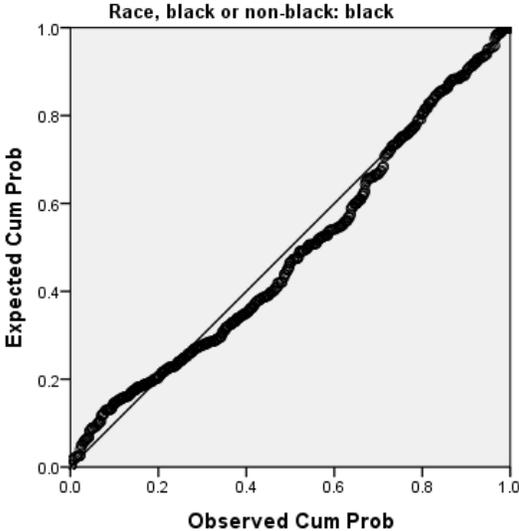
Case Number	Std. Residual	Summary variable of all topics parent reports talking to youth about	Predicted Value	Residual
1578	3.527	13.00	2.0458	10.95421

a. Race, black or non-black = black

b. Dependent Variable: Summary variable of all topics parent reports talking to youth about

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: Summary variable of all topics parent reports talking to youth about



Cases weighted by Composite weight factor

Appendix J: Chapter 5: Table 5. 1a: Specification of variables in the models

Variable	Variable name -Coding
<i>Dependent variables</i>	
Ever had sex	<i>Yes =1 No=0</i>
Risky sexual behaviour	<i>Risky sex: High risk=1, Low risk=0</i>
<i>Independent variables</i>	
Parent-child global communication (range is 0-13)	<i>Talkteen (sum of all 13 topics)</i> <i>Each topic was coded 0 for rarely or never, 1 for often or sometimes</i>
Parent teen sexual risk communication scale score-youth (rang 0-9)	<i>Tnsextk (sum of 9 sexual topics)</i> <i>Each topic was coded 0 for rarely or never, 1 for often or sometimes</i>
Parent teen general communication scale score-youth(range 0-4)	<i>Tngencom (sum of 4 topics on general communication)</i>
<i>Control Variables</i>	
Teenagers Characteristics	<i>Age: 12–14=1 15–17= 0</i>
	<i>Type of residence: rural= 1 urban=0;</i>
	<i>Population group: African=1 non-African=0;</i>
	<i>Gender: male=1 female=0 ;</i>
	<i>Schooling: yes=0; no=1;</i>
Parents characteristics	<i>Gender: male=1; female=0 ;</i>
	<i>Age: under 40=1; over 40=0</i>
	<i>Population group: African=1, non-African=0;</i>
	<i>Marital status: Not married =1; currently married =0</i>

Table 5.1a Specification of variables in the models (cont.)

Variable	Variable name -Coding
	<i>Work status: Not working= 1; Working= 0</i>
	<i>Education: none or primary=1; matriculation and above= 0</i>
	<i>Wealth: More than enough or wealthy=0; Poor= 1,</i>
	<i>Household income: R1000 and above=0; Under R1000=1</i>
Household structural factors	<i>Living arrangement: live with both parents =1; single parent =2 ; other guardian=3</i>
	<i>Number of children aged 12–17 years: 1= One child aged 12–17 years ; 0= Two or more children aged 12–17 years</i>
	<i>Household size: 1= 1–4 people, 0= 5 or more</i>
Attitudes towards open communication- parents reports	<i>Responses were (1) agree and (2) disagree.</i>
	<i>Open communication about sex and sexuality would:</i>
	<i>Reduce the risks of HIV/AIDS</i>
	<i>Reduce the risk of pregnancy</i>
	<i>Encourage adolescents to delay sex</i>
	<i>Encourage adolescents to initiate sex</i>
	<i>Encourage adolescents to be more responsible</i>
	<i>Open communication has no value.</i>

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Appendix K: Table 6. 1: Characteristics of participants

Adolescents	Age group	FGDs	IDIs
Age	10–14	11	4
	18–19	11	4
Sex of respondents	10–14	5 females, 6 males	2 females, 2 males
	18–19	6 females, 5 males	2 females, 2 males
Number of children in the family	10–14	2–3	9
	18–19	4–12	11
Schooling status	10–19	All in school	All in school
Education level (current level of schooling)	10–14	5-9	
	18–19	10–12	
Living arrangements			
Both parents	10–14	4	
	18–19	3 boys	
Mother only	10–14	5	
	18–19	2	
Mother and other relative	10–14	1 girl	
	18–19	2	
Other relative*	10–14	1 boy	
	18–19	4	

Appendix K: Table 6.1: Characteristics of participants (cont.)

Parents or caregivers**	Age group	FGDs	IDIs
Not working	10–14	6	
	18–19	6	
Not married	10-14	7	
	18–19		
Married or cohabiting	10–14	2	
	18–19		
Education	10–14	0–12+	
	18–19		
Ages	10–14	21–64	
	18–19		
Children ages	10–14	1–38	
	18–19		
Number of children	10–14	1-9	
	18–19		

*Brother, sister, aunt, uncle or grandmother **details to be added

Appendix K: Table 6.1: Characteristics of participants (cont.)

