A REVIEW OF SECONDARY SCHOOLS AS SUPPORTIVE ENVIRONMENTS FOR HIV PREVENTION AND SEXUALITY EDUCATION AMONGST SECONDARY SCHOOL LEARNERS IN DURBAN AND SURROUNDING AREAS, KWAZULU-NATAL, SOUTH AFRICA.

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DECLARATION

Submitted to the University of KwaZulu-Natal in fulfilment of the requirements for the awarding of a Philosophy Doctorate as part of the NRF Innovation doctoral programme. This is a product of my independent work and I confirm that it is not the result of plagiarism. I declare that *A review of secondary schools as supportive environments for HIV prevention and sexuality education amongst secondary school learners in Durban and surrounding areas, KwaZulu-Natal, South Africa* is my own work, that it has not been submitted before for any degree or examination in any other university and that all the sources I have used or quoted have been indicated and acknowledged as complete references in the thesis.

Signed   December 2017

Candice Alexis Jimmyns (Student number: 208525636)

DEDICATION

This work is dedicated to the people in my life who have watched me dream, embark on and complete this thesis: My father, Piash Jimmyns, husband, Renaldo Pillay, best friends Wendy Leigh Penfold, Andrea Lisa Taylor, Kerryn Haarhoff, Angela Walthausen, Paula Rossell and Monique James and my extended family. Thank you for your support and understanding through the long hours spent on this study.

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Unity

I dreamed I stood in a studio
And watched two sculptors there.
The clay they used was a child's mind,
They fashioned it with care.
One was an educator,
The tools she used were books, music and art,
One was a parent
With a guiding hand and gentle, loving heart
Day after day the educator toiled,
With a touch that was strong and sure,
While the parent laboured by her side
With a heart that was clean and pure.
And when at last the task was done,
They stood proud of what they had wrought,
For things they had moulded into the child
Could neither be sold nor bought.
And each agreed they would have failed,
In they had worked alone.
For behind the parent stood the school,
And behind the educator, a home.

(Source Unknown)

ABSTRACT

Background: The study investigated whether the current provision of sexuality education made available through the Life Orientation Curriculum (LO) in South African secondary schools is supported by their school environments. Given the high prevalence rates of HIV, STIs and teenage pregnancy amongst youth in South Africa, the impact of the school environment on how and what is learnt, received and applied to school life and learners' daily lives needs to be taken into account for the future prevention of learner engagement in risky sexual behaviours. More specifically, the importance of the school environment in impacting on the outcomes of sexuality education needs to be emphasised in schools in KwaZulu-Natal (KZN), given the fact that KZN is the province with the highest prevalence of HIV, STIs and teenage pregnancy in South Africa. It also possesses the highest number of youth in the age range of 15-24 years; which is the population age demographic indicated to be at the highest risk for sexually transmitted diseases. Although much research has been undertaken into the effectiveness of the content of sexuality education worldwide and into its, implementation in classrooms and schools, there is a paucity of research on the role of the school climate, culture and school connectedness in Life skills teaching. Research involving Life skills curricula have indicated varied results in improving youths' sexual behaviours and HIV, STI and teenage pregnancy prevention. Limited research has been carried out in terms of school connectedness, school climate and culture in general within SA but, in particular, there is limited research directly to the connectedness of the learner to the school and to the HIV prevention and sexuality component of the Life skills programme. Further research is therefore required into the role of the school environment and sexuality education as an influential factor in learners' own sexual practices. Providing a holistic understanding of the surrounding factors within the school environment that create an influence on the way in which sexuality education is delivered via the LO curriculum within South African schools, is critical to the overall effectiveness of sexuality education. It is also important to gain an accurate understanding of the environment that best supports learners, educators and caregivers to engage with the revised curriculum. The study therefore explores whether the school environment stands in contrast to or promotes the values taught in sexuality education and whether the school environment is supportive and conducive to teaching sexuality education. Furthermore, it aims to understand how learners, educators and caregivers perceived and experienced their school environment to determine whether or not these external conditions were conducive to the aims of sexuality

education. The study aims to achieve this via investigation/exploration of the following seven objectives: 1) To investigate and understand the extent to which learners feel safe, cared for and respected by peers, educators and support staff within their school; 2) To determine and explore if learners have networks of social support that they can access within their schools; 3) To examine and explore if learners feel they have positive role models at the school from which they can learn positive behaviour; 4) To study and understand learners' perceptions of the discipline and order within the school environment; 5) To examine and gain an understanding of the overall school climate and values in terms of discrimination, stigma, acceptance, and tolerance as well as how learners feel about being able to apply what they have learnt during LO, in the context of their school environment; 6) To explore caregiver-school connectedness in terms of perceptions and experiences of the school environment in relation to it being conducive to sexuality education, sexuality and the overall health and well-being aims; and 7) To develop guidelines for improving school climate/culture and caregiver involvement.

Method: The study is pragmatic, employing a Post-Positivist paradigm which uses a concurrent mixed methodology research design with the aim of triangulation of the data. The research design consists of: Phase one which was a pilot study to assess the feasibility of the instruments and refinement thereof; and Phase two, which consists of the main study, that comprises the researcher's observations of the school, cross-sectional surveys with learners, qualitative in-depth interviews with educators and focus group discussions with caregivers. The samples were from four different poverty quintile level schools (poverty quintile two, three, four and five schools) in the Umlazi district of the Ethekwini region, KwaZulu-Natal, South Africa. Stratified purposive sampling was used and principals of randomly selected schools within the stratification by poverty quintile were consulted for access. Grades selected for the study were Grade nine and 11 learners and the study also involved the LO educators of learners and caregivers of learners. Ethical approval was obtained through the Regional Department of Education and the Humanities and Social Science Research Ethics Committee of the University of KwaZulu-Natal, South Africa. A proposed theoretical framework for school connectedness (Waters, Cross & Runions, 2009) was used as a guide. Principal component analysis, chi-square tests, t-tests, Pearson product-moment correlation coefficients, Two-Way ANOVAs and standard Multiple Regression Analysis were conducted to analyse the quantitative data. Thematic content analysis was used to analyse the qualitative data.

Results: The results indicate that a number of challenges faced by the school, which affect learners, educators, caregivers and the school as a whole; are negatively impacting learners' practice of sexuality education in their own lives. The quantitative and qualitative aspects of the study's findings indicate that schools in KwaZulu-Natal are largely falling short in the implementation of best practices for optimal outcomes of sexuality education for learners. Furthermore, the study's findings suggest that schools are likely to require more awareness and resources in order to create enabling school environments for the influence and practice of sexuality education messages in learners' own lives. Of the total sample (N=600), 24.2% of the learners (N=145) indicated having had sexual intercourse. Learners' perceived ability to apply sexuality education lessons in their personal lives was the best overall predictive factor for sexual activity engagement. The study's findings indicate significant correlations between the various elements of the school environment and sexual activity engagement. School engagement was found to be the strongest predictor of sexual activity engagement ($ß = .834$; $t = 5.316$; $p < .001$). The results of the Sexual Activity Scale had a significant negative correlation with the results of the School Discipline Scale ($r = -.223$, $p < .01$), Sense of Belonging ($r = -.145$, $p < .01$) and Comprehensive School Climate Inventory ($r = -.223$, $p < .01$). The Sexual Activity Scale and Caring Environment scale were also negatively correlated ($r = -.104$, $p < .01$) as was the Psychological Sense of School Membership scale ($r = -.101$, $p < .01$). This suggests that high levels of sexual behaviour engagement were associated with low levels of positive school environment components. Further, quantitative findings indicate that learners regard the school climate, sense of belonging, psychological sense of school membership and school engagement as being beneficial impact factors to sexuality education's influence and practice in their personal lives. However, the study's findings also demonstrate that most learners do not attach adequate importance or give priority to sexuality education or LO. Regarding the study's findings on educators, it was indicated that educators are aware of and are making a good effort to encourage the best practices of sexuality education which will influence personal practice by learners. However, the school environment presents various challenges to the implementation thereof. The study also indicates that caregivers are not as involved in learners' lives as they could be for best reinforcement of sexuality education in their children's lives.

Conclusion: In addition to the provision of sexuality education through the LO curriculum; supportive factors such as the awareness, promotion and implementation of best practices for

school environments should be improved in schools in KwaZulu-Natal. Learners are recommended to participate in sexuality education lessons, to understand the objectives of this component of the curriculum and to practice these messages in their personal lives. Educators are recommended to continue implementing the best practices for pedagogy. It is also recommended that that they maintain the good quality of learner-educator relationships they currently have. Caregivers are encouraged to become more aware of sexuality education as taught via the LO curriculum and to become more involved in their child's schooling. Schools are recommended to create caring and supportive climates for all key stakeholders (learners, educators and caregivers) as well as to foster closer relationships with caregivers of learners. It is also of importance to call on national and local government to address the structural challenges of poverty and hopelessness as well as degradation and social ills in disadvantaged environments since it is apparent that the environment within which the school is situated has an impact on risk behaviours. Therefore, all stakeholders have a role to play in creating a more supportive school environment which will enable better achievement of sexuality education's aims.

Key words: Life Orientation, life skills education, sex and relationship education, school environment, school connectedness, school climate.

LIST OF ACRONYMS AND ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
CAPS	Curriculum Assessment Policy Statement
CDC	Centre for Disease Control
DBE	Department of Basic Education
DoE	Department of Education
HAPS	HIV and Alcohol Prevention
HPS	Health Promoting School(s)
HIV	Human Immunodeficiency Virus
KZN	KwaZulu-Natal
LO Curriculum	Life Orientation Curriculum
MARPs	Most-at-Risk Populations
MCP	Multiple Concurrent Partnerships
MTCT	Mother to Child Transmission
NGO	Non-governmental Organisations
NSP	National Strategic Plan
OVC	Orphans and Vulnerable Children
PMTCT	Preventing Mother to Child Transmission
RCT	Randomised Control Trial
RH	Reproductive Health
SA	South Africa
SRHR	Sexuality and Sexual and Reproductive Health and Rights
SSA	Sub-Saharan Africa
STI	Sexually Transmitted Infections
UK	United Kingdom
US	United States
WHO	World Health Organisation

DEFINITION OF TERMS

AIDS: The Acquired Immune Deficiency Syndrome or acquired immunodeficiency syndrome (AIDS) is a human immune system disease caused by the human immunodeficiency virus (HIV).

Health Promoting Schools: Health Promoting Schools are defined as schools which constantly strengthen their capacity as a healthy settings for living, learning and working (Health Promoting Clearinghouse, 2009, p.3).

HIV: The Human Immunodeficiency Virus (HIV) is a virus of the retrovirus family resulting in HIV infection and ultimately the acquired immunodeficiency syndrome (AIDS). HIV attacks the immune system while the immune system attacks the virus making the person ultimately susceptible to various opportunistic infections like tuberculosis.

NGOs: Non-governmental Organizations that provide psychosocial services and technical skills training to street-connected children and youth.

Prevalence: Prevalence measures the total number of people infected with HIV or who have developed AIDS at a specific point in time.

School climate: School climate may be defined as the perceived quality and character of school life. It may be based on patterns of learner, caregiver, and school personnel experiences within the school and reflects norms, goals, values, interpersonal relationships, teaching and learning practices, and organisational structures (Gann, 2015, p.2).

School connectedness: School connectedness refers to an academic environment in which learners believe that adults in the school care about their learning and about them as individuals. It is the level of engagement and involvement by learners in the school (Blag, 2014, p. 6).

School culture: The school culture is largely determined by the actual values, shared beliefs, and behaviour of all the various stakeholders within the school community and reflects the school's social norms (Gann, 2015, p.2).

School environment: The school environment is composed of the facilities, classrooms, school-based health support and disciplinary policy. A positive school environment is defined as a school having appropriate facilities, well-managed classrooms, available school-based health supports,

and a clear, fair disciplinary policy (Bond, Butler, Thomas, Carlin, Glover, et. al., 2007, p.3). The school environment is a comprehensive overview of the school climate, culture and school connectedness as well as the physical school environment.

Sexual activity: The term 'sexual activity' is referred to in order to indicate learners' engagement in sexual activity. This has originated from the name of the scale: 'The Sexual Activity Scale' (Bennett & Dickinson, 1980) and was maintained throughout for consistency.

Sexuality Education: Only certain aspects of sexuality education were covered by the study. Provides positive messages about sexuality and sexual expression, including the benefits of abstinence and about methods of protection (Department of Education, 2000b).

Whole School-Approach: "A whole school approach is cohesive, collective and collaborative action in and by a school community that has been strategically constructed to improve learners' learning, behaviour and wellbeing, and the conditions that support these" (Rowe, Stewart & Patterson, 2007, p.27).

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CHAPTER 1

1. INTRODUCTION: OUTLINE OF RESEARCH PROBLEM

This chapter is intended to provide a declaration of the aims, rationale and objectives of the study. The chapter commences by quoting the rates of the Human Immunodeficiency Virus and Acquired Immune Deficiency Syndrome (HIV and AIDS) infection, teenage pregnancy and Sexually Transmitted Infection (STI) rates in South Africa (SA) and focuses on the challenges to be faced; with a view to creating a foundation of evidence to support the study's aims.

The total number of people living with HIV and AIDS in SA increased from an estimated 4,02 million in 2002 to 6,19 million by 2015 (Statistics South Africa, 2015). In 2015, an estimated 11.2% of the total population was HIV positive (Statistics South Africa, 2015). Approximately one-fifth of South African women in their reproductive years are HIV positive (Statistics South Africa, 2015). More specifically, youth aged 15-24 years are a high-risk age group for the disease with 20.5% of all youth in this age group already being infected (Khumalo, 2012; Shisana, Rehle, Simbayi, Zuma, Jooste et al., 2014). In 2011, 13% of youth aged 15-19 years were infected (Khumalo, 2012). According to Statistics South Africa (2015), 5.19% of youth aged 15-24 years were estimated to be newly infected by HIV and AIDS in SA in 2015. Regarding the provincial breakdown, KwaZulu-Natal (KZN) has the highest prevalence of HIV and AIDS in the country with 37.4% of the people being infected in 2012 (Khumalo, 2012). KZN also has the highest proportion of youth aged younger than 15 years, with approximately 3.8 million (22.9%) living in the province (Willan, 2013).

In addition to high HIV rates, teenage pregnancy rates are alarmingly high with 30% of learners in 2011 reporting ever being pregnant in SA (Willan, 2013). In SA, teenage pregnancy rates have risen from 68000 teenagers falling pregnant in 2011 to 81000 in 2012, to 99000 teenage pregnancies recorded in 2013 (Statistics South Africa, 2015). KZN has the highest teenage pregnancy rate with more than 26000 pregnancies recorded in 2015 (Statistics South Africa, 2015).

In the first *Youth Risk Behaviour Survey (YRBS)* conducted in 2003 among South African youth in public secondary schools, nearly half (41.1%) the sampled youth were reported to have had sex (Reddy, Panday, Swart, Jinabhai, Amosun et al., 2003). This rate has decreased slightly,

but it is still a disturbingly high rate, according to the *2nd South African National Youth Risk Behaviour Survey* (Reddy, James, Sewpaul, Koopman, Funani et al., 2010), where 38% of the youth were reported to currently engage in sexual intercourse and 13% of this number reported that their age of initiation into sexual activity had been before the age of 14 years. Among the youth who had had sex, 41% had had more than one sexual partner, 52% had indulged in sex in the three months preceding the survey, 16% had had sex after consuming alcohol, 14% had sex after engaging in substance use and 31% practiced consistent condom-use. In 2015, an estimated one in eight South Africans were infected with HIV; with a prevalence rate as high as one in three in lower socio-economic areas (Statistics South Africa, 2015). It is estimated that three quarters of all new HIV infections occur amongst individuals aged between 15 and 25 years (Statistics South Africa, 2015). A national survey of teenagers found that one third of all youth between the ages of 12 and 17 years are sexually active (USAID, 2015). Most children enter the education system being HIV-negative; a growing number leave school HIV-positive, and many more become HIV-positive shortly after leaving school (iKamvayouth, 2015; Human Sciences Research Council, 2008). Regarding teenage pregnancy, 19% had been pregnant or had impregnated someone; while only 65% reported receiving HIV and AIDS education (Reddy et al., 2010).

Against this background, the importance of national action to prevent HIV and AIDS in particular, other sexually transmitted diseases and teenage pregnancies is undeniable. The South African Department of Education (DoE) embarked on a programme for sexuality education to be incorporated within the Life Orientation (LO) curriculum (Department of Education, 1999). This initiative was launched in 1996 and was based on an effort to prevent the spread of HIV within the South African schooling system (Department of Education, 1999). *The National Policy on HIV and AIDS for Learners and Educators in Public Schools* and *Learners and Educators in Further Education and Training Institutions* (Department of Education, 1999), introduced HIV and AIDS education as a compulsory component of the curriculum for learners. Three policy documents have designated schools and educators as the responsible agents for the promotion of safe sexuality and prevention of HIV and AIDS in learners. These policies are: the *Education White Paper 6, Special Needs Education: Building an Inclusive Education and Training System* (Department of Education, 2001), the *Implementation Plan for Tirisano, January 2000 – December 2004* (Department of Education, 2000c), and the *National Education Policy Act: Norms and Standards for Educators* (Department of Education, 2000a). The DoE had later completed *The Integrated*

Strategy on HIV and AIDS 2012 - 2016 in 2011 with a view to improving the impact of HIV and AIDS prevention programmes that addressed risky sexual behaviour in South African youth.

The school is the best and most suitable place to reach all youth since it is best positioned as a common access point for youth to be targeted on a national level (Kirby, 2002; Kirby, Coyle, Alton, Rolleri & Robin, 2011; UNAIDS 2009). All the youth can be accessed at the same time and in a controlled manner for learners to make informed decisions regarding their sexuality and learners can be monitored for the proposed resultant behaviour change (Kirby, 2002; Kirby et al., 2011). Learners themselves have also highlighted the importance of sexuality education in South African schools with studies indicating them reporting the school as being the best source of information on sensitive topics such as sex and reproduction; including HIV and AIDS, teenage pregnancy and STI's (Bhana, Brookes, Makiwane & Mokomane, 2005; Jimmyns & Roche, 2010; Sprecher, Harris & Meyers, 2008; Zuma, Simbayi, Rehle, Mbelle, Zungu et al., 2016).

However, the content and pedagogy used to teach the sexuality education component of LO lessons impacts on the influence and practice of sexuality education messages in learners' own lives and the likelihood of learners' translating this information into resultant positive behaviour change (Kirby et al., 2011; UNAIDS, 2009; UNAIDS, 2011). Studies indicate that although most secondary school learners are equipped with a basic knowledge of HIV and AIDS, teenage pregnancy and STIs; knowledge alone is not enough to assure safe sexual behaviour (Aaro, Mathews, Kaaya, Katahoire, Onya et al., 2014; Fonner, Armstrong, Kennedy, O'Reilly & Sweat, 2014; Kirby et al., 2011). Among young people, HIV and AIDS awareness programmes and sexuality education programmes that focus on the delay of sexual activity and on behavioural change towards safe sexual behaviours are priorities and remain the best means of primary prevention (Fonner et al., 2014; Kirby et al., 2011). Local research shows that LO is falling short of its aims in terms of outcomes evaluation on behaviour change.

A number of studies have pointed out that in addition to sexuality education programmes that focus on behaviour change, the school environment impacts positively on the internalisation and positive behaviour change in learners (Boler & Aggleton, 2005; Bowe, Ball & Gold, 2017; Furlong & Christenson, 2008). The school as a context also reinforces the positive behaviour change that has already occurred and is a protective and supportive factor influencing learners' safe sexual behaviours (Furlong & Christenson, 2008). The effective implementation of life skills

education requires a school environment that is conducive to a participatory approach, which assumes child-centred learning and the presence of positive role models (Boler & Aggleton, 2005). However, where LO lessons are carried out in an environment where learners' do not feel supported, cared for, and have no positive role models to look up to, these are of limited value for learners (Boler & Aggleton, 2005; Furlong & Christenson, 2008; Bowe et al., 2017; Smith & Harrison, 2012).

The relationship of the learner with the school is often referred to as learner-school connectedness, and it has been found to have an impact on learners' health and wellbeing (Bond, Butler, Thomas, Carlin, Glover et al., 2007). The school climate may be defined as the "perceived quality and character of school life. It may be based on patterns of learner, caregiver, and school personnel experiences within the school and reflects norms, goals, values, interpersonal relationships, teaching and learning practices, and organisational structures" (Gann, 2015, p.2). School connectedness refers to an "academic environment in which learners believe that adults in the school care about their learning and about them as individuals. It is the level of engagement and involvement by learners in the school" (Blag, 2014, p. 6). The school culture is largely "determined by the actual values, shared beliefs, and behaviour of all the various stakeholders within the school community and reflects the school's social norms" (Gann, 2015, p.2). Negative school experiences largely account for young people's alienation or disconnectedness from school. Research focusing on school connectedness emphasises the importance of the quality of relationships (peer and educator) on engagement in learning, as well as on health and wellbeing. Such experiences highlight different social experiences including, for example, being bullied, not getting along with educators, feelings of not belonging, being unsuccessful at school and feelings of stress or anxiety (Bond et al., 2007; Zuma et al., 2016).

The more connected learners are to positive school environments, the more likely they are to engage in safe sexual behaviours and be at a lower risk for HIV and AIDS, STIs and teenage pregnancy (Furlong & Christenson, 2008). This is due to schools being accessible and relatively stable sites within which to locate interventions to promote adolescent connectedness at a time of several transitions; during which identity and relationships with family, peers and the school change (Bond et al., 2007).

Furthermore, the involvement of caregivers in the schooling system and especially in the sexuality education component of the LO curriculum is imperative for successful and sustained positive behaviour change (Jimmyns & Roche, 2010). Studies have indicated that caregiver support and involvement in the school can increase the likelihood that their children will engage in safe sexual behaviours and be at a lower risk of contracting diseases and of falling pregnant, than children whose caregivers are not involved in their children's schools or their child's school life (Appleton, Christenson & Furlong, 2008; Holtmann, 2011).

The impact of the school environment on how and what is learnt, received and applied to school life and learners' daily lives needs to be taken into account when aiming for the maximum reduction in risky sexual behaviour through sexuality education programmes (Ruzek, Hafen, Allen, Gregory, Mikamie et al., 2016). Given the paucity of research in the area of the school environment as a supportive environment for sexuality education's influence and practice in learners lives; especially in KZN, the study seeks to understand how the HIV prevention and sexuality education component of the LO curriculum is being valued by learners. In addition, the study explores and investigates how learners perceive this in the context of the school environment. The study seeks to investigate and explore whether the school environment stands in contrast to, or promotes the values taught in LO and whether the school environment is conducive to teaching LO. More specifically, the study aims to understand how learners, educators and caregivers perceive and experience their school environments in order to determine whether or not these external conditions are conducive to the aims of the LO programme. It is imperative to explore whether or not the value placed on this topic by learners is supported by the school as a whole. It is therefore important to review whether the school creates the atmosphere for learners to feel comfortable and accepted in the school in order to discuss and internalise these sensitive and often personal issues. Providing an holistic understanding of the surrounding factors within the school environment that create an influence on the way in which the LO curriculum is implemented and delivered within South African schools, as well as gaining an accurate understanding of the environment that best supports learners, educators and caregivers to engage with the revised curriculum, is critical to the overall effectiveness of the LO curriculum. The school environment should best be regarded as a source of sexuality education which builds a sense of responsibility in learners through their positive relationship with the school. The school environment should empower them to make the right choices around sexuality behaviour, attitudes and engagement.

1.1. The Gap in the Research

Although much research has been undertaken around the effectiveness of the content of sexuality education programmes worldwide, their contents and to a lesser extent their implementation in classrooms and schools, there is a paucity of research on the role of the school climate, culture and school connectedness in Life skills teachings (Ruzek et al., 2016). Research involving Life skills curricula have indicated varied results in improving youth sexual behaviour and HIV, STI and teenage pregnancy prevention. Limited research has been carried out in terms of school connectedness, school climate and culture in general within SA, but with a paucity of research which relates in particular to the connectedness of the learner to the school and to the HIV prevention and sexuality component of the Life skills programme (Bond et al., 2007; Bowe et al., 2017; Mcgraw, Moore, Fuller & Bates, 2008; Monahan, Oesterle & Hawkins, 2010; Patton, Bond, Carlin, Thomas, Butler et al., 2006). Further research is required into the role of the school environment as a factor in sexuality education message influence and practice by learners in their own lives.

In addition, limited research is available on HIV prevention and sexuality education at a national level for LO in South African schools (James, Reddy, Ruiter, McCauley & van den Borne, 2006; Bhana et al., 2005). Furthermore, according to the *South African Basic Education Conference* held in 2012 and a national LO review undertaken by the Health Economics and HIV/AIDS Research Division (HEARD), on behalf of the DoE (Adams Tucker, George, Reardon & Panday et al., 2016), there is a stark absence of rigorous research studies on whether and to what extent the school environment supports the LO curriculum's sexuality education's aims for HIV, teenage pregnancy, STI's and risky sexual behaviour prevention. In addition, as highlighted by the same LO review and South African Basic Education Conference (2012), there is little research on caregivers' roles in support of the LO curriculum's sexuality educations' aims.

Boler and Aggleton (2005), indicate that the school's system in its totality is often a neglected concern that can hinder the effective introduction of Life skills education in schools. The organisational culture of schools may impact negatively on the environment in which LO is delivered, internalised and practiced by learners. For this reason, Boler and Aggleton (2005), argue that whole-school approaches that consider the school system in its totality are necessary when introducing Life skills education in schools. The overall implementation and effectiveness of the

LO curriculum hinges on the provision of a holistic understanding of the contextual environmental influencing factors within the school environment that influence the way in which the LO curriculum is implemented and delivered within South African schools. In addition, these factors have an impact upon an accurate understanding of the environment that best supports learners and educators in their engagement with the revised curriculum. The study will focus on the most suitable school environment for the influence and practice of sexuality education via the curriculum in learners' personal lives, as well as the extent to which KZN schools provide this suitable school environment. A definition of a holistic school environment has been provided below:

A holistic, safe and learner friendly school can be defined as:

> One that is free of danger and where there is an absence of possible harm; a place in which non-educators, educators and learners may work, teach and learn without fear of ridicule, intimidation, harassment, humiliation, or violence. A safe school is therefore a healthy school in that it is physically and psychologically safe. Indicators of safe schools include the presence of certain physical features such as secure walls, fencing and gates; buildings that are in a good state of repair and well-maintained school grounds. Safe schools are further characterised by good discipline, a culture conducive to teaching and learning, professional educator conduct, good governance and management practices, and an absence (or low level) of crime and violence (Gann, 2015, p.137-138).

This study aims to understand the surrounding factors within the school environment that create an influence on the way in which the LO curriculum is implemented and delivered within SA, specifically in KZN schools. Furthermore, the study aims to determine the environment that best supports learners, educators and caregivers of learners to engage with the revised curriculum for the overall effectiveness of the LO curriculum. Schools in different socio-economic contexts were included to explore differences in school environments.

The research may be used to inform provincial school environment policy. However, it cannot be generalised to any other population but may be useful in determining proposed guidelines for assisting school environments to be conducive to the aims of HIV/STI and teenage pregnancy prevention; are likely to be derived from the research findings. The proposed positive

outcome would be to improve the influence of the messages taught in the LO curriculum thereby, reducing learners' engagement in risky sexual behaviour. This may in turn, reduce the risk of HIV and STI contraction as well as teenage pregnancy. Potentially this could increase learner wellbeing, learner retention and healthy learner behaviour (DiClemente & Crosby, 2008). It should be noted that only certain aspects of sexuality education were covered by the study.

1.2. Contributions to New Knowledge

Based on the lack of insight and understanding of the environmental influences, the study findings will be used to develop guidelines for positive school environments to maximise sexuality education message influence and practice for learners in KZN schools. The study findings should shed light on how and to what extent the school environment (including caregivers as part of the school environment) supports or inhibits the aims of the LO curriculum's sexuality component to prevent HIV and AIDS, teenage pregnancy, STI's and risky sexual behaviour in secondary school-aged learners in KZN, SA. Personal feedback sessions to the schools on the research outcomes will be presented in written reports to each of the schools. Each school will receive a confidential report which may assist them in reviewing areas of improvement, as well as maintaining best practices. These will include whether and to what extent the school environment in their schools supports the LO curriculum's sexuality education's aims for HIV, teenage pregnancy, STI's and risky sexual behaviour prevention. More specifically, it will provide guidelines relating the connectedness of learners to their schools and to the HIV prevention and sexuality education component of the Life skills programme. It also emphasises the importance of the caregiver's role in the impact of sexuality education on learners' lives. In the report to schools, guidelines for caregiver involvement will cover the extent of caregiver involvement and the manner in which schools can be more open to caregiver involvement. Negative feedback will be included in the report where the schools did report this however, this will be reported in a generalised manner to ensure that no learners, educators nor parent are identifiable. The negative aspects will be mentioned as recommendations for aspects to improve. However, the positive aspects will be highlighted to encourage schools to remain motivated in engaging in supportive and positive practices.