Characteristics of Focus Group Participants –Adolescents

Participant Number	Age	Grade	Number of children in the family	Birth order	Lives with	Resides
Boys 10-14						
P1	14	8	10	8	Brother	Elsewhere
P2	11	5	8	?	Both Parents	Site A
P3	10	5	4	2	Both parents	Site A
P4	11	5	8	5	Both parents	Site A
P5	14	8	3	3	Mother	Site A
P6	12	7	3	2	Mother	Site A
Girls 10-14						
P1	14	9	4	4	Mother	Site A
P2	10	6	2	1	Both parents	Elsewhere
P3	13	9	2	1	Mother, grandmother	Site A
P4	11	5	2	1	Mother	Site A
P5	12	8	3	11	Mother	Site A
Boys 17-19						
P1	19	12	4	2	Uncle	Site B
P2	19	12	7	NM	Both Parents	Site B
P3	19	12	5	NM	Aunt	Site B
P4	19	12	6	4	Sister	Site B
P5	18	12	3	1	Mother	Site B
P6	18	12	5	1	Both Parents	Site B
Girls 17-19						
P1	18	12	5	4	Mother and grandmother	Site B
P2	18	10	3	2	Grandmother and uncle	Site B
P3	18	12	3	2	Both parents	Site B
P4	18	12	12	11	Both parents	Site B
P5	18	12	2	2	Both parents	Site B

NM- not mentioned

Appendix L: Code Book Qualitative Research on Pent-Teen Communication in South Africa

❖ Focus Group Discussions

- **Respondent Demographics**

Definition: Demographic characteristics of the respondents.

- **Connectedness/Relationships**

Definition: How do participants describe their relationships with their parents or children?

Good, bad, strained

- **Sources of information**

Definition: What are the sources of information? Parents, teachers, school, media, friends

- **Information provided by life skills programme**

Definition: What is offered by the life skills programme? Sex education, HIV/AIDS, teenage pregnancy, condom use

- **Information provided by parents**

Definition: Do participants engage in any form of communication with their parents or children? Perceptions by adolescents on parent-child communication. Perception of parents on parent-child communication

- **Barriers to communication**

Definition: What barriers exist that hinder communication between parents and their children?

- **Recommendations for beginning sexuality communication**

Definition: Recommendations for starting sexuality information

- **Good Quotes**

Definition: Any quote that jumps right out at you as being a fantastic example of a situation/thought/feeling/comment/discussion that hits at the core of the topic being discussed or is a great example of a typical/atypical/variation of a situation/thought/discussion/feeling. In other words, when you read the quote, you'll

know when to code it as “Good Quotes.” It’ll be helpful to use these quotes for the report later on as well.

❖ **Miscellaneous**

▪ **Miscellaneous/Unclear**

Definition: Text/passages that you are not sure where they should go. Eventually, what gets put in here may be reviewed and given a new code name if it is important enough or may be placed in an existing code after discussion.

❖ **In-depth Interviews**

▪ **Respondent Demographics**

Definition: Demographic characteristics of the respondents.

▪ **Relationships**

Definition: How do participants describe their relationships with their parents or children?

▪ **Communication**

Definition: Do participants engage in any form of communication with their parents or children?

▪ **Barriers to communication**

Definition: What barriers exist that hinder communication between parents and their children?

▪ **Sources of sexuality related information**

Definition: Where do young people get their information?

▪ **Recommendations for beginning sexuality communication**

Definition: Recommendations for starting sexuality information

▪ **Good Quotes**

Definition: Any quote that jumps right out at you as being a fantastic example of a situation/thought/feeling/comment/discussion that hits at the core of the topic being discussed or is a great example of a typical/atypical/variation of a

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situation/thought/discussion/feeling. In other words, when you read the quote, you'll know when to code it as "Good Quotes." It'll be helpful to use these quotes for the report later on as well.

❖ **Miscellaneous**

- **Miscellaneous/Unclear**

Definition: Text/passages that you are not sure where they should go. Eventually, what gets put in here may be reviewed and given a new code name if it is important enough or may be placed in an existing code after discussion.

Appendix M: LoveLife: National Awareness and Impact Survey Parent/Caregiver/Guardian Questionnaire

1. Marital Status (Single/Unmarried, Married, Divorce) _____

2. Relationship To Teenage Respondent (12-17 years old) _____

3. Age: How Old Are You?
 - a. Under 30 years _____
 - b. 30-35 _____
 - c. 35-40 _____
 - d. 40-45 _____
 - e. 45-50 _____
 - f. over 50 years _____

4. Monthly Household Income:
 - a. Under R500 _____
 - b. R500 – R1 000 _____
 - c. R1 000 – R2 000 _____
 - d. More Than R2 000 _____
 - e. Refused _____

5. Number Of Children In Household Aged 12-17: _____

6. I Would Like To Find Out From You What You Think The Five Greatest Concerns For Young (teenage) South Africans Are Today? **(RANK ACCORDING TO FREQUENCY OF MENTION. DO NOT PROMPT)**
 - a. Sexual Abuse _____
 - b. Crime _____
 - c. HIV/AIDS _____
 - d. Poverty _____
 - e. Lack Of Opportunity _____
 - f. Violence _____
 - g. Teenage Pregnancy _____
 - h. Unemployment _____
 - i. Other (specify): _____

7. How Regularly Do You Talk To Your Teenage Children About:

(Rate: 1-Often, 2-Sometimes, 3-Hardly Ever, 4-Never, 5-Don't Know, 6-Refused)

 - a. Their Dreams And Aspirations _____
 - b. Someone They Are Dating _____
 - c. Their Friends and The Things They Do Together _____
 - d. Alcohol and Drugs _____
 - e. HIV/AIDS Specifically _____
 - f. The Things That Are Going On in Their Lives _____