The study is aimed at achieving the following seven objectives:

1. To investigate and understand the extent to which learners feel safe, cared for and respected by peers, educators and support staff within their school;
2. To determine and explore if learners have networks of social support they can access within their schools;
3. To examine and explore if learners feel they have positive role models at the school from which they can learn positive behaviour;
4. To study and understand learners' perceptions of the discipline and order within the school environment;
5. To examine and gain an understanding of the overall school climate and values in terms of discrimination, stigma, acceptance, and tolerance etc. and how learners feel about being able to apply what they have learnt during LO, in the context of their school environment;
6. To explore caregiver-school connectedness in terms of perceptions and experiences of the school environment in relation to it being conducive to the aims of sexuality education and overall health and well-being aims;
7. To explore learners' views about caregiver-school connectedness regarding the school environment as context for the sexuality, health and wellbeing aims of sexuality education.
8. To develop guidelines for improving school climate/culture and caregiver involvement.

In order to achieve these seven objectives the research attempts to answer the following key research questions:

1. To what extent to do learners feels safe, cared for and respected by peers, educators and support staff within their schools?
2. Do learners have networks of social support they can access within their schools?
3. Do learners feel they have positive role models at the school from which they can learn positive behaviours?
4. What are learners' perceptions of the school discipline and order?
5. What is the nature of the overall school climate and what are the school's values in terms of discrimination, stigma, acceptance, and tolerance etc.
6. How do learners feel about being able to apply what they have learnt in LO?

7. What are learners' views about caregiver-school connectedness regarding the school environment as context for the sexuality, health and wellbeing aims of sexuality education?

8. What is the extent of caregivers' school connectedness in terms of perceptions and experiences of the school environment with regard to it being conducive to LO's sexuality and overall health and well-being aims?

1.3. Overview of the Methodology

Mixed methods design was used for the study. Focus group discussions were conducted with caregivers and qualitative in-depth interviews were conducted with LO educators of Grade 9 and 11 learners. Cross-sectional surveys were issued to Grade 9 and 11 learners in schools. These measures were conducted in four schools of different Poverty Quintiles (PQ). A school observation was conducted by the researcher on visits to the schools. The purpose of the measures involving various target audiences was to enable triangulation.

1.4. Ethical Considerations

Ethical approval for this study was obtained from the Humanities and Social Science Research Ethics Committee of the University of KwaZulu-Natal, SA (reference number: HSS/1112/015D) Ethical procedures are presented in more detail in the Methodology section (Chapter 3: Section 3.3. Study Permission and Ethical Principles). Refer to Appendices M and N for evidence of the ethical approval from the review boards of the above-mentioned institutions.

1.5. Outline of the Chapters in the Study

Chapter 1 is an introductory chapter which indicates the purpose and motivation for the study. It provides an overview of the needs of learners in terms of protection and prevention of risky sexual behaviour as well as the type of school environment which is best placed to assist with this challenge. This chapter also indicates the aims of the study and provides an outline of the methodology.

Chapter 2 constitutes a literature review to provide past evidence and a theoretical framework for the investigation of the components of the school environment in international and South African schools which are best placed to promote safe sexual behaviours amongst learners.

Chapter 3 details the research methodology adopted for the study. This chapter describes the research approach used, gives an overview of the research design and outlines the data collection and analysis methods. The discussion on ethics in research concludes this chapter.

Chapter 4 presents the findings and discussion points on the bio-socio demographic characteristics of learners, and their perceived caregiver involvement in their lives at home and at school. The chapter concludes with the extent of learners' sexual and other health risk behaviours and demographic group differences.

Chapter 5 presents the findings and discussion learners' perceptions of their school environment and the influence it has on learners' perceived ability to implement sexuality education messages and the resultant influence on their sexual activity. Thereafter, the chapter specifically focusses on learners' relationship with educators in the classroom and within the school, and the resultant impact on sexuality education message influence and practice in learners' own lives. The chapter is aimed at investigating whether and to what extent learners in KZN schools have positive educator support and role models from which they can learn and internalise positive behaviour.

Chapter 6 covers the challenges which impede and/or restrict educators' ability to offer care to learners. The findings and discussion points are provided in this chapter with a focus on the challenges educators face in the classroom and in the school.

Chapter 7 focusses on the results and discussion points on caregiver support and involvement in the school, as well as on caregiver support for messages on risky sexual behaviour prevention as taught in the LO curriculum.

Chapter 8 is a comprehensive summary and overview of the findings presented in the Chapters four to seven and the study as a whole. It is a consolidation chapter which is aimed at collating the individual aspects of the study to draw conclusions and to make recommendations pertaining to the guidelines for schools as holistic organisations. Guidelines for both caregivers and educators are presented.

1.6. Summary and Conclusion

Given the high HIV, STI and teenage pregnancy rates in KZN youth aged 15 – 19 years, prevention measures of risky sexual behaviour are urgently required. Since the school should be a protective environment which promotes the prevention of risky sexual behaviour in almost all youth around the ages of 15 – 18 years in a standardised manner; the study aims to investigate the impact of the school environment in prevention of risky sexual behaviour as taught within the LO curriculum. The school environment is composed of various stakeholders namely: Learners, educators, staff, infrastructure, resources, extra-curricular activities and caregivers of learners. Therefore, the school is viewed as a holistic organisation which has the ability to impact positively on learner behaviour and attitudes and, in particular in this study, those factors surrounding sexuality and risky behaviour.

CHAPTER 2

LITERATURE REVIEW

2.1. Introduction

This chapter is intended to provide a review of the past literature and a theoretical framework which should assist in the provision of a design for the study and a comparison of the study's findings, as well as to provide a conceptual understanding of the study's findings. All aspects of the entire school environment which were seen to impact on learner attitudes and behaviour towards learner sexuality were considered as relevant to this study. These include school connectedness, the school climate and the school culture.

There is a high prevalence of HIV and AIDS, STIs and teenage pregnancy, specifically in the age group 18 – 24 years in South Africa, with the highest rates being in KZN (Avert, 2017, Mutinta, Govender, Gow & George, 2013; Shisana, et al., 2014; Reddy et al., 2010). Given these high rates, it is imperative that health-promotion programmes address risky sexual behaviour among the youth. Schools are the best-placed environments to target all youth in a standardised manner and to provide a captive audience by tailoring the sexuality education curriculum to learners, according to their physical, cognitive and emotional development (Kirby, 2002; Kirby et al., 2011; Thapa, Cohen, Guffey & Higgins-D'Alessandro, 2013). The sexuality education programme for SA has been designed by the DoE to be assimilated into the LO curriculum (DoE, 2011c). The content focuses on the relevant knowledge and skills required to enable health-enhancing behaviour i.e. safer sexual behaviours, safer alcohol use etc. However, the impact of the sexuality education programme on youth, has been found to be dependent on the school culture, climate and environment as well as learner connectedness to these (Boler & Aggleton, 2005; Bond et al., 2007).

An holistic and supportive school environment is required for the sexuality-education component of the LO curriculum in order for it to have a greater influence in learners' own lives. This will, consequently, promote the influence of messages and health-promoting/enhancing or preventative behaviour in learners (Appleton et al., 2008). The school environment constitutes the physical school environment, the socio-emotional school environment, as well as the availability of resources and infrastructure which could assist youth (Gaurdino & Fullerton, 2010). In addition,

this involves learner relationships with educators, educator skills, the pedagogy used and educators' influence as role models (Rupp & Rosenthal, 2007). Furthermore, caregivers of learners play a key role in influencing and reinforcing the messages which are an integral component of the attitude and behaviour-change process, as they instil and validate the values, morals and teachings conveyed in the sexuality-education component of the LO curriculum (Mertler, 2017). The caregiver involvement in learners' lives and the school, re-enforces the teachings in the LO curriculum (Rupp & Rosenthal, 2007). This cumulatively plays an important role in the promotion of learners' safe sexual behaviours (Rupp & Rosenthal, 2007). Chapter Two addresses the above-mentioned aspects within the context of KZN secondary schools.

2.2. The Rate of HIV and AIDS, Teenage Pregnancy and STIs in South Africa

Sub-Saharan Africa is the most heavily HIV and AIDS infected region in Africa, accounting for 70% of all people living with HIV and 46% of all AIDS-related deaths in the world (Avert, 2017). Of the 22.5 million people living with HIV in the region, it is estimated that 60% are females and 12% are children (UNAIDS, 2016). Given the increasing numbers of HIV-infected individuals, there is an urgent need for effective HIV-prevention programming in this region. The social, health and economic consequences are far-reaching for individuals and communities on a country level.

Of the Sub-Saharan African countries, HIV and AIDS-prevalence is highest in SA, Swaziland, Zimbabwe, Botswana and Lesotho, which together account for the HIV-prevalence rates of 46% of the entire Sub-Saharan region in 2016 (Avert, 2017; UNAIDS, 2016). There was an estimated total of 960 000 new infections in Sub-Saharan Africa and, of those, 56 000 new infections were amongst children in Sub-Saharan Africa (UNAIDS, 2016). SA has the highest prevalence of HIV and AIDS compared to any other country in the world, with seven million people living with HIV. There were 380 000 new infections and 180 000 HIV-related deaths recorded in 2016 (Statistics South Africa, 2016; Avert, 2017). In addition, in 2016, HIV was recorded as the third leading cause of natural death in SA (Statistics South Africa, 2016).

Furthermore, youth aged between 15 – 24 years have the highest prevalence of HIV and AIDS, accounting for 25% of new infections in SA (Avert, 2017). Given that the estimated youth population in 2016, aged 15 – 24 years in SA was 18.5 million out of the total population of 52.9

million, indicated that a very high proportion of the South African population (almost half the population of youth), which are constituents of this age-group, are in the highest-risk bracket for the contraction of HIV infection (Avert., 2017; Statistics South Africa, 2016). The HIV-prevalence amongst South African youth aged 15-19 years was 7.3% in 2016 and this has not shown a decline since 2010 (Avert, 2017).

KZN is the province with the highest HIV and AIDS prevalence in the age group 15-24 years at 16.9% out of all youth in SA (Avert, 2017). In addition to possessing the highest HIV and AIDS prevalence in SA, KZN possesses the highest teenage-pregnancy rate with more than 26 000 teenage pregnancies recorded. This is followed by the Eastern Cape with more than 20 000, and Limpopo with more than 13 000. This contributed to a total of 99 000 pregnancies amongst youth in SA in 2015 (Statistics South Africa, 2015). The national prevalence of ever having had an STI was 7.4% in South African youth in 2016 (Avert, 2017). Of those who have had an STI, 63.6% reported receiving treatment for an STI (Avert, 2017). KZN learners were reported as having the highest prevalence of STIs contracted in the year 2016, among youth in SA, at 16.9% (Avert, 2017). In addition to having the highest prevalence of HIV, teenage pregnancy and STI contraction, KZN also has a higher proportion of schools that are considered as poor compared to other provinces and the highest school-dropout rates in SA (DoE, 2016).

With regard to sexual behaviour, adolescents aged between 16 and 18 years are significantly more likely to have engaged in sexual activity as compared to younger adolescents between the ages of 13 and 15 years (Department of Health, 2013b; Human Science Research Council, 2014; Reddy et al., 2010). The findings of the Human Science Research Council (2014), indicate that the proportion of secondary-school learners engaging in sexual activity almost doubles between Grade 9 (24.9%) and Grade 11 (52.1%) with about one in two Grade 11 learners reporting being sexually active. The largest percentage increase in sexual activity among Grade 9 to Grade 11 learners appears to occur as learners change from Grade 9 (30.3%) to Grade 10 (42.5%) (HSRC, 2014). In addition to the prevalence of sexual activity, differences in prevalence figures between Grade 9 and Grade 11 learners for other high-risk behaviours such as alcohol usage, substance abuse and smoking suggest that future research would best be used by sampling both Grade 9 and 11 learners due to the variation in risk behaviours between these grades (HSRC, 2014).

Therefore, youth in KZN aged 16-18 years are at high risk of contracting HIV and STIs as well as KZN producing youth with unwanted pregnancies and the related negative consequences. Furthermore, perceptions of risk-susceptibility for HIV contraction, STI infection and teenage pregnancy are lower in youth than in other age groups (DiClemente & Crosby, 2008; Shisana et al., 2009). Youth perception of risk-susceptibility for HIV, STI and teenage pregnancy is fundamental to understanding precautionary behaviour (Shisana et al., 2009). If youth are of the opinion that teenage pregnancy, HIV and STIs are less likely to affect them during their lifetime, they will be less likely to use protective methods when engaging in sexual behaviour (Scott-Sheldon, Walstrom, Harrison, Kalichman & Carey, 2013). Given that this is the highest risk group and that, in addition, there is a lowered perceived susceptibility to the contraction of HIV/STIs and teenage pregnancies, an optimum school environment is necessary to support the teachings of sexuality education via the LO curriculum, in order to promote safe sexual attitudes and behaviours.

2.2.1. Demographics for HIV and AIDS, STIs and teenage pregnancy in South Africa

The section below documents the current statistics and prior literature of the relevant demographic characteristics regarding HIV and AIDS, STIs and teenage pregnancy amongst South African youth. The demographics covered are race, gender and age.

2.2.1.1. HIV and AIDS, STIs and teenage pregnancy-prevalence by race

Studies indicate that South Africans of African descent have the highest HIV and AIDS-prevalence compared to other South African race groups (Beksinska, 2014; Department of Health, 2013b; HSRC, 2014). While South Africans of White descent have been reported to have the lowest HIV and AIDS prevalence in the age groups 15- 24 years (Beksinska, 2014; Department of Health, 2013b; HSRC, 2014). Coloured and Black South African youth aged 15 – 19 years have a higher reported teenage pregnancy rate than White and Indian South Africans (Francis, 2013; HSRC, 2014; Medical Research Council, 2008; Reddy et al., 2010). Reported STI's amongst South African youth aged 15 – 24 years in 2016 have been highest in Black youth, followed by Coloured youth, with ratings based on STIs reported in one year (HSRC, 2014). According to the Human Sciences Research Council (2014), there is a continued high HIV-prevalence and incidence in the Black African population within the youth and young adult-age groups in KZN.