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- g. Dealing With Pressure To Have Sex _____
- h. The Risks Of Unprotected Sex (such as HIV/AIDS and pregnancy) _____
- i. Deciding When They Are Ready To Have Sex _____
- j. Relationships Between Men And Women _____
- k. Contraception And How To Avoid Getting Pregnant _____
- l. The Risks Of Sexual Assault (Such As Rape Or Forced Sex) _____
- m. The Risks Of Sexual Abuse (Such As Child Molestation or Sexual Violence) _____
8. What Do You Think Your Teenage Child's Chances Are Of: How Much Of A Risk Do You Think They, Personally, Have Of: (Rate: 1-Very High, 2-High, 3-Low, 4-Very Low, 5-None, 6-Don't Know, 7-Refused)
- a. Getting Someone/Becoming Pregnant _____
- b. Becoming Infected With HIV Or AIDS _____
- c. Becoming Infected With Other Sexually Transmitted Diseases _____
- d. Being Sexually Assaulted _____
9. Do You Personally Know Any Teenagers (Aged 12-17) Who: (Rate: 1-Yes, 2-No, 3-Don't Know, 4-Refused)
- a. Has HIV Or AIDS _____
- b. Has A Sexually Transmitted Disease Other Than HIV/AIDS _____
- c. Has Been/Gotten Someone Pregnant _____
- d. Has Been Sexually Assaulted _____
10. Have You Ever Heard Of *loveLife*? **[SHOW LOVELIFE LOGO] IF NO, SKIP TO QUESTION 18**
- Yes _____ No _____
11. Which Of the Following Do You Think Most Closely/Best Describes *loveLife*? **(CHOOSE ONE)**
- New Healthy Lifestyle for Young South Africans _____
- HIV/AIDS Education Program _____
- Sex Education Program _____
- Condom Advertisement _____
12. *loveLife's* "Pay-Off Line"/Main Message is "Talk About It." What Do You Think The "It" Refers To?
- _____
13. Have You Discussed *loveLife* With Any Of The Following (Yes or No):
- a. Spouse Or Partner _____
- b. Children _____
- c. Other Family Members (Specify) _____
- d. Friends _____
- e. Others (specify): _____

14. Do You Think More Open Communication About Sex and Sexuality Can:

- | | | |
|---|-------------|----------------|
| a. Help Reduce The Risk of HIV/AIDS | Agree _____ | Disagree _____ |
| b. Help Reduce The Risk of Teenage Pregnancy | Agree _____ | Disagree _____ |
| c. Encourage Adolescents To Delay Sex | Agree _____ | Disagree _____ |
| d. Encourage Adolescents To Initiate Sex | Agree _____ | Disagree _____ |
| e. Encourage Adolescents To Be More Responsible | Agree _____ | Disagree _____ |
| f. Have No Value | Agree _____ | Disagree _____ |

15. Has *loveLife* Provided You With An Opportunity/Reason For You To Talk To Your Children About (Yes or No):

- | | |
|--|-------|
| a. Sex | _____ |
| b. HIV/AIDS | _____ |
| c. Relationships Between Men And Women | _____ |
| d. Other Difficult Issues (specify) | _____ |

16. As A Result Of What You Have Seen/Heard Of *loveLife*, Have You Done Any Of The Following (Yes or No):

- | | |
|---|-------|
| a. Called Thetha Junction | _____ |
| b. Called The Parent Helpline | _____ |
| c. Visited The <i>loveLife</i> Website | _____ |
| d. Looked For More Information On <i>loveLife</i> | _____ |

17. Based On What You Know About *loveLife*, Do You Think It Is A: **(CHOOSE ONE)**

- | | |
|--|-------|
| a. Good Thing For The Youth Of The Country | _____ |
| b. Bad Thing For The Youth Of The Country | _____ |

18. **IF GOOD IS SELECTED IN Q15, Ask:** Can You Tell Me Why You Think *loveLife* Is A Good Thing For The Youth Of The Country?

19. **IF BAD IS SELECTED IN Q15, Ask:** Can You Tell Me Why You Think *loveLife* Is A Bad Thing For The Youth Of The Country?

20. I Am Going To Read You A Statement About *loveLife*: **(ASK OF ALL RESPONDENTS)**

- *loveLife* Is A Sustained, Multi-Year Effort To Prevent The Spread Of HIV And Promote Healthy Lifestyles Among Young People. It Includes Far-Reaching TV, Radio, And Print Messages And A Broad Range Of Services For Young People, Including Youth Centers, Telephone Hotlines, Adolescent-Friendly Health Services in Public Clinics, Youth Counselors, Love Trains, And *loveLife* Sports Games. *loveLife* Is Run By Non-Governmental South African Organizations, And Is Funded By International Donors And The South African Government.

21. Now That You Have Heard A Description Of *loveLife*, Do Think It Is A: **(CHOOSE ONE)**

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a. Good Thing For The County _____

OR

b. Bad Thing For The Country _____

22. And, Why?

23. Have You Personally In Any Way Changed Your Behavior To Protect Yourself/Your Family From The Risk Of HIV Infection?

Yes _____ No _____

24. Have You Heard Of The Expression "Unprotected Sex"?

Yes _____ No _____

25. To Which Of The Following Do You Think The Phrase "Unprotected Sex" Would Apply?

a. Sex Without A Condom	Yes	_____	No	_____
b. Sex With No Clothes On	Yes	_____	No	_____
c. Sex Without Any Contraception	Yes	_____	No	_____
d. Sex With More Than One Partner	Yes	_____	No	_____

26. Have You Heard Of The Expression "Safe Sex"?

Yes _____ No _____

27. To Which Of The Following Do You Think The Phrase "Safe Sex" Would Apply?

a. Sex With A Condom	Yes	_____	No	_____
b. Oral Sex	Yes	_____	No	_____
c. Sex With A Virgin	Yes	_____	No	_____
d. Anal Sex	Yes	_____	No	_____
e. Masturbation	Yes	_____	No	_____
f. Sex Using Contraception	Yes	_____	No	_____
g. Sex With One Partner	Yes	_____	No	_____
h. Sex With Your Clothes On	Yes	_____	No	_____
i. Sex With A Circumcised Man	Yes	_____	No	_____

QUESTIONNAIRE FOR YOUNG PERSON (ages 12-17)

PART A: GENERAL LIFESTYLE

- 1. Age _____

- 2. Would You Describe Your Family As:
 - a. Very Poor _____
 - b. Poor _____
 - c. Enough Money To Live On _____
 - d. More Than Enough Money To Live On _____
 - e. Wealthy _____

- 3. Are You Living With:
- 4.
 - a. Both Your Parents _____
 - b. Mother Only _____
 - c. Father Only _____
 - d. Another Family Member _____
 - e. Foster Family _____
 - f. Other (specify) _____

- 5. Do You Currently Attend School?
 Yes _____ No _____

- 6. Which Grade Are You Currently In?

- 7. If Not Currently In School, What Was The Last Grade You Finished/Passed?
 - a. Grade 1 _____
 - b. Grade 2 _____
 - c. Grade 3/Standard 1 _____
 - d. Grade 4/Standard 2 _____
 - e. Grade 5/Standard 3 _____
 - f. Grade 6/Standard 4 _____
 - g. Grade 7/Standard 5 _____
 - h. Grade 8/Standard 6 _____
 - i. Grade 9/Standard 7 _____
 - j. Grade 10/Standard 8 _____
 - k. Grade 11/Standard 9 _____
 - l. Grade 12/Standard 10 _____

- 8. If Not Attending School, What Are You Doing At The Moment?
 - a. Working Full Time _____
 - b. Working and Studying _____
 - c. Studying Full Time _____
 - d. Unemployed _____
 - e. Other (specify) _____

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9. If At School or Unemployed, I would Like to Find Out Where You Get Money From For Your Personal Use: **(MULTIPLE ANSWERS POSSIBLE)**

- b. Pocket Money From Parent/Guardian _____
- c. Odd Jobs/Paid Chores _____
- d. Selling Things (specify) _____
- e. Part Time Employment _____
- f. Friends _____
- g. Favors For Others (specify) _____
- h. I Never Have Money _____

10. I Would Like To Find Out From You What You Think The Five Greatest Concerns For Young South Africans Are Today? **(RANK ACCORDING TO FREQUENCY OF MENTION. DO NOT PROMPT)**

- a. Sexual Abuse _____
- b. Crime _____
- c. HIV/AIDS _____
- d. Poverty _____
- e. Lack Of Opportunity _____
- f. Violence _____
- g. Teenage Pregnancy _____
- h. Unemployment _____
- i. Other (specify) _____

10. I Would Like To Find Out How You Feel About Your Life At Present. Would You Say You Are:

- a. Very Happy _____
- b. Somewhat Happy _____
- c. Neither Happy Nor Unhappy _____
- d. Somewhat Unhappy _____
- e. Very Unhappy _____

11. I Would Like To Know How You Feel About Your Future Opportunities To Be Successful and Prosper. Would You Say:

- a. Your Opportunities Are Limitless _____
- b. There Are Only Limited Opportunities _____
- c. Opportunities Are Very Limited _____
- d. No Opportunities At All _____

12. What Do You Personally Feel Are Your Five Top Priorities?

- a. Getting A Good Education _____
- b. Marrying And Having A Family _____
- c. Making Money _____
- d. Protecting Myself And The People I Love From HIV/AIDS _____
- e. Living A Responsible Life _____
- f. A Stable/Happy Family Life _____
- g. Living For Myself _____
- h. Caring For My Family And Other People _____
- i. Other (specify) _____

13. Which Of The Following Have You Ever Done/Ever Do? And, How Often Do You Do Each?

	Ever do	Every Day	5-6 times a week	3-4 times a week	1-2 times a week	Once every 2 weeks	Once a month	Less often than once a month
Watch TV								
Listen to the radio								
Read a newspaper								
Use the internet								
Go to the cinema/movies								
Read a magazine								
Read a book for entertainment								
Read a book for studying								

Appendices

14. We Are Particularly Interested In What You Do Over Weekends. Please Tell Me How Important The Following Are To You To Do Over Weekends?

	Very Important	Important Somewhat	Neither Important nor unimportant	Unimportant Somewhat	Not important at all
Reading books or newspapers					
Watching TV					
Listening to the radio					
Being with friends (“just hanging out”)					
Going to a “street party,” “rave,” “bash,” “nightclub,” “party,” etc.					
Going to church					

15. If You Don’t Have A TV In Your Home, Where Do You Watch TV Most Often?

- a. At A Friend’s House _____
- b. At A Grandparent/Family Member’s House _____
- c. At School _____
- d. Other (specify) _____

PART B: *loveLife* AWARENESS

1. Have You Ever Heard Of *loveLife*? (SHOW LOGO) IF NO, SKIP TO Q17

Yes _____ No _____ Don't Know _____

2. If You Have Heard Of/Seen Anything About *loveLife*, Where Did You Hear/See It? **READ OUT. MULTIPLE MENTION**

- | | | | | | | |
|---------------------|-----|-------|----|-------|------------|-------|
| a. From A Friend | Yes | _____ | No | _____ | Don't Know | _____ |
| b. Brother/Sister | Yes | _____ | No | _____ | Don't Know | _____ |
| c. My Mother | Yes | _____ | No | _____ | Don't Know | _____ |
| d. My Father | Yes | _____ | No | _____ | Don't Know | _____ |
| e. Other Family | Yes | _____ | No | _____ | Don't Know | _____ |
| f. At School | Yes | _____ | No | _____ | Don't Know | _____ |
| g. Television | Yes | _____ | No | _____ | Don't Know | _____ |
| h. Newspapers | Yes | _____ | No | _____ | Don't Know | _____ |
| i. Radio | Yes | _____ | No | _____ | Don't Know | _____ |
| j. Taxi's | Yes | _____ | No | _____ | Don't Know | _____ |
| k. Billboards | Yes | _____ | No | _____ | Don't Know | _____ |
| l. At A Y-Centre | Yes | _____ | No | _____ | Don't Know | _____ |
| m. At A Clinic | Yes | _____ | No | _____ | Don't Know | _____ |
| n. Other (specify): | | _____ | | | | |

3. Which Of The Following Do You Think Most Closely Describes *loveLife*?

- New Healthy Lifestyle for Young South Africans _____
- HIV/AIDS Education Program _____
- Sex Education Program _____
- Condom Advertisement _____

4. *loveLife*'s "Pay-Off Line"/Main Message is "Talk About It." What Do You Think The "It" Refers To?