2.2.1.2. HIV and AIDS, STIs and teenage pregnancy prevalence by gender

According to Statistics South Africa (2016), HIV prevalence remains disproportionately high for females in comparison to males. HIV prevalence among South African females was nearly twice as high as that of males in 2016 (Statistics South Africa, 2016). This proportion has remained unchanged since 2002 and has remained a consistent result in prior surveys (HSRC, 2014; MRC, 2008; Reddy et al., 2010). The HSRC (2014) validates the disproportionate HIV prevalence in females, indicating that the increase in HIV prevalence was predominantly observed among females aged 30 years and above, whereas 9.9% of males were HIV positive and 14.4% of females were HIV positive. According to Avert (2017), the highest risk-group is females aged 25–29 years, where one in three women (32.7%) were found to be HIV positive in 2016. Rates of new infections among females aged 15-24 years were more than four times greater than that of males of the same age (Statistics South Africa, 2016). Statistics indicate that, in SA, females already have a higher HIV prevalence than males at ages 15 – 19 years with 5.9% of females being HIV positive compared to less than one percent of males (Avert, 2017). There is, therefore, a need for interventions to be targeted and tailored especially toward girls who are in their teenage years. The sustained high levels of HIV infection among young females is one of the most concerning findings of a South African 2016 survey and requires urgent attention for effective HIV prevention among females who are at their prime child-bearing age (Avert, 2017). A survey conducted in 2013 in four of the nine SA provinces indicated that 19.2% of females aged 12 - 19 years had had at least one pregnancy which was unwanted), while only 5.8% of males in the same age group had impregnated a female (Department of Health, 2013b). In addition, condom-use by 15 - 24-year-olds, in their most recent sexual encounter, declined from 85.2% to 67.5% for males and from 66.5% to 49.8% for females, according to two nationally-representative surveys conducted in 2008 and 2012, respectively (HSRC, 2014; Reddy et al., 2010). Regarding proportions of STI-prevalence by gender, the *National HIV Survey South African National HIV, Behaviour and Health Survey 2012* (HSRC, 2014), indicated that there were equal numbers of female and male youth in terms of reported STIs between the ages 15-24 years.

2.2.1.3. HIV and AIDS, STIs and teenage pregnancy-rates of the secondary-school learner age group

HIV-prevalence levels in the age group 15–49 years increased slightly from 15.6% in 2002 to 16.2% in 2005 and 16.9% in 2008 and in 2016 it was at its highest at 18% (Avert, 2017; Jooste et al., 2009; Shisana, Rehle, Simbayi, Zuma). South African youth continue to be vulnerable, with an HIV prevalence of 7.3% reported for youth aged 15 – 19 years in 2016 (Avert, 2017). As noted by various studies, the interpretation of HIV-prevalence trends in this age group is difficult without an in-depth analysis of HIV incidence and the impact of increasing access to Anti-retroviral Therapy (ART) (MRC, 2008; Panday, Makiwane, Ranchod & Letsoalo, 2009; Shisana et al., 2014). However, numerous South African studies do provide evidence for HIV prevalence as being high in the age groups 15-24 years (Avert, 2017; HSRC, 2014).

2.3. Determinants of HIV and AIDS, STIs and Teenage Pregnancy in Adolescents

Sexual risk behaviour poses a considerable threat to the well-being of learners (HSRC, 2014). Learners who are sexually active are at risk of unwanted pregnancy, HIV and STIs (Kirby et al., 2011). The consequences of risky sexual behaviour are steadily driven by a convergence of risk factors that exist on both an individual and structural level. The *Integrated Strategy on HIV, STIs and TB 2012 – 2016*, (Department of Education, 2011c), draws attention to the existence of multiple determinants of HIV infection that increase the HIV risk and vulnerability of youth in SA. These include individual factors such as the age of becoming sexually active, multiple and concurrent sexual partnerships, unprotected sexual intercourse, intergenerational and transactional sex, alcohol use, low perception of risk susceptibility to HIV and AIDS, STIs and teenage pregnancy and a lack of knowledge about HIV and prevention methods (HSRC, 2014; Kirby et al., 2011). Structural factors include "physical, social, cultural, organisational, community, economic, legal or policy aspects of the environment that impede or facilitate efforts to avoid HIV infection" (Gupta, Parkhurst, Ogden, Aggleton & Mahal, 2008, p.764). Gender inequality and gender-based violence, stigma and discrimination, wealth inequality, cultural beliefs and practices as well as lack of access to health care services and information are core structural factors that impact on the HIV risk and vulnerability of youth (Department of Education, 2010).

2.3.1. Learners' perceived susceptibility to HIV, pregnancy and STIs

The World Health Organization (WHO, 2006, p.16) defines adolescence as young people aged 10–19 years and states that it is the "period of transition from childhood to adulthood." According to Gupta et al. (2008), the early teenage years are a time for sexual exploration and experimentation. Evidence exists which support the premise for taking risks, experimenting and pushing boundaries as being important components of normative development into an adult (Francis, 2013; Gupta et al., 2008; Johnson, Carey, Marsh, Levin & Scott-Sheldon, 2008; Martin & Rabie, 2011). However, this process includes the overrating of adolescents' capabilities to overcome health risks, including tendencies to take risks, which may serve as catalysts for sexual-risk behaviours such as sensation seeking which has been indicated to be a correlate of sexual risk for HIV infection and teenage pregnancy (Armistead, Cook, Skinner, Toefy, Anthony et al., 2014; DiClemente & Crosby, 2008).

2.3.2. Sexual debut

Sexual debut remains a crucial factor in vulnerability of youth to HIV infection (Gupta et al., 2008; Shisana et al., 2009). According to Shisana et al. (2009), early sexual debut is connected to a higher likelihood of adolescents' lack of use of contraceptives which contributes to them being at a higher risk of contracting HIV, STIs and unplanned pregnancy. A study by the Human Science Research Council (HSRC), conducted over three years, consistently found that a small proportion of young people had had their sexual debut before the age of 15 years (HSRC, 2014). More males aged 15–24 years reported having sex before the age of 15 years (6.7%) when compared to their female counterparts (3.4%) (HSRC, 2014). Possible reasons for early sexual debut include experimentation with alcohol and substances which may result in experimentation with sex, pressure from socialising with older-aged persons/groups, who are already sexually active and peer-pressure in order to conform to the sexually active peer standard or perception of this standard (Shisana et al., 2009).

2.3.3. Poverty

Poverty is a determinant of risky sexual behaviour and has been linked to academic success including the influence of teachings of the sexuality education curriculum (Francis, 2013; Health Promoting Clearinghouse, 2009). Studies indicate a correlation between adolescent risky sexual

behaviours and lower socioeconomic environments (Abdool-Karim, Meyer-Weitz & Harrison, 2009; Francis, 2013). Poverty is often associated with the limited resources in terms of physical, human and social capital resources which are necessary supportive factors for promoting the influence of sexuality education in learners' lives (Health Promoting Clearinghouse, 2009; Vanwesenbeeck, Westeneng, de Boer, Reinders & van Zorge, 2016). Access to resources and services are important factors in the provision of sexuality education and in poorer geographic locations, adolescents are challenged with limited access to condoms and contraceptives as well as helpful and non-stigmatised service care (Abdool Karim et al., 2009; Health Promoting Clearinghouse, 2009). The impact of poverty on sexuality education internalisation may be visible in family bonds which may be further strained as many adolescents from poorer socioeconomic contexts do not live with their biological families, as caregivers work in remote locations from their family homes (Abdool Karim et al., 2009; Health Promoting Clearinghouse, 2009). Adolescents in these situations therefore lack the caregiver monitoring and supervision as well as the closeness in family relationships to openly discuss sex and related topics. Poorer schools usually have fewer extra-curricular programmes and the surrounding areas may also have fewer external-to–school extra-curricular activities which has an impact by reducing adolescents' free time for engagement in sexual and other risky behaviours (Francis, 2010; Shisana et al., 2014). The feeling of connectedness from belonging to a school club or community organisation may also provide adolescents with a sense of meaning and be a protective factor for sexual engagement (Abdool Karim et al., 2009).

2.3.3.1. Structural socio-economic classification of South African schools

The section which follows provides an overview of the structural classification of South African schools through socio-economic status. A history of this structural classification is provided, which encompasses the rationale behind the system and the manner in which the system was constructed in SA as well as its current status.

History and origin of the South African Poverty Quintile

As previously discussed, research has established that a great deal of variability in the implementation of LO lessons can occur within provinces and even within schools (Bhana et al., 2003; Bhana et al., 2005; Makina, Mandal, Xiong, Hattori, Markiewicz et al., 2017). There are

current disparities in the socio-economic status of schools with deprived schools and more privileged schools which has occurred as a result of the South African historical political dispensation of segregation (Equal Education, 2015; DoE, 2015). This has had a resultant impact of greater vulnerability on youth in disadvantaged areas, particularly in rural areas (DoE, 2015; Equal Education, 2015). In a bid to address these historical inequalities and its consequences, SA has started to implement South African legislation and has put in place the PQ system whereby schools are rated on their poverty level, based on their degree of possession of resources, personnel and infrastructure (Equal Education, 2015). Schools which were previously disadvantaged in the past are enabled, through the government's provision, and are identified as those which require more financial assistance than more advantaged schools (DoE, 2015). Based on this policy (*South African Schools Act, 1996: Act no. 84 of 1996 and National Education Policy Act, 1996: no. 27 of 1996*), schools are provided with certain funding to enable a standardisation of the poverty levels (DoE, 1997). In 1996, it was confirmed that five levels of PQ assignment would categorise South African public schools' poverty levels, including the resultant funding assistance receivable from the government, as well as the percentage of fee-exemption payable by caregivers of learners (DoE, 2016). Quintiles were determined for public schools only and were based on the geographical area in which the school is situated, the socio-economic status of that geographic area and the educator-to-learner ratio (DoE, 2016). Quintile one schools are the poorest no-fee schools, whereas quintile five schools are better resourced and do charge fees (DoE, 2016). Quintile one to three schools benefit by being no-fee charging schools as well as receiving feeding schemes and higher financial aid (DoE, 2016). Table one below is from the *South African Schools Act, 1996: Act no. 84 of 1996 and National Education Policy Act, 1996: no. 27 of 1996* (DoE, 1998). It indicates the breakdown of resource-allocation by the Department of Education according to PQ:

Table 1
Resource Targeting Based on the Condition of Schools and Poverty of Communities (Department of Education, 2016)

School Quintiles, from poorest to least poor	Expenditure allocation	Cumulative percentage of the population	Cumulative percentage of non-personnel and non-capital recurrent expenditure	Per-learner expenditure indexed to average of 100
Poorest 20%	35% of the resources	20%	35%	175
Next poorest 20%	25% of the resources	40%	60%	125
Next poorest 20%	20% of the resources	60%	80%	100
Next poorest 20%	15% of the resources	80%	95%	75
Least poor 20%	5% of the resources	100%	100%	25

The PQ system aims to correct the social injustices and imbalance of resources, opportunities and privileges such as education, health, work opportunities etc. This, in turn, is aimed at improving health inequalities, more specifically, of learner mental and physical health (Peltzer & Pengpid 2015; Pengpid, 2013). The eventual impact is for the ability of all schools to provide a supportive environment and network equally in order for the internalisation of the sexuality education messages, taught in the LO curriculum, to occur (DoE, 2001). However, despite the democratic governance and provision for political equality since 1994, inadequacies remain within the schooling system and it appears that insufficient attention has been provided to improve schooling inequalities (Equal Education, 2015).

School matriculation rate by Poverty Quintile

As indicated in Table 2 below, there are currently more schools in PQ one than in quintile five (DoE, 2016). Therefore, there are a higher proportion of poorer schools that exist in SA (DoE, 2016). This translates into challenges for close supervision, cleaner and safer physical school environments, better discipline and increased caregiver involvement in school activities/the curriculum as well as with the school as a whole (Equal Education, 2015). More specifically, in practice this means less qualified educators who have fewer learners in their class to be responsible for, thereby fostering a more distant learner-educator relationship than is optimal for learning (Equal Education, 2015). The resultant impact is evident with regards to academic performance.

Matriculation performance over the past five years indicates vast inequalities within education in SA. Rural provinces such as the Eastern Cape, KZN and Limpopo have the most under-resourced and poorest schools i.e. these provinces have a high number of schools without water, electricity or sanitation. Consequently, they also consistently record pass-rates well below the national average (Equal Education, 2015). The tables below are from the Department of Education's (2015, p.54) National Senior Certificate Examination Report 2015 and indicate the number of schools per PQ in SA. Table 2 indicates the number of schools by PQ, while Table 3 indicates the number of matriculation candidates by PQ in SA.

Table 2
Number of Schools by Quintile 2015 (Department of Education, 2016)

Quintiles	Number of Schools					
	0-19.9%	20-39.9%	40-59.9%	60-79.9%	80-100%	Total
Quintile 1	126	284	416	489	463	1760
Quintile 2	61	229	405	522	423	1640
Quintile 3	36	209	334	453	391	1423
Quintile 4	1	24	63	169	330	587
Quintile 5	0	3	31	94	574	702
Total	224	749	1251	1727	2181	6132

*Please note: Independent and special schools are not classified in quintiles.

Table 3
Number of Matriculation Candidates in Schools per Percentage Interval per Quintile 2014-2015 (Department of Education, 2016)

% Interval (Schools)	2016						2015					
	Q1	Q2	Q3	Q4	Q5	Total	Q1	Q2	Q3	Q4	Q5	Total
No. with 0-19.9%	2778	2064	593	217	0	5652	7435	3333	2239	139	0	13146
No. with 20-39.9%	9022	5651	6767	1176	1040	23656	20481	16633	17700	3547	441	58872
No. with 40-59.9%	20639	18802	17240	6702	2090	65473	33651	35226	36040	8668	4055	117640
No. with 60-79.9%	31918	38195	37761	16998	12134	137006	41712	47447	55412	25114	11260	180945
No. with 80-100%	29993	35739	32401	30063	55938	184134	35848	39611	44520	39910	84826	244715
Total	94350	100451	94762	55156	71202	415921	139127	142259	155981	77378	100582	615318

Figure One below, is a graph obtained from the DoE report on matriculation pass rates for 2013 (DoE, 2015). The graph indicates the matriculation passes by PQ and percent of matriculation passes as a proportion of Grade eight enrolments, in order to indicate school dropout rates, as well as the bachelor passes as a proportion of the Grade eight-enrolment of all matriculation learners in SA. Matriculation results by PQ, in both 2006 and 2013, indicate an inequality in positive academic results subsequently, as quintile five schools indicate a higher pass rate than all other quintile schools. In addition, as recorded by Table 4 below, matriculation pass rates in both 2006 and 2013 are positively correlated with school PQ i.e. the higher the PQ of the school, the higher the school matriculation pass rate. For example, there was a 92% pass rate for PQ five schools versus a 70% pass rate for PQ one schools. However, equality in education has been increasing as can be viewed by comparing the matriculation pass rates of 2013 in Figure One below to Table Four, which is a graph depicting matriculation results by PQ in 2006 and is located below Figure One.