5. Have You Seen Or Heard Of Any Of These *loveLife* Products? (READ OUT. MULTIPLE MENTION POSSIBLE.)

- | | | | | | | |
|---------------------------------------|-----|-------|----|-------|------------|-------|
| a. S'camto@large | Yes | _____ | No | _____ | Don't Know | _____ |
| b. "Stand Your Ground" television ads | Yes | _____ | No | _____ | Don't Know | _____ |
| c. S'camto Ground breakers | Yes | _____ | No | _____ | Don't Know | _____ |
| d. Codi:Loud and Clear | Yes | _____ | No | _____ | Don't Know | _____ |
| e. <i>loveLife</i> Games | Yes | _____ | No | _____ | Don't Know | _____ |
| f. <i>loveLife</i> Tours | Yes | _____ | No | _____ | Don't Know | _____ |
| g. Yfm Youth Crossfire | Yes | _____ | No | _____ | Don't Know | _____ |
| h. eS'camtweni on Metro | Yes | _____ | No | _____ | Don't Know | _____ |
| i. S'camtoPrint | Yes | _____ | No | _____ | Don't Know | _____ |
| j. love Tours | Yes | _____ | No | _____ | Don't Know | _____ |
| k. Website | Yes | _____ | No | _____ | Don't Know | _____ |
| l. Y-Centre | Yes | _____ | No | _____ | Don't Know | _____ |

Appendices

- | | | | |
|-------------------------------|-----------|----------|------------------|
| m. <i>loveLife</i> franchises | Yes _____ | No _____ | Don't Know _____ |
| n. Thetha Junction | Yes _____ | No _____ | Don't Know _____ |
| o. <i>loveLife</i> billboards | Yes _____ | No _____ | Don't Know _____ |
| p. <i>loveLife</i> Taxis | Yes _____ | No _____ | Don't Know _____ |
| q. Other (specify) _____ | | | |

6. What Did You Think Of What You Saw/Heard?

- | | | |
|---|-------------|----------------|
| a. It Was Different And I Was Interested | Agree _____ | Disagree _____ |
| b. It Was Boring And I Was Not Interested | Agree _____ | Disagree _____ |
| c. It Talked About Sex In A Positive Way And I Liked It | Agree _____ | Disagree _____ |
| d. It Was Vulgar And I Did Not Like It | Agree _____ | Disagree _____ |
| e. It Reflected Young Peoples' Aspirations And Lifestyle | Agree _____ | Disagree _____ |
| f. It Made Me Think About Making Safer Choices In My Life | Agree _____ | Disagree _____ |

7. *loveLife's* Messaging And Programmes Are Mostly In English. Is That A Problem For You Or Not?

- | | |
|-----------|----------|
| Yes _____ | No _____ |
|-----------|----------|

8. Thinking About *loveLife's* Impact On You Personally, Have You As A Result Of What You Have Heard/Seen Of *loveLife*:

- | | | |
|--|-----------|----------|
| a. Taken No Personal Action | Yes _____ | No _____ |
| b. Called Thetha Junction | Yes _____ | No _____ |
| c. Called Another Helpline | Yes _____ | No _____ |
| d. Looked For More Information On Sex, Sexuality And Relationships Between Men And Women | Yes _____ | No _____ |
| e. Been To A Clinic Or Private Doctor | Yes _____ | No _____ |
| f. Visited <i>loveLife's</i> Web Site | Yes _____ | No _____ |
| g. Looked For More Information on <i>loveLife</i> | Yes _____ | No _____ |
| h. Talked To Your Friends/Family/Others About <i>loveLife</i> And/Or Lifestyle Issues In General | Yes _____ | No _____ |

9. Probing More Deeply About Whether *loveLife* Has Had An Impact On You Personally Or Not – Has It Caused You To:

- | | | |
|--|-----------|----------|
| a. Delay/Abstain From Sex | Yes _____ | No _____ |
| b. Limit/Reduce Your Number Of Sex Partners | Yes _____ | No _____ |
| c. Talk To Your Friends About Sex, Sexuality And Relationships Between Men And Women | Yes _____ | No _____ |
| d. Be More Aware Of The Risks Of Unprotected Sex | Yes _____ | No _____ |
| e. Use Condoms When Having Sex | Yes _____ | No _____ |
| f. Be more assertive in insisting your boyfriend use a condom | Yes _____ | No _____ |
| g. Have Sex More Often | Yes _____ | No _____ |
| h. Explore Other Forms Of Sexual Activity, Like Masturbation Or Oral Sex | Yes _____ | No _____ |
| h. Think More About The Openness And Honesty Of Your Romantic Relationships | Yes _____ | No _____ |

10. How Regularly Do You Talk To Your Parent Or Adult Guardian, About:
(Rate: 1-Often, 2-Sometimes, 3-Hardly Ever, 4-Never, 5-Don't Know, 6-Refused)

- a. Their Dreams And Aspirations _____
- b. Someone You Are Dating _____
- c. Your Friends and The Things You Do Together _____
- d. Alcohol and Drugs _____
- e. HIV/AIDS Specifically _____
- f. The Things That Are Going On in Your Life _____
- g. Dealing With Pressure To Have Sex _____
- h. The Risks Of Unprotected Sex (such as HIV/AIDS and Pregnancy) _____
- i. Deciding When You Are Ready To Have Sex _____
- j. Relationships Between Men And Women _____
- k. Contraception And How To Avoid Getting Pregnant _____
- l. The Risk Of Sexual Assault (Such As Rape Or Forced Sex) _____
- m. The Risk Of Sexual Abuse (Such As Child Molestation Or Sexual Violence) _____

11. Have You Specifically Discussed *loveLife* With Any Of The Following (Yes or No):

- a. Mother _____
- b. Father _____
- c. Brother/Sister _____
- d. Other Family Members _____
- e. Friends _____
- f. Others (specify): _____

12. Do You Think More Open Communication About Sex and Sexuality Can:

- a. Help Reduce The Risk of HIV/AIDS Agree _____ Disagree _____
- b. Help Reduce The Risk of Teenage Pregnancy Agree _____ Disagree _____
- c. Encourage Adolescents To Delay Sex Agree _____ Disagree _____
- d. Encourage Adolescents To Initiate Sex Agree _____ Disagree _____
- e. Encourage Adolescents To Be More Responsible Agree _____ Disagree _____
- f. Have No Value Agree _____ Disagree _____

13. Has *loveLife* Provided An Opportunity For You To Talk To Your Parents About (Yes or No):

- a. Sex Yes _____ No _____
- b. HIV/AIDS Yes _____ No _____
- c. Relationships Between Men and Women Yes _____ No _____
- d. Other Difficult Issues Yes _____ No _____

14. Based On What You Know About *loveLife*, Do You Think It Is A: **(CHOOSE ONE)**

- a. Good Thing For The Youth Of The Country _____
- b. Bad Thing For The Youth Of The Country _____

15. **IF GOOD IS SELECTED IN Q20, Ask:** Can You Tell Me Why You Think *loveLife* Is A Good Thing For The Youth Of The Country?

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16. **IF BAD IS SELECTED IN Q20, Ask:** Can You Tell Me Why You Think *loveLife* Is A Bad Thing For The Youth Of The Country?

17. I Am Going To Read You A Statement About *loveLife*: **(ASK OF ALL RESPONDENTS)**

▪ *loveLife* Is A Sustained, Multi-Year Effort To Prevent The Spread Of HIV And Promote Healthy Lifestyles Among Young People. It Includes Far-Reaching TV, Radio, And Print Messages And A Broad Range Of Services For Young People, Including Youth Centers, Telephone Hotlines, Adolescent-Friendly Health Services in Public Clinics, Youth Counselors, Love Trains, And *loveLife* Sports Games. *loveLife* Is Run By Non-Governmental South African Organizations, And Is Funded By International Donors And The South African Government.

▪ Now That You Have Heard A Description Of *loveLife*, Do Think It Is A: **(CHOOSE ONE)**

a. Good Thing For The County _____

OR

b. Bad Thing For The Country _____

▪ And, Why?

18. I Want To Talk To You More About Condoms – What Is A Condom? **(INTERVIEWER CHECK OFF MENTION OF THE FOLLOWING, BUT DO NOT PROMPT.)**

- a. It Protects Against Women/Girls Getting Pregnant/Having Babies Yes _____ No _____
- b. It Stops Sexual Disease Yes _____ No _____
- c. It Stops HIV/AIDS Yes _____ No _____
- d. It Stops The Sperm From Entering The Woman Yes _____ No _____
- e. It Is Worn By The Man/Boy During Sex Yes _____ No _____
- f. It Makes Sex Less Pleasant Yes _____ No _____
- g. It Is Like A Rubber Balloon Yes _____ No _____
- h. It Is For Birth Control Yes _____ No _____
- i. It Is A Toy/Balloon Yes _____ No _____
- j. Other (Specify) _____

19. If You Wanted To Get Condoms, Where Would You Go? **(CHECK OFF MENTION OF THE FOLLOWING, BUT DO NOT PROMPT.)**

- a. Chemist _____
- b. Petrol Station _____
- c. Supermarket _____
- d. Clinic _____
- e. Parent _____
- f. Another Adult _____
- g. Friend _____
- h. Other (specify) _____

20. If You Had A Choice, Where Would You Prefer To Get Condoms? **(CHECK OFF MENTION OF THE FOLLOWING, BUT DO NOT PROMPT.)**

- a. Chemist _____
- b. Petrol Station _____
- c. Supermarket _____
- d. Clinic _____
- e. Parent _____
- f. Another Adult _____
- g. Friend _____
- h. Other (specify) _____

21. I Want To Know If You Have Ever Had Problems Getting Hold Of Condoms When You Wanted Them?

Yes _____ No _____

22. If Yes, Why? **(CHECK OFF MENTION.)**

- a. Too Expensive _____
- b. Not Available Anywhere Near Where I Live _____
- c. Too Embarrassed To Go To A Clinic Or Doctor _____
- d. When I Went To The Clinic/Doctor/Chemist/Petrol Station/Supermarket, They Were Out Of Stock _____
- e. When I Went To The Clinic/Doctor/Chemist/Petrol Station/Supermarket, I Was Chased Away _____
- f. I Am Too Embarrassed To Buy/Ask For Condoms _____
- g. Other (specify) _____

23. Would You Use A Condom That Was Made By/Branded By *loveLife*?

Yes _____ No _____

24. Have You Heard Of The Expression "Unprotected Sex"?

Yes _____ No _____

25. To Which Of The Following Do You Think The Phrase "Unprotected Sex" Would Apply?

- a. Sex Without A Condom Yes _____ No _____
- b. Sex With No Clothes On Yes _____ No _____
- c. Sex Without Any Contraception Yes _____ No _____
- d. Sex With More Than One Partner Yes _____ No _____

26. Have You Heard Of The Expression "Safe Sex"?

Yes _____ No _____

Appendices

27. To Which Of The Following Do You Think The Phrase "Safe Sex" Would Apply?

- | | | | | |
|-------------------------------|-----|-------|----|-------|
| a. Sex With A Condom | Yes | _____ | No | _____ |
| b. Oral Sex | Yes | _____ | No | _____ |
| c. Sex With A Virgin | Yes | _____ | No | _____ |
| d. Anal Sex | Yes | _____ | No | _____ |
| e. Masturbation | Yes | _____ | No | _____ |
| f. Sex Using Contraception | Yes | _____ | No | _____ |
| g. Sex With One Partner | Yes | _____ | No | _____ |
| h. Sex With Your Clothes On | Yes | _____ | No | _____ |
| i. Sex With A Circumcised Man | Yes | _____ | No | _____ |

PART C: SEXUAL HEALTH (INTERVIEWER READ STATEMENT REGARDING CONFIDENTIALITY OF INFORMATION)

1. I Would Like To Know Where You May Have Gotten Information About Sex, Sexuality And Relationships Between Men And Women (Rate: 1-Some, 2-A lot, 3-Just A Little, 4-Nothing At All).