Figure 1: Number of Matriculation Passes by Poverty Quintile in 2013 (DoE, 2015)
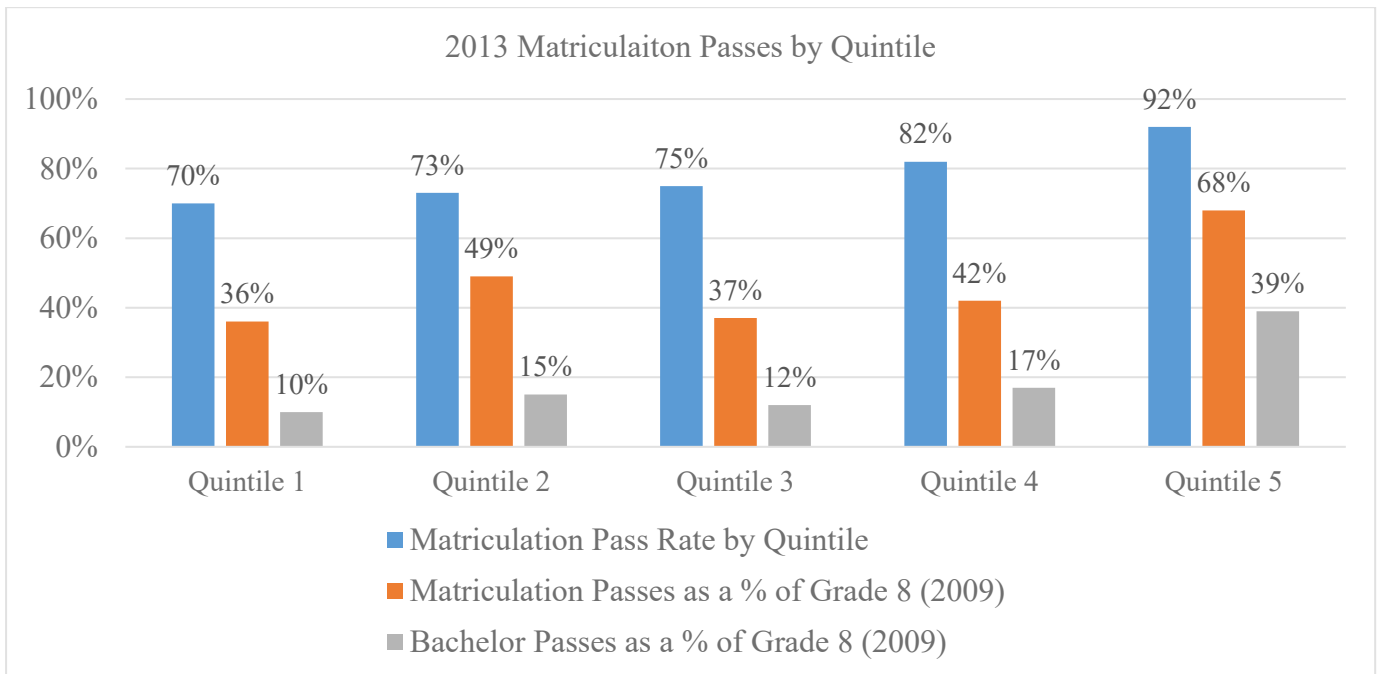
Table 4
Matriculation Passes by Poverty Quintile in 2006 (DoE, 2011)

Quintile	Breakdown pass rates by quintile				
	Mean (%)	Median	Min	Max	N
1	56.57	56.3	0	100	1376
2	58.50	58.8	0	100	1155
3	61.82	61.4	0	100	1503
4	69.72	71.65	0	100	836
5	87.68	95.95	4.2	100	862
Total	64.93	65.1	0	100	*5732

*Public schools only. Information about quintiles was not available for all public schools.

The link between poor academic progress and sexual risk

It could be expected that the higher the PQ, the more supportive the school environment and, resultantly, the less at risk its learners would have in the contraction of STI, HIV, AIDS and teenage pregnancy. Therefore, the expected premise is that risky sexual behaviours should be minimised in higher PQ schools. Available research does provide support for the above premise, although, there, are few current studies which focus directly on the possible correlation between school PQ, academic outcomes and the consequence of risky sexual behaviour in SA. However, international studies do provide support for better-resourced schools as being associated with higher academic outcomes and lower engagement in risky sexual and, other, risky behaviours (Bell & Murenha, 2009; Hanson & Kim, 2007; Sani, Abraham, Denford & Ball, 2016). Reasons for the correlation between academic outcomes and engagement in risky behaviours by youth are the extent to which youth prioritise schooling for life success, connectedness to the school and spending time on school and school activities which are protective factors for risky behaviour engagement (Gutman & Eccles, 2007; Lewallen, Hunt, Potts-Datema, Zaza & Giles, 2015; Martin & Rabie, 2011).

2.3.4. Intergenerational sex

South African research has indicated an increase in the percentage of young females aged 15–19 years who have older sexual partners according to rates in 2014, when compared to rates in

2005 (7.4% versus 3.8% respectively) (HSRC, 2014). Having a partner who was five to nine years older was associated with a sexual debut for those under the age of 15 years (Abdool Karim et al., 2009; Magnusson, Masho and Lapane, 2012). Studies have also indicated a higher HIV prevalence among adolescent males and females who reported having sexual partners who are five or more years older than themselves (Health Systems Trust, 2015). In addition, the partners of pregnant teenagers were significantly older, less likely to be in school and more likely to have additional partners, which, in turn, places teenage girls at a higher risk for HIV in concurrence with teenage pregnancy (Rosenberg, Pettifor, Miller, Thirumurthy, Emch et al., 2015). Females who reported having a partner five to nine years older at first sex were more likely to have had an earlier sexual experience and are less likely to report using a family planning method at the last sexual encounter (Cluver, Orkin, Yakubovich & Sherr, 2016). According to South African research by Leclerc-Madlala (2008), the sexual relationships between older men and teenage girls are almost always based on material/financial gains and, in some cases, are endorsed by families who benefit financially directly and indirectly from these relationships. Therefore, the role of poverty may be a motivating factor for younger girls seeking older partners (Cluver et al., 2016; Rosenberg et al., 2015; Shisana et al., 2009). There is, therefore, a need to discourage young girls from engaging in sexual activity with men who are five or more years older than themselves, as this increases the risk of HIV infection, teenage pregnancy and STI contraction.

2.3.5. Cultural practices

A further issue linked to teenage pregnancy is cultural beliefs, more specifically bride-wealth (Shefer, Bhana & Morrell, 2013). Bride-wealth is a cultural norm in some cultures which places financial value on a woman's economic potential, as indicated by her level of education and by her ability to bear children (potential or proven) (Shefer et al., 2013). In addition, masculine roles may provide a further contributing factor towards early pregnancy as men have their own personal goals for having children and their choice of partner which, in some cultures, is measured by the women's youthfulness (Shefer et al., 2013; Shisana et al., 2009). A South African study by Wood and Jewkes (2006) indicated that female youth reported that the presence of pressure from male partners and family members played a role in having a baby or proving their fertility during their teenage years. In some communities young girls may be targeted by older men for sex,

especially if they are virgins, and a possible pressure by communities to procreate and demonstrate their fertility (Shisana et al., 2009).

2.3.6. Multiple sexual partners

It has been established that engaging in sexual activity with multiple partners, whether sequentially, or concurrently places individuals at a greater risk for HIV and STI infection (DoE, 2011c; HSRC, 2014; Shisana et al., 2009). Studies indicate that teenage males are more likely to be engaged in multiple-sexual partner relations when compared to their female peers, internationally and in SA (Cluver et al., 2016; HSRC, 2014; Shisana et al., 2009). These findings correspond to gender-biased attitudes involved in sexual behaviour. More specifically, the sexual double standard which is elicited by most cultures and societies (Francis, 2010; Rosenberg et al., 2015). Multiple sexual partnerships are viewed as more acceptable and, therefore, encouraged among males, but less condoned and even frowned upon among females (Leclerc-Madlala et al., 2008; Shisana et al., 2009). Reasons for engaging in multiple sexual partnerships cited by the youth are financial gain, sexual exploration, peer-pressure, the acquisition of status through being sexually desirable, pleasure-seeking, and a de-emphasis on long-term relationships (Steffenson, Pettifor, George, Seage, Rees et al., 2011). Among female youth, reasons for engaging in multiple sexual partnerships revolve more around power imbalances and financial gain whereas pleasure-seeking was the main reason amongst male youth (Steffenson et al., 2011). Regarding ethnic demographic differences within multiple sexual partnership, the group most at risk in SA, was those of African descent (Kalichman, Berto & Eaton, 2008).

2.3.7. Contraceptive use

In SA, an estimated 65% of women are currently on a form of contraception, according to the United Nations Population Fund (UNFPA, 2011). Consequently, the fertility rate is said to have decreased from three children per woman in 2001 to two children in 2011 (UNFPA, 2011). However, while these statistics show promise, there is still much to be done in terms of reducing the transmission of sexual diseases and HIV and preventing unplanned pregnancies (Wood & Jewkes, 2006). In 2013, statistics from the Department of Health (2013a) indicated that there were 89000 legal abortions during the year and that teenage pregnancy contributed to 8% of all pregnancies. Among sexually active black African women aged 15–24 years in SA in 2006, the

prevalence of current modern contraceptive use was 64.4% (DoH, 2013). This may explain the 35% decline in child-bearing amongst adolescent girls seen from the late 1980s to the late 1990s (DoH, 2013a). In 2006, it was also reported that 35% of women experienced pregnancy before the age of 20 years, which was documented to be a very substantial proportion for this age group (Wood & Jewkes, 2006). Given the sustained high rates of teenage pregnancy and abortion rates, researchers worldwide are focusing on developing more effective contraceptive methods that last longer and are less user-dependent i.e. for solutions that require little effort or compliance on the part of the user (Health 24.com, 2016). However, it is not only the manufacturers of contraceptives who are required to contribute to the reduction of the number of teenage and unwanted pregnancies in SA. According to Goldstone (2014) and Gupta (2008), barriers to sustained contraceptive-use also play a role in the reinforcement of risky sexual behaviour. These include learners' medically inaccurate notions about how conception occurs and fears about the effects of contraception on fertility and menstruation, which were not taken seriously by nurses. Learners indicated that nurses' attempts to stigmatise teenage sexuality through their scolding and harsh treatment of adolescent girls and their reluctance to acknowledge adolescent experiences as necessitating contraceptive use, undermined the effective use of contraception by girls (Goldstone, 2014). Studies, therefore, emphasise that training for nurses in this area is necessary, so that they are equipped sympathetically to assist teenagers requiring contraception and to provide the necessary information and education campaigns that reduce the stigma of teenage sexuality in order to curb adolescent girls' fears in requesting contraceptives (Brown, 2013; Goldstone, 2014; Idele, Gillespie, Porth, Suzuki, Mahy et al., 2014).

2.3.7.1. Condom-use

Studies have indicated consistent findings that condom-use has steadily increased over the years, including in SA, since 2008 (Kalichman et al., 2008; Shisana et al., 2009; Steffenson et al., 2010). The greatest improvement in condom-use was seen among youth aged 15–24 years (HSRC, 2014). Prior to 2008, more adult males indicated lower rates of reported condom-use. Fewer females reported this (Protogerou, 2013; Setsuko-Hendriksen, 2007; Shisana et al., 2009). Literature has noted that an increase in condom-use was also accompanied by an increase in coverage of HIV prevention programmes targeting youth (Setsuko-Hendriksen, 2007; Shai, 2012). Other factors which have supported condom-use are the provision of condoms in public clinics

and extra-curricular programmes which provide information and or/provide condoms to youth (Shai, 2012; Steffenson et al., 2010). Despite increasing condom-use rates, HIV rates continue to increase (HSRC, 2014; Shisana et al., 2009; UNAIDS, 2016). Literature postulates that possible reasons for this increase are inconsistent condom use or incorrect condom use or a need to use a safer precaution than condoms alone (Idele et al., 2014; Shai, 2012; Shisana et al., 2009). Programmes should, therefore, continue to teach learners condom negotiating skills and correct condom-use. In addition, programmes need to strive to reach as many learners and their families as possible in order to continue the increased openness in the community to discuss condom-use among youth.

2.3.8. Sexual abuse

An additional contributing factor to early sexual debut is sexual abuse or sexual coercion (Magnusson et al., 2012; Peltzer, 2013). Sexual abuse is also thought to be more closely connected to the engagement in riskier sexual behaviours than peers who have not been exposed to sexual abuse (Shisana et al., 2009). It is, therefore, a requirement of sexuality education programmes to create awareness for both genders to identify sexual abuse and possible abusive situations in order to protect themselves from initial or further sexual abuse.

2.3.9. Orphans and vulnerable children

Evidence also exists that orphaned and vulnerable children (OVCs), regardless of gender, are more susceptible to early and risky sexual behaviour engagement as opposed to non-orphans (Peltzer & Makusa, 2014). Possible reasons for this may be the decreased supervision among orphans, the increased likelihood of becoming street children as well as having to fend for themselves for financial gain and basic resources such as food and shelter (Peltzer & Makusa, 2014). In addition, studies have provided evidence for psychosocial deprivation, specifically with regard to the extreme lack of emotional bonding with caregivers (Abdool Karim, et al., 2009; Buehler, Benson & Gerard, 2006). Orphaned and/or homeless youth are highly vulnerable to engaging in unprotected survival sex in order to meet their basic needs and/or nurse a substance-abuse habit and are subject to rape as well as have multiple sexual partners for economic support (Abdool Karim, et al., 2009). These social and contextual determinants may be aggravating factors for earlier sexual debut. There is, therefore, also a need for sexuality education programmes to

protect orphaned and homeless youth by providing them with knowledge and skills to refuse and resist attempts to gain financially through risky sexual behaviour.

2.3.10. Alcohol and substance abuse as contributing factors to risky sexual behaviour

Research recognises that there are certain behaviours related to alcohol and substance-abuse which increases the likelihood of engagement in risky sexual behaviour, including the onset of early sexual activity and unprotected sex (Amoateng, 2006; Bonell, Sorhaindo, Strange, Wiggins, Allen et al., 2010; Martin & Rabie, 2011; Redonneta, Chollet, Fombonned, Bowes & Melchi, 2012). A direct correlation was also found between engaging in substance abuse and youth engagement in multiple sexual partnerships (Kalichman et al., 2008). Alcohol is the drug most commonly used among all age categories, but particularly so among the younger age groups due to adolescent experimentation, general availability/accessibility and social norms which support alcohol use and abuse (Amaoateng, 2006; Govender, Naicker, Meyer-Weitz, Fanner, Naidoo et al., 2013). Although the association between alcohol consumption and risky sexual risk behaviours are similar for both genders, sexual coercion occurs most often when sex is preceded by alcohol consumption thereby emphasising teenage girls' limited power in relationships (Amoateng, 2006; Morojele, Myers, Townsend, Lombard, Plüddemann, et al., 2013; Redonneta et al., 2012; Ritchwood, Ford, DeCoster, Sutton & Lochmand, 2015). Most at Risk Populations (MARPS), who are high-risk drinkers and persons who use drugs for recreational purposes, reported the highest levels of multiple-sexual partnerships over the period of a year (Amoateng, 2006; Morojele et al., 2013; Ritchwood et al., 2015). This finding is consistent with previous studies which indicate that both alcohol and drug use are associated with increased risks of HIV infection due to the impairment in both judgement and decision-making, which may lead the users to risky sexual behaviour (DiClemente, Hansen & Ponton, 2013; Morojele et al., 2013; Payne & Meyer-Weitz, 2008). Sexuality education programmes should, therefore, aim to address the impact of alcohol and substance use amongst South African youth in order to improve the sexuality education outcome of reducing risky sexual behaviour in youth (Scott-Sheldon et al., 2013).

2.4. Schools as a Protective Factor for Youth Health and Wellbeing Inclusive of Health Risk Behaviours

It has been established that against the background of high HIV and teenage pregnancy rates, the need to focus on factors that may protect adolescents from engaging in health-risk behaviour in particular, sexual risk and substance-use/abuse behaviour, is evident (Jimmyns & Roche, 2010; Shisana et al., 2014; Sprecher et al., 2008). Apart from the family, the school context has not only been viewed as important for the development of academic pathways, but also to provide a protective environment for the social, psychological, and physical well-being of learners and, specifically relevant to this study, as a protective factor for risky sexual behaviour in adolescents (Adams-Tucker, George, Reardon and Panday, 2016; DiClemente & Crosby, 2008; Govender et al., 2013; Salusky, Larson, Griffith, Wu, Raffaelli et al., 2014). The school is the main and most accessible source of adolescent-sexuality teaching (Jimmyns & Roche, 2010). It could arguably be the most available preventive source of information and behaviour change for sexuality for adolescents (Bhana et al., 2005; DoE, 2011c; James et al., 2006).

Studies have emphasised the role of schools in curbing adolescent pregnancy, indicating that school-going is protective (Equal Education, 2015; Kirby 2002; Kirby et al., 2011). Teenagers not attending school were found to be more likely to fall pregnant than those at school (Adams-Tucker, 2016; Health Systems Trust, 2015; Kirby, 2002; Kirby et al., 2011). Surveys on SA youth indicate that girls are 1.7 times more likely to use condoms when in school as opposed to those girls who are have dropped out of school (Health Systems Trust, 2015).The school is therefore, best placed as the strategic avenue for delivery of the programmes and interventions for risky sexual-behaviour prevention (James et al., 2006).

Despite schools possibly bearing inadequacies in incorporating sexuality education realistically into the curriculum, given that the advantages of sexuality education, delivered through the school surpasses the disadvantages, the school remains the standardised medium through which to target the majority of youth (in the most at-risk-age group) in order to prevent HIV/STI transmission and teenage pregnancy (De Lange, Mitchell & Khau, 2012; Kirby, 2002; Kirby et al., 2011; Verma, 2016). Having the ability to target most youth, schools are expected to communicate knowledge, instil values and promote behaviours that will enable learners to protect themselves against HIV and STI infection and teenage pregnancy (De Lange et al., 2012; Hale,

Fitzgerald-Yau & Viner, 2014; Verma, 2016). It is therefore, expected that this form of prevention involves learning and some relatively permanent positive change in behaviour arising from the communication process (Bond et al., 2007; DoE, 2015). The messages include abstinence, safe sex, fidelity to one partner and reducing the number of sexual partners (DoE, 2011c). Since the school has been found to be such a protective factor in risky sexual-behaviour prevention, it is necessary to ensure that learners remain in school and that schools provide the best supportive environment that they can to prevent risky sexual behaviour, delay early onset of sexual behaviour in adolescents and promote safe sexual behaviour (Kirby et al., 2011).

A multitude of studies recommend sex education at school before the age of 14 years, when a number of young people have been documented to become sexually active, for the prevention of risky sexual behaviour in youth (Adams-Tucker et al., 2016; Kirby, 2002; Kirby et al., 2011; Medical Research Council, 2008). The need for school-based programmes and interventions for risky sexual-behaviour prevention and as a source of information is really important. Rowe et al., (2007, p.14) puts forth the argument that there is a need for:

> Carefully planned strategies for the provision of preventative and curative STI services for adolescents because they have the potential to influence behaviour and treatment seeking practices.

The need for these carefully planned strategies are not only limited to the prevention of STIs but, teenage pregnancy and HIV and AIDS prevention as well (Goesling, Colman, Trenholm, Terzian & Moore, 2014; Martin & Rabie, 2011). According to Martin and Rabie (2011), adolescents are least likely to access sexual health advice and, therefore, schools are challenged to deliver a comprehensive package of sexual and relationship-education within personal, health and social education lessons, and to assist young people to access specialist advice and support from health professionals. As discussed in Section 2.4.1 "The Life Orientation Curriculum," in South African schools, the Department of Education has constructed the sexuality education component of the LO curriculum in this regard.

2.4.1. The Life Orientation curriculum

In response to the rife HIV and AIDS pandemic and teenage-pregnancy prevalence rates, the Department of Education has put in place the sexuality education component of the LO

curriculum (DoE, 2000a; DoE, 2000b; DoE, 2000c). LO is a relatively new learning area compared to other subjects and was introduced in the late 1990's with the intention to equip learners with the knowledge, skills, values and attitudes for successful living and learning (DoE, 2000a; DoE, 2000b). The introduction of Outcomes Based Education (OBE) and Curriculum 2005 (DoE, 2007) and the subsequent *Revised National Curriculum Statement* (DoE, 2008) in SA, signalled the development and introduction of this learning area. LO has been defined in the national curriculum as an holistic study of the self, the self in society and is an opportunity to develop learner's emotions, the citizenship aspects of life in SA, democracy, human rights and encompasses health and wellness (DoE, 2010). According to the *Revised National Curriculum Statement* (DoE, 2008, p.26):

> The Life Orientation Learning Area Statement develops skills, knowledge, values and attitudes that empower learners to make informed decisions and take appropriate actions regarding: Health promotion, social development, personal development, physical development and movement and orientation to the world of work. Together, these five focus areas of the Life Orientation Learning Area Statement address the human and environmental rights outlined in the Constitution.

LO, therefore, offers the potential for equipping SA learners with the knowledge, skills, attitudes and values to face the challenges they encounter as informed, confident and responsible young people (DoE, 2002).

2.4.1.1. History and aims of the sexuality component of the LO curriculum

In 1996, in an effort to prevent the spread of HIV within South Africa's schooling system, the *National Policy on HIV and AIDS for Learners and Educators in Public Schools and Learners and Educators in Further Education and Training Institutions* (DoE, 1999) made HIV and AIDS education a compulsory component of the curriculum for learners. Consequently, three policy documents have designated schools and educators as the responsible agents for the promotion of safe sexuality and prevention of HIV and AIDS in learners. These policies are namely the *Education White Paper 6, Special needs education: Building an inclusive education and training system* (DoE, 2001), the *Implementation Plan for Tirisano, January 2000 – December 2004* (DoE, 2000c), and *the National Education Policy Act: Norms and Standards for Educators* (DoE, 2000a).

In line with these policies, the Department of Education (DoE) developed the Life Skills and HIV and AIDS Education Programme, which was informed by the Government's *National Strategic Plan on HIV and AIDS 2000-2005*. The Life Skills Programme was originally implemented in the year 2000 as the *National Integrated Plan for Orphans and Vulnerable Children affected by HIV and AIDS* and was later extended to include other communicable diseases and social problems affecting youth. The Life Orientation Learning Area has remained the primary vehicle for teaching the Life Skills programme to learners (DoE, 2015, DoE, 2008; DoE, 2011a & DoE, 2011b). At present it has been implemented within all public schools across the country, although implementation within special schools has been delayed (DoH & DoE, 2016; DoH, 2001).

2.4.1.2. Description of the sexuality component of the LO curriculum

Due to the high rates of HIV and teenage pregnancy in SA, the South African government has committed itself to the development of several policies that seek to address the impact of the HIV and AIDS epidemic on society. The resulting *National Strategic Plan for HIV and AIDS, STIs and TB 2012-2016* (South African National AIDS Council, 2011) and *National Strategic Plan for HIV and AIDS, STIs and TB 2017-2022* (South African National AIDS Council, 2017), provides guidance for the impact on several levels of the HIV and AIDS epidemic which includes primary prevention interventions such as the school–based life skills programme in the LO curriculum. The educator-led life skills programme aims to have learners increase their knowledge regarding HIV and AIDS, its prevention as well as for learners to report safer sexual behaviours and intentions to practice safer sex. It is also intended for learners to express more positive attitudes toward condom-use and people living with AIDS than comparable learners who were not taught the programme (James et al., 2006). The sexuality education programme is intended to reach all school-going adolescents in a standardised manner.

Given the consistently high rates of HIV, teenage pregnancy in youth in SA, the Department of Education revised their strategy in the 2010 policy titled the *Integrated Strategy on HIV and AIDS 2011-2015* (DoE, 2011c). This policy replaced the previous policy, the *National Policy on HIV and AIDS for Learners and Educators in Public Schools and Learners and Educators in Further Education and Training Institutions* (Department of Education, 1999). The new strategy seeks to address important shortcomings of the former policy. In particular, it aims

to bring the education sector responses to HIV and AIDS in alignment with the Government's key areas of focus in the *National Strategic Plan for HIV and AIDS, STIs and TB 2012-2016* (South African National AIDS Council, 2011) and *National Strategic Plan for HIV and AIDS, STIs and TB 2017-2022* (South African National AIDS Council, 2017). In addition, it aims to make provision for education-sector responses to address the impact of HIV and AIDS on learners, educators and communities. The importance of sexuality education in the LO curriculum in schools is emphasised by the Department of Education through one of the key strategic outcomes of the *Integrated Strategy on HIV, STIs and TB 2012 – 2016* (DoE, 2011). This is specifically Strategic Outcome Two, "Sexual and reproductive health education including HIV is a mandatory, timetabled and assessed subject delivered in all South African schools" (DoE, 2011c, p.49).

In KZN, the province with the highest number of school-going children in SA, the Life Skills programme, focusing on HIV and AIDS, was developed by the provincial Department of Education in consultation with other organisations working in the area of adolescent sexuality education (DoE, 2000b). The life skills and HIV and AIDS education programme designed for KZN youth by the KZN Department of Education was designed by the educators for young people to facilitate their development in relation to themselves, their school, and their communities in an effort to prevent HIV and AIDS (DoE, 2000b).

According to the *Curriculum Assessment Policy Statement* (CAPS), for LO, Grade 7 to 9, "Sexuality" is one of three topics taught under the "Development of the Self in Society" which is one of the six overall sub-subjects of LO (Department of Education, 2011a). In the Grade 10 to 12 phase, the CAPS for LO indicates that sexuality is encompassed within the "Development of the Self in Society" however, is not directly referred to as a topic (Department of Education, 2011b). This study therefore refers to the sexuality education as taught via the LO curriculum as "sexuality education" due to the lack of an umbrella term for Grades 7-12.

2.4.1.3. The rollout of LO sexuality education in schools

Despite measures to ensure standardisation of the curriculum being implemented in schools, there is an element of variability in the manner in which the sexuality education curriculum is being implemented between schools (Adams-Tucker et al., 2016; DoE, 2011c). Factors which contribute to the variability of the implementation of sexuality education are not

limited to but include pedagogy and the extent to which the sexuality programme taught at schools is being used by educators (Helleve et al., 2009; Mertler, 2017). In addition, the extent to which educators and learners evaluate, and perceive LO in their schools is critical for understanding how they engage with the LO programme in terms of their motivation and commitment (Bhana, Petersen, McCay, Mahintisho & Bell, 2003). The presentation of the content, the educator as a role model and the educators' teaching in a relevant manner to learners, teaching and pedagogy on learner's comprehension levels and the extent to which learners can practically implement the teachings in their daily lives, are a number of factors which impact on the influence of life skills teachings in learners' lives (Shisana et al., 2009; Peralta, 2007).

Schools are viewed as intervention sites for the delivery of the HIV/STI and teenage pregnancy prevention skills and messages (Ahmed, 2009; Mashele, 2014). The conditions associated with the implementation and running of the LO programme within the school setting also plays a significant role in realising the overall aims of the programme (Matshoba & Rooth, 2014). The success of the LO curriculum's aims being achieved is determined by various internal classroom factors including the amount of time dedicated to LO learners in terms of preparation for lessons, lesson time, homework, individual attention etc. when compared to the rest of the curriculum requirements (Bhana et al., 2005; Matshoba & Rooth, 2014). It is also determined by the level of learner-participation and the engagement of learners in LO lessons (MRC, 2005).

Outside of the classroom, factors such as school perspectives on LO as a subject, also play a role in the ability of learners to internalise LO messages around safe sexual behaviour (Francis, 2010; Matshoba & Rooth, 2014). The manner in which LO is perceived by learners in schools is a factor deemed important to ascertain the influence of messages taught within the LO curriculum, in learners' own lives (MRC, 2005). The manner in which learners think about, evaluate, and perceive LO within their schools is critical for understanding how they engage in the LO programme in terms of their motivation and commitment (Matshoba & Rooth, 2014). Positive beliefs, attitudes and perceptions towards the LO programme will facilitate a greater commitment and enthusiasm from learners (Vanwesenbeeck et al., 2016). Similarly, according to Francis, (2010) in order to effectively address the unwillingness and reluctance of some learners to effectively participate in the programme (which thereby impedes the achievement of the programme's aims), it is critical to first understand how important the Life Skills programme is to

learners in the school setting (Francis, 2010; MRC, 2005). Learners' internalisation of the messages taught in the LO curriculum is based on the perceived importance and overall value of the LO programme compared with other subjects in the school curriculum (DoE, 2011c). The value of the LO programme amongst learners is determined by the perceived difficulty and demanding nature of its programme compared with other subjects, the learners' attitudes or their value judgements towards the LO programme and the benefit experienced by them from their participation in the programme (Bhana et al., 2005). It is necessary to evaluate these factors in order to understand the shortcomings of the LO programme in terms of what it has failed to address effectively and to give adequate attention to its area of success (MRC, 2005).