- a. Teachers At School _____
- b. Church _____
- c. Mother _____
- d. Father _____
- e. Brother or Sister _____
- f. Friends _____
- g. Magazines _____
- h. Television _____
- i. Nurse or Doctor _____
- j. Another Adult _____

2. I Would Like You to Just Answer Yes Or No To These Questions:

a. Have You Ever Been Kissed Or Cuddled By A Boy/Girlfriend

Yes _____ No _____

b. Have You Ever Been On Dates With Members Of The Opposite Sex

Yes _____ No _____

ASK GIRLS/FEMALES ONLY:

c. Has A Man/Boy Ever Put His Penis/Pipi/Willie Inside Your Vagina/Fanny/Kuku (Sexual Intercourse)

Yes _____ No _____

ASK BOYS/MALES ONLY:

d. Have You Ever Put Your Penis/Pipi/Willie Inside A Girl's Vagina/Fanny/Kuku (Sexual Intercourse)

Yes _____ No _____

3. RECORD SEXUALLY EXPERIENCED/NOT SEXUALLY EXPERIENCED: **NOT SEXUALLY EXPERIENCED, SKIP TO QUESTION 10**

Appendices

4. How Old Were You When You First Had Sexual Intercourse?

- a. 6 Years Of Age Or Younger _____
- b. 7 Years _____
- c. 8 Years _____
- d. 9 Years _____
- e. 10 Years _____
- f. 11 Years _____
- g. 12 Years _____
- h. 13 Years _____
- i. 14 Years _____
- j. 15 Years _____
- k. 16 Years _____
- l. 17 Years _____
- m. Don't Know _____
- n. Refusal _____

5. How Many Different Sexual Partners Have You Had?

- a. 1-2 _____
- b. 3-5 _____
- c. 5-10 _____
- d. More Than 10 _____
- e. Don't Know/Refused _____

6. How Many Different People Have You Had Sex With In The Past Year?

- a. Number _____
- b. None _____
- c. Refused _____

7. Thinking About The Number Of Times You Had Sex In The Past Year, How Many Times Did You Use A Condom?

- a. Never _____
- b. Some Of The Times _____
- c. Most Of The Times _____
- d. Always _____

8. Thinking About The Last Time (Most Recent) You Had Sex, Did You Use A Condom?

Yes _____ No _____

9. I Am Going To Read To You A Whole Lot Of Statements That People Like Yourself Have Made About Relationships And Sex. Could You Please Tell Me Whether You Agree, Disagree Or Don't Know About Each Of The Following Statements?

a. Safe Sex Is The Equal Responsibility Of Both Partners

Agree _____ Disagree _____ Don't Know _____

b. I Always Use A Condom When I Have Sex

Agree _____ Disagree _____ Don't Know _____

c. Sometimes I Use A Condom

Agree _____ Disagree _____ Don't Know _____

d. I Never Use A Condom

Agree _____ Disagree _____ Don't Know _____

e. Sex Without A Condom Is More Enjoyable

Agree _____ Disagree _____ Don't Know _____

f. I Ask My Boyfriend To Use A Condom, But If He Refuses, There Is Nothing I Can Do

Agree _____ Disagree _____ Don't Know _____

g. Whenever We Have Sex I Am Afraid That My Partner/I will Fall Pregnant

Agree _____ Disagree _____ Don't Know _____

h. I Have Sex With My Boyfriend/Girlfriend Because I am Afraid Of What My Friends Will Say If I Don't

Agree _____ Disagree _____ Don't Know _____

i. I/My Partner Cannot Fall Pregnant If I/My Partner Always Use(s) A Condom

Agree _____ Disagree _____ Don't Know _____

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j. I Find Buying Condoms Very Embarrassing

Agree _____ Disagree _____ Don't Know _____

k. Every Time I Have Sex With My Partner I Am Afraid I Am Going to Get HIV/AIDS

Agree _____ Disagree _____ Don't Know _____

l. I Feel Very Sure Than I Will Not Get HIV/AIDS From My Sexual Partner

Agree _____ Disagree _____ Don't Know _____

m. I Sometimes Think That I Am Sexually Attracted To People Of The Same Sex

Agree _____ Disagree _____ Don't Know _____

n. Sex Is Only For Married Couples

Agree _____ Disagree _____ Don't Know _____

o. I Have Sex, Not Because Of What Anyone Else Thinks Or Says, But Because I Enjoy It

Agree _____ Disagree _____ Don't Know _____

p. **MALES ONLY:** Sometimes I Have Sex Even Though My Girlfriend Does Not Want To

Agree _____ Disagree _____ Don't Know _____

q. **MALES ONLY:** If My Girlfriend Says Not To Sex, I Do Not Insist On Having Sex With Her

Agree _____ Disagree _____ Don't Know _____

r. **FEMALES ONLY:** If My Boyfriend Says No To Sex, I Accept It

Agree _____ Disagree _____ Don't Know _____

s. **FEMALES ONLY:** There Are Times When I Do Not Want TO Have Sex But I Do Because My Boyfriend Insists On Having Sex

Agree _____ Disagree _____ Don't Know _____

t. Having Sex Is A Way Of Proving That You Really Love The Other Person

Agree _____ Disagree _____ Don't Know _____

u. Sex Is Bad And Makes One Feel Dirty

Agree _____ Disagree _____ Don't Know _____

v. I Use Contraception

Agree _____ Disagree _____ Don't Know _____

w. **MALES ONLY:** I Do Not Wear A Condom When I Have Sex With My Partner, It is Her Responsibility To Take Precautions