2.4.1.4. Prior evaluations of the sexuality component of the LO curriculum

To further improve on the quality of the implementation of sexuality education, an evaluation review of the current LO curriculum was conducted, and a comparison was made in 2011 and 2012 between the best ways in which life skills programmes were taught internationally. This enabled the DoE to recommend enhancements to the LO curriculum, teaching practice and support materials. Specifically, at the level of implementation and delivery, it is necessary to gain a clear understanding of how the LO programme is being implemented in the school curriculum and within the classrooms in diverse school contexts as research has found that there is a great deal of variation in the implementation of lessons between schools within the same province. (Bhana et al., 2005; Fonner et al., 2014; James et al., 2006; Makina et al., 2017). Prior to research carried out in 2012 by the Health, Economics and HIV and AIDS Research Division conducted on behalf of the DoE, there was a paucity of national research on the evaluation of the sexuality aims of the LO curriculum. Upon evaluation of various LO evaluation studies, James et al., (2006), indicate that there are limited empirically-designed evaluation studies which focus on reviewing the life skills or the sexuality education component of the LO curriculum. In general, in SA, programmes which aim to increase knowledge about sexual health and HIV and AIDS, positive attitudes toward people with HIV and AIDS and safer sex behaviours have not been systematically evaluated (Francis, 2010; James et al., 2006; Rooth & Makhado, 2014. Therefore, evidence for the success or failure of the LO programme in achieving its aims is dependent on various non-rigorous and non-systematic empirical evaluation studies which may not be as reliable but do provide some insight into how the programme is progressing (James et al., 2006).

Evaluations of the LO programme in recent years have revealed mixed results regarding the overall effectiveness of LO and sexuality education. Numerous studies provide evidence which indicate that, for many learners, the LO programme has become a primary site for learning about sex and HIV and AIDS (Bhana et al., 2005; Department of Education, 2006; Jimmyns & Roche, 2010). However, the translation of this knowledge into improved prevention behaviour is somewhat ineffective (Department of Education, 2006; Reddy et al., 2010; Fonner et al., 2014). Given the escalating prevalence of HIV, STIs and teenage pregnancy amongst South African youth, it would appear that the current sexuality education programme taught through the LO curriculum is not yielding its dividends (Adams-Tucker et al., 2016; Francis, 2010; Shisana et al., 2009). A number of South African studies suggest that LO has not been optimally implemented in schools (Bhana et al., 2005; Francis, 2010; Matshoba & Rooth, 2014). This may be attributed to the subject being passed with very little effort when compared to other subjects and that it is not being perceived as an important academic subject (Adams-Tucker et al., 2016; Francis, 2010; James et al., 2006;). In addition, according to Boler and Aggleton (2005), the reality of the classroom and the schools themselves is often a neglected concern that can hinder the effective introduction of Life Skills education in schools.

According to the CAPS documents for Grade 10-12 (DoE, 2011b, p.12), LO endeavours to apply:

> A holistic approach to the personal, social, intellectual, emotional, spiritual, motor and physical growth and development of learners. This encourages the development of a balanced and confident learner who can contribute to a just and democratic society, a productive economy and an improved quality of life for all.

Despite it being one of the only subjects concerned with the holistic development of learners and their positive contribution to our society, there remains a widely held belief by both educators and learners that LO is not as important as other subjects within the curriculum (Matshoba & Rooth, 2014). According to Francis, (2010) and numerous other studies (Adams-Tucker et al., 2016; Haberland & Rogow, 2015; Matshoba & Rooth, 2014; Smith & Harrison, 2012), LO requires further attention by the Department of Education, educators, as well as other government departments and organisations dealing with LO-related-help, in order to assist LO to occupy its rightful place in schools. Evidence suggests that inter-sectoral and collaborative efforts

are required to sustain training and support of LO educators (Adams-Tucker et al., 2016; DoE, 2016). Furthermore, training with an emphasis on experiential and participatory methodologies is required to increase the status of LO in schools and, consequently, the influence of the messages they transfer to learners (Matshoba & Rooth, 2014). This includes adequate time allocation, impartial funding and advocacy strategies to ensure that this learning area achieves its outcomes (Matshoba & Rooth, 2014).

2.4.2. School health

SA is experiencing an increase in the population of young people and an increase in high levels of morbidity as well as that of a high level of risk-taking behaviour (Statistics South Africa, 2016). These challenges are preventable (DoH, 2013a). The priority lifestyle-focus areas provided by the Department of Health (2013a), represent the challenges faced by youth in SA and are categorised into the following: Poor nutrition, alcohol, substance and tobacco-use and abuse and risky sexual behaviour. These health and wellness challenges persist into adulthood and cause a significant burden of illness in the community which translates into a range of chronic diseases and unhealthy lifestyles (DoH and DBE, 2013c). This, in turn, contributes to significant economic cost for the government through increased expenditure on health care. Until recently, the traditional model of school health was practised in most schools (DoE, 2011d). Some elements of the model included screening for visual and auditory impairments, growth monitoring, assessment of nutritional conditions, health education and follow-up from health examinations in accordance with the *Integrated School Health Polic*y (DoH & DBE, 2013c). However, school health services and health education practitioners experienced many hurdles reflecting the inequities of years of discriminatory practices, especially in previously disadvantaged schools (DoH, 2011). These included the provision of services along racially segregated lines, disproportionate personnel-to-learner ratios, financial constraints and inadequate training of staff (Idele et al., 2014; Macnab, Gagnon & Stewart, 2014). As a result, issues such as health in schools were not able to have the high priority they deserved. This is currently being addressed by the newly developed policy on Primary Health Care Re-engineering in schools in 2015 and its intended implementation since 2016. According to the *Annual Performance Plan: 2015/16-2017/18*, there are currently 47 school health teams active in South African schools (DoH, 2016). This has resulted in improvements such as the allocation of school health nurses and teams which screen for hearing, vision, and dental

problems as well as being responsible for health education concerning sexual and reproductive health in secondary schools. Content covered by school primary health care teams are chronic illnesses (including HIV and TB) as well as sexual, physical and emotional abuse which includes bullying and violence. Additional topics covered under the mandate include sexual and reproductive health which comprehensively covers menstruation, contraception, Medical Male Circumcision (MMC), teenage pregnancy, prevention of mother-to-child transmission (PMTCT), choice of termination of pregnancy (CTOP). STIs, HIV and AIDS. HIV Counselling and Testing (HCT) and stigma mitigation are also covered by the school primary health care teams. In addition, the policy documents state that schools are required to have referral services to an appropriate healthcare facility for learners with health challenges. However, an area for future improvement is for the implementation of the programme to go to schools across KZN in a standardised manner as school teams have not yet been deployed to all schools in KZN (DoH, 2016).

2.4.3. Whole-Schools approach

Evidence exists for a whole-school approach as providing the best environment for the internalisation of messages in the LO curriculum. (Aaro et al., 2014; Lewallen et al., 2015). Whole-school approaches have been described as a comprehensive approach to school intervention (Senior, 2012). In addition, a whole-school approach involves partners beyond the school organisation such as caregivers, youth health services, police departments and other community stakeholders (Aaro et al., 2014; Appleton et al., 2008; Lewallen et al., 2015). The importance of applying basic intervention principles such as actively involving learners and mobilising support from caregivers and the larger community are important premises for intervention development (Aaro et al., 2014; Lewallen et al., 2015).

According to Boler and Aggleton (2005), the reality of the classroom and schools themselves is often a neglected concern that can hinder the effective introduction of life skills education in schools. Schools can be either healthy or unhealthy environments and for this reason, Boler and Aggleton (2005), argue that whole-school approaches, which take into account the reality of the school system, are needed when introducing life skills education in schools. To provide a comprehensive understanding of the contributing factors within the school environment that create an influence on the way in which the LO curriculum is implemented and delivered within South African schools, an accurate understanding of the environment that best supports

learners and educators to engage with the revised curriculum is essential to the overall effectiveness of the LO curriculum. According to Bonell et al., (2010), increasing social ties and cultural pride in schools may reduce rates of risky sexual and the early onset of sexual behaviour. The whole-school approach involves a standardised process and arranging an action group in each school involving learners, staff and others to review policies and undertake actions to promote an inclusive school climate (Austin et al., 2011).

Schools with lower levels of learner and caregiver engagement have more disengaged learners who may use substances and engage in risky sexual behaviour for the purpose of gaining status with peer groups (Holland & Rendall-Mkhosi, 2007). Unsafe schools may also create a concealed and protective environment for those using substances and engaging in risky sexual behaviour. Unsupportive schools may contain unsupported learners who may resort to risky sexual behaviour because of this (Austin et al., 2011). By enhancing social ties and pride, security, communication and self-regard, schools can encourage positive school connectedness and learner-engagement in healthy behaviour (Boller et al., 2010; Bundick & Tirri, 2014).

2.4.4. Heath Promoting schools

By using the whole-school approach, a school can be transformed into a school which supports the internalisation of the messages taught by the sexuality education programme and can become a Health Promoting School (HPS), a concept initiated in schools since the late 1990s (Bond et al., 2007). Health Promoting Schools are defined as schools which constantly strengthen their capacity as a healthy setting for living, learning and working (Eldredge, Markham, Ruiter, Fernandez, Kok et al., 2016; Health Promoting Clearinghouse, 2009). The HPS model, based on the *Ottawa Charter for Health Promotion*, refers to those strategies; educational, political, economic, environmental and medical which are designed to reduce disease and promote health in schools (World Health Organisation 1986 as cited in Eldredge et al., 2016). The goal of Health Promoting Schools is to improve the health status of children and to improve the development of quality education (Turunen, Sormunen, Jourdan, von Seelen, & Buijs, 2012).

Schools which are health promoting in nature are seen as the best environmental context to internalise messages taught by the LO curriculum and, thereby, reduce risky sexual behaviour (Adams-Tucker et al., 2016; Francis, 2010; Shisana et al., 2009). Strong support was shown for

establishing educator, principals, school health nurses and learner associations at schools as these bodies play a crucial role in school governance (Appleton et al., 2008; Macnab et al., 2014). The challenge is for the different stakeholders (learners, school staff, caregivers, community, school governing body and government) to co-operate with one another in order to develop a strong network of HPS at local, provincial and national levels. Financial constraints are the most pressing concern for a HPS (Appleton et al., 2008). Issues which require addressing in schools and are considered a pre-requisite for creating a HPS are adequate nutrition, water and sanitation, healthy early childhood development, child protection and social welfare, as well as curtailing behaviour such as smoking, alcohol use, drug use, road-related behaviour, violent behaviour and sexual behaviour (Turunen et al., 2012).

According to Bonell et al. (2010), a sense of inclusion in and positive attitude to school, and engagement with education are protective factors against the early onset of (deviant) sexual behaviour. The health-promoting schools movement has called for schools to become more inclusive and supportive environments, marking a shift from schools as sites for health education to viewing schools as settings that can influence health. When schools act in collaboration with caregivers and community services, the result is a more comprehensive and integrated system which is more likely to create sustainable improvements in learners' lives and their environments (Appleton et al., 2008; Holland & Rendall-Mkhosi, 2007). With the appropriate support, schools can overcome tremendous challenges using the HPS framework (Eldredge et al., 2016).

According to Macnab et al. (2014), HPS enable learners to benefit from a more balanced approach to school health promotion. In a HPS, learners develop in more than one component of health education. Personnel work across disciplines and share resources, and schools have greater access to community health personnel (Macnab et al., 2014). HPS also have a greater awareness of resources for health programmes, a greater opportunity for co-ordinated curriculum development and improved teaching methods in health education (Chapman and Werner-Wilson, 2008; Turunen et al., 2012). Strategic decision-making in HPS are based on improved information on health and health programmes. Further benefits of HPS include improved staff development opportunities, an improvement of the schools' image in the community, better co-ordination with other educational initiatives, improved health status of learners and, consequently, improved educational achievement and improvement of the general quality of education in schools (Bundick

& Tirri, 2014; Sani et al., 2016). This results in a greater internalisation of the messages taught in the LO curriculum to prevent risky sexual behaviour in learners. In order to have a HPS through the use of the whole-school approach, it is necessary to have a positive school environment (Boler & Aggleton, 2005).

The *Integrated School Health Policy 2015 –* 2019 (ISHP) (Department of Health and Department of Education, 2012), established the need for Health Promoting Schools in SA. The ISHP focuses on the development of healthy school policies and relevant services in order to assist the school community to address its health requirements. In addition, it aims to develop the personal skills of members of the school community in order to create improved health for all and develop a supportive environment for the improvement of healthy attitudes and behaviours in the school. The ISHP also extends to the community where its objective is for the community to take action for increased ownership and to be able to solve the problem of collective health needs by accessing resources for health. In 2015, it was documented that ISHP was designed to up-scale school health services to reach all learners in the schooling system (approximately 12 million) over the next 5 years (Department of Basic Education, 2015). The programme has thus far been extended to approximately 1 174 810 learners through bi-annual *School Health Weeks* and other means across the country (DoE, 2016). In response to the high prevalence and incidence rates of risky sexual behaviour, teenage pregnancies and HIV and STI prevalence in SA youth, as cited by the Youth Risk Behaviour Survey (Medical Research Council, 2008), the ISHP has been extended to include the referral of learners at risk to qualified school counsellors/nurses. In schools where these human resources are not available, referrals are to be made to nurses and counsellors exterior to the schools (NGO's), in a bid to conserve learner autonomy and confidentiality within the school. The success of the ISHP programme in schools is dependent on the decisions of the governing body of the school and the manner in which sexual and reproductive health services to learners are carried out before such services are offered. The ISHP also noted that sexual and reproductive health services for learners required a comprehensive approach which extends beyond the provision of condoms in schools. This comprehensive approach includes health education and counselling (including that on pregnancy and Male Medical Circumcision), together with an offer of contraception and provision of condoms, screening for STIs, pregnancy testing and HIV Counselling and Testing. In addition, visiting school health teams are to be made

responsible for the delivery of health education on sex and reproduction in secondary schools across SA.

2.5. The School Culture, Climate and Environment

The school environment is defined as the school structure in terms of resources which include facilities, classrooms, school-based health-support systems, disciplinary policies and practices (DoE, 2006). A positive school environment provides a positive influential structure for external factors that affect learners (DoE, 2006). Positive school environments are characterised by possessing appropriate facilities, well-managed classrooms and available school-based health support systems (Sulkowski, Demaray & Lazarus, 2014). They also possess a clear and fair disciplinary policy (Appleton et al., 2008; Bradshaw, Waasdorp, Debnam & Johnson, 2014). Schools' environments may be categorised by academic, disciplinary and physical environments (Strøm, Thoresen, Wentzel-Larsen & Dyb, 2013). In addition, the school environment consists of the linkage between schools and community-based structures and resources which would assist learners to access important support networks, resources and learning opportunities, which assist in achieving the aims of sexuality education in the LO programme (DoE, 2006). For instance, learner engagement in physical activity (an aim of the LO programme) can be enhanced if schools have good links and partnerships with community pools and athletic fields which learners can access outside of school hours. Similarly, to assist learners in making responsible decisions about their health and wellbeing (another aim of the LO programme), schools could establish referral links with community clinics to encourage learners to be able to access health services and information. Good networks with community-based organisations may also provide opportunities for learners to apply their skills and values, learnt within LO lessons, to community organisations and initiatives, which is one of the purposes of the LO programme identified by the *Curriculum and Assessment Policy Statement* (DoE, 2011a & DoE, 2011b). The importance of links with the surrounding community is also re-iterated within the Department of Education's (2011) Strategic Outcome Five, in the *Integrated Strategy on HIV, STIs and TB 2012 – 2016*, where the development of relationships/associations between schools and the surrounding community is crucial to meeting the sexual and reproductive-health needs of learners and educators. The sentiment of the school playing the primary role within the environment, with the environment as

a supportive factor to best prevent risky sexual behaviour in youth, is echoed in the words of a community member in a South African study by Holland and Rendall-Mkhosi (2007, p.15):

> Because we are sitting out there in our homes, we have a problem which nobody cares about. The school can be a platform to address people who are trapped in a tunnel. The tunnel is dark, but there is light at the end of the tunnel. Many of us are trapped in that tunnel. Let the school be an institution which is the light at the end of that tunnel.

Research is yet to be conducted which will provides an accurate understanding of the contributing factors within the school environment that create an influence on the way in which the sexuality education component of the LO curriculum is implemented and delivered within South African schools (Adams-Tucker et al., 2016; Haberland & Rogow, 2015). An accurate understanding of the environment that best supports learners and educators when engaging with the revised curriculum is critical to the overall effectiveness of the revised LO curriculum, and the realisation of Strategic Outcome Two of the *Integrated Strategy on HIV, STIs and TB 2012 – 2016* (Department of Education, 2011c).

2.5.1. Differentiation of the school climate, culture and environment

The school environment is a comprehensive concept incorporating the factors which constitute a Health Promoting School (Please refer to section 2.4.4: Health Promoting School). It is composed of the school climate, culture, school connectedness as well as the academic and physical environments (Thapa et al., 2013). The school climate is reflective of the subjective perceptions of individuals and groups in the school (Austin et al., 2011). The school culture is differentiated from the school climate as it is the actual state of the school (Rowe et al., 2007). The school environment encompasses all four aspects (school climate, connectedness, culture and academic/physical environment) of the school in order to create a positive school for optimum learner-health and wellbeing (Thapa et al., 2013).

2.5.1.1. The school climate

Learners' personal experiences of schools shape the learning and development which translates into meaningful learning for them. Personal experiences can form memories of the school climate in terms of feeling safe, cared for, supported and having a sense of belonging

(Austin et al., 2011). The school climate is formed by group processes which elicit an experience of the school on an individual or group level (Thapa et al., 2013). A comprehensive school climate includes aspects of school life such as relationships, teaching and learning as well as larger organisational patterns (Appleton et al., 2008). Research has established that a positive school climate is associated with academic achievement, effective risk prevention efforts and positive youth development (Austin, O'Malley & Izu, 2011). This extends to the prevention of risky sexual behaviour. Studies have established further benefits of positive school climates indicating that it decreases absenteeism, suspensions, substance abuse, and bullying, while increasing learners' academic achievement, motivation to learn, and psychological well-being (Appleton et al., 2008; Thapa et al., 2013). It may even alleviate the negative effects of self-criticism and socioeconomic status on academic success as well as diminishing educator-burnout while increasing retention (Thapa et al., 2013; Zuma et al., 2016).

Gann (2015, p. 2) defines the school climate as follows:

> School climate refers to the quality and character of school life. School climate is based on patterns of students', caregivers' and school personnel's experience of school life and reflects norms, goals, values, interpersonal relationships, teaching and learning practices and organisational structures.

A positive school climate includes norms, values and expectations that support learners and enables them to feel respected (Austin et al., 2011). It also assists in creating feelings of being socially, emotionally and physically safe as well as promoting involvement in the school. Learners, educators and caregivers unite to develop, live and contribute toward a shared school vision in a sustainable positive school environment. Educators also model and nurture attitudes that emphasise the benefits gained from learning (Zuma et al., 2016). Each person contributes to the operations of the school and the care of the physical environment. Although, to date, there is no consensus on the factors which contribute to a healthy school climate, there are ideas which appear to be generalised across literature. These being: Safety, relationships and teaching and learning (Appleton et al., 2008; Austin et al., 2011; Gann, 2015). Figure 2 below, is a representation of the constituents of the school climate as indicated by Gann (2015):

Figure 2: Safe and Supportive Schools Model (Gann, 2015, p.25).
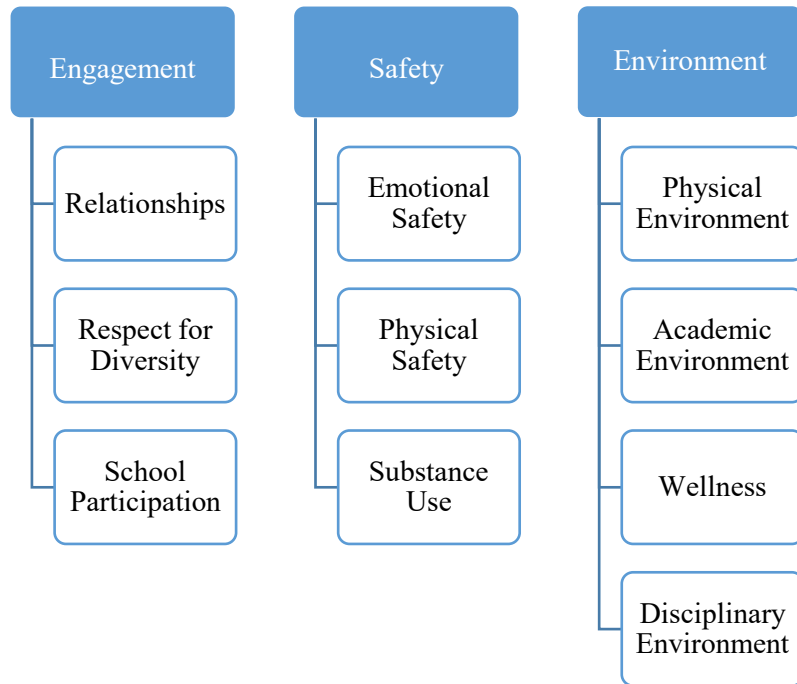
2.5.1.2. School culture

The school culture is the actual and underlying set of norms, values and beliefs which the school adheres to (Brown, 2013; Deal & Peterson, 2016). This constitutes the school persona and has been indicated to have an impact on the health and wellness of the learners, school staff and caregivers of learners in the school through affecting the belief system of and confidence in the ability to perform responsibilities required by the various stakeholders in the school (Deal & Peterson, 2016). A positive school culture celebrates successes, emphasises accomplishments and collaboration and fosters a commitment to staff and learners' learning (Brown, 2013). Conversely, a toxic school culture, blames learners for lack of progress, discourages collaboration and breeds hostility among staff (Armstrong, Steiner, Jayne & Beltran, 2016). Furthermore, a negative school culture affects school staff-attendance and willingness to engage in extra effort toward their responsibilities (Zuma et al., 2016). A positive school culture is, therefore, a protective factor which acts against learners' risky sexual behaviour and promotes their overall health and wellbeing (Appleton et al., 2008).

2.5.1.3. Learner connectedness to the school

The positioning of schools as potential sources of care and support for children has increasingly been recognised over the past few years (Appleton, 2008). School connectedness, as defined by Goodenow (1993, p.80), is "the extent to which learners feel personally accepted, respected, included, and supported by others in the school social environment." School connectedness constitutes the level of engagement and involvement of learners in the school as well as the level of belief that educators care about the learners as individuals (Bell & Murenha, 2009). Links between health and education indicate that school connectedness is vital not only academically, but also to the health and wellbeing of learners (Goodenow, 1993; Rowe, Steward, Patterson, 2007). A higher school attendance and learner involvement in the school sexuality curriculum and extra-curricular activities promotes a higher school connectedness and fosters better relationships with the school, educators, school staff and peers who then have a positive influence on them (Monahan et al., 2010). Learners with a higher level of school connectedness are more likely to respect their school, school staff and peers and, in turn, create a better school environment for all (Bond, Butler, Thomas, Carlin, Glover et al., 2007). Learners who experience school connectedness enjoy being at school, feel that they belong, believe educators care about them and their learning, believe that education matters, have friendships at school, believe that discipline is fair and equal for all and have adequate opportunities to participate in extracurricular activities (Blag, 2014). Research has established that in schools with higher levels of learner-school connectedness, learners develop a greater respect for their educators and are, therefore, more likely to listen, internalise and modify their attitudes and behaviours in keeping with the teachings and messages they are being taught in the sexuality component of the LO curriculum (Bond et al., 2007; Schafer & Sweeney, 2012; Zuma et al., 2016). Conversely, according to a study by Neser (2007), outcasts rather than the non-outcast group felt that they were not part of the school, had problems with social acceptance, felt unsafe at school, were lonely, and experienced anxiety and feelings of unhappiness. Consequently, these learners also showed a greater tendency toward school avoidance and they eventually drop out (Neser, 2007). Major threats to school connectedness, therefore, include social isolation, poor classroom management and lack of school safety (Appleton et al., 2008; Blag, 2014). Social isolation, which is especially risky for adolescents, can result from learners being bullied or teased and ignored, and tends to be nurtured in environments dominated by social cliques (Blag, 2014). Bell and Murenha (2009) indicate that

evidence exists for learner connectedness being a positive practice when assimilating LO teachings, especially regarding those learners who are prone to risky behaviour. A number of alternate studies establish that a relationship between school-connectedness and teenage pregnancy exists and suggest the school is a protective factor for risky sexual-behaviour prevention, thereby preventing HIV and AIDS, teenage pregnancy and STIs in school-going-adolescents (Anderson, Sabatelli & Trachtenberg, 2007; Bond et al., 2007; Govender et al., 2013). In addition, research indicates that learners who have a greater extent of school connectedness are more influential in peer groups than learners with lower levels of school connectedness (Bell & Murenha, 2009; Frederickson et al., 2009; Roth & Brooks-Gunn, 2010). Therefore, these learners are conduits for the relaying and reinforcing of safe sexual behaviours and attitudes amongst their peers (Roth & Brooks-Gunn, 2010). Due to this influence, learners should, therefore, practise safer sexual behaviour and, in turn, be more likely to influence their peers to do the same. Research has also established that learners' sense of belonging to school communities, decreases as they progress through primary and secondary education (Roth & Brookes-Gunn, 2010; Ruzek et al., 2016). Therefore, it is necessary for schools to increase and sustain the level of school connectedness through the improvement of the school environment, especially for secondary school learners, in order to reduce the unhealthy behaviour of learners and, more specifically, their risky sexual behaviour.

School connectedness is also fostered through social networks between the school and relevant and supportive stakeholders (DoE, 2011c). Along with efforts to educate and foster learners' healthy academic and intellectual development, the obligation is on schools and members of school communities to reach out to and connect with learners on a socio–emotional level (Sulkowski et al., 2014). In response to the higher HIV, STI and teenage pregnancy rate in 2013, Gauteng education Member of the Executive Council, Panyaza Lesufi, indicated that multiple stakeholders bear the responsibility to improve the outcomes of the South African sexuality education programme (DoE. 2013). Furthermore, Mr Elijah Mhlanga, a representative from the DoE, indicated that caregivers, guardians and schools should intensify education on youth sexuality (DoE. 2013). It is, therefore, imperative that schools and their stakeholders be kept safe and well-managed for the provision of a stable environment which will encourage respectful and meaningful learning, health and psychological wellbeing and a sense of belonging (Babakhani, 2014; Frederickson et al., 2009; Mcgraw et al., 2008; Monahan et al., 2010).

2.6. Challenges and Best Practices that Play a Role in the School Environment for Optimal Sexual Education Delivery

Best-practice learning can be gauged from international studies in order for SA to establish the sexuality education curriculum. In a similar manner, Kirby (2002) undertook a review to determine the key characteristics that distinguishing effective programmes from those that are ineffective. According to Kirby (2002), key populations who are at a higher risk of HIV and AIDS exposure need to be targeted with evidence-based interventions. Evidence exists for best practice and comprehensive interventions as being those which are designed to influence sexual behaviour and having mediators which represent underlying change-processes. These mediators comprise knowledge, attitudes, norms, self-efficacy and intentions, interpersonal relationships and violence in intimate relationships (Aaro et al., 2014; Kirby et al., 2011). Furthermore, successful interventions, according to Kirby et al. (2011), include practices of participatory methods of teaching, teaching of comprehensive sexuality education courses, educator knowledge and confidence in teaching sexuality education, involving learners in programme curriculum design and learning by teaching and experience. Overall, the content, pedagogy, curriculum design and the extent of support the school provides as well as caregiver and community involvement, are the criteria which play important roles in the degree to which prevention of risky sexual-behaviour messages are internalised and practised by learners (Kirby et al., 2011). Furthermore, there is a distinct and all-encompassing structure through which to address youth in order to shape or change their sexual behaviour positively. This is eloquently stated by Verma (2016):

> Education in a world with HIV and AIDS must be different from education in a prior, AIDS-free world. The content, process, methodology, role and organisation of school education in a world with HIV and AIDS must be radically altered. The entire educational edifice must be dismantled. Every brick must be examined, and where necessary, re-shaped before it is used in a new structure that has not yet been designed. The new structure will almost certainly incorporate a number of aspects of non-formal education provision. It seems likely that it will also be more community-based, with the traditional school replaced by a community-based service organisation which will provide not only education but other services as well (Verma, 2016, p2).

2.6.1. School safety in South African schools

As established by prior research, school safety is a major contributing factor to school-connectedness which has been established as being correlated with lower