Agree _____ Disagree _____ Don't Know _____

x. It Is Reasonable To Expect Males To Take The Responsibility Of Using Condoms

Agree _____ Disagree _____ Don't Know _____

y. I Believe It Is My Responsibility To Protect Myself From Getting HIV/AIDS

Agree _____ Disagree _____ Don't Know _____

z. It Is Possible To Not Have Sex If That's What You Want

Agree _____ Disagree _____ Don't Know _____

aa. I Am Afraid To Have Sex Because My Partner May Hurt Me During Sex

Agree _____ Disagree _____ Don't Know _____

bb. I Am Afraid Of Saying No To Sex

Agree _____ Disagree _____ Don't Know _____

Appendices

cc. **MALES ONLY:** I Have Given A Girlfriend Pocket Money Or Bought Her Drinks Or Food In Return For Sex

Agree _____ Disagree _____ Don't Know _____

dd. **FEMALES ONLY:** I Have Had Sex For Money, Drinks, Food Or Other Gifts

Agree _____ Disagree _____ Don't Know _____

ee. Having Many Sexual Partners Means I Am Cool/Hip

Agree _____ Disagree _____ Don't Know _____

ff. I Have Had Sex With A Person Who Is Of The Same Sex/Gender As Me

Agree _____ Disagree _____ Don't Know _____

gg. Condoms From The Clinic Are Not Safe/Inferior

Agree _____ Disagree _____ Don't Know _____

hh. The Fewer Partners You Have, The Less Likely You Are To Get HIV/AIDS

Agree _____ Disagree _____ Don't Know _____

10. For You Personally, What Do You Think Is The Best Way To Protect Yourself From HIV: **(NOTE MENTION. DO NOT PROMPT)**

- a. Abstain From Sex _____
 - b. Always Use A Condom _____
 - c. Only Have Sex With Same Partner _____
 - d. Explore Other Forms (Non-Penetrative) Of Sexual Pleasure, Such As Masturbation/Oral Sex
 - e. Other (specify) _____
-

11. Have You Ever Been Forced To Have Sex When You Did Not Want To?

Yes _____ No _____

12. With Whom (Were You Forced To Have Sex)?

- a. Boyfriend _____
- b. Girlfriend _____
- c. Family Member _____
- d. Teacher _____
- e. Stranger _____
- f. A Gang _____
- g. Other (Specify) _____

13. What Do You Think Your Chances Are Of: How Much Of A Risk Do You Think You, Personally, Have Of: (Rate: 1-Very High, 2-High, 3-Low, 4-Very Low, 5-None, 6-Don't Know, 7-Refused)

- a. Getting Someone/Becoming Pregnant _____
- b. Becoming Infected With HIV Or AIDS _____
- c. Becoming Infected With Other Sexually Transmitted Diseases _____
- d. Being Sexually Assaulted _____

14. Do You Personally Know Any Teenagers Who: (Rate: 1-Yes, 2-No, 3-Don't Know, 4-Refused)

- a. Has HIV Or AIDS _____
- b. Has A Sexually Transmitted Disease Other Than HIV/AIDS _____
- c. Has Been/Gotten Someone Pregnant _____
- d. Has Been Sexually Assaulted _____
- e. Has Had Sex For Money Or Other Favors _____

15. Have You Changed Your Behavior In Any Way To Protect Yourself From The Risk Of HIV Infection (Specify):

Yes _____ No _____

Specify: _____

16. When Last, If At All, Have You Visited A Government Clinic For Sexual Health Advice/Care Or For A Sexually Related Problem, By That I Mean Any Medical Help Or Advice You Have Needed From A Nurse Or A Doctor To Examine Your Male/Female Organs, Or For An Illness That You May Have Gotten From A Sexual Experience Or Relationship, Or For Contraceptives Or Condoms? Was It:

- a. In The Past 6 Months _____
- b. In The Past 12 Months _____
- c. Longer Than 12 Months Ago _____
- d. Never _____

17. **FOR ALL WHO HAVE VISITED A GOVERNMENT CLINIC:** On Your Last Visit To A Government Clinic For Sexual/Health Related Issues, How Would You Describe The Treatment You Received From This Clinic?

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- a. Very Good Indeed _____
- b. Good _____
- c. Average _____
- d. Poor _____
- e. Not Good At All _____

18. And, At This Last Visit, Which Of The Following Describes The Nurse's/Doctor's Attitude Toward You?
- b. Helpful _____
 - c. Caring _____
 - d. Insulting _____
 - e. Rude _____

Other (specify)

**Appendix N: Chapter 6: Parent-adolescent sexual risk communication in South Africa:
Implications for policy intervention**

KEY INFORMANT INTERVIEW GUIDE

General Information: *As appropriate, complete this information prior to interview.*

1. Organisation: _____
2. Name of person being interviewed: _____
3. Phone number: _____
4. Date of interview: _____
5. Interview conducted: In person _____ By phone _____
6. Interviewer: _____
7. Interview start time: _____ Interview end time: _____

Total time for interview: _____

(Total number of minutes)

The purpose of this interview is to find out about the parent education programme offered by your organisation.

"I would like to start by asking you about your job activities and responsibilities at (name of organisation)."

1. What is your position or title?
2. As the *(title)* at *(name of service provider)*, what are your general job duties and responsibilities
3. What is your involvement or role in parent education programme?

B. Parent Education Programme

1. Please briefly describe the organisation's parent education activities
 - a. Description of activities:
 - b. Description of the target population (gender, race/ethnicity, socioeconomic status, languages spoken, literacy levels)
2. What do you see as the primary objective (or objectives) of this programme? In other words, what effect are these activities carried out in the programme supposed to have on the people they are provided to? (Probe: For example, how are these activities supposed to effect knowledge? Attitudes? Behaviors?)
3. Overall, how effective or successful do you think the programme is at meeting these objectives?
4. What do you think are barriers to providing the parent education programme?
5. What do you think are existing characteristics that facilitate the provision the parent education programme?
6. Strengthening the parent education programme
 - a. What do you think are needs of the parents in these community with regard to sex education?
 - b. How do you think the needs mentioned above can be addressed?
 - c. Who do you think is responsible for addressing these needs?

C. Evaluation by interviewer- Review of interactive materials and published evaluations. Here a checklist of the materials and content will be undertaken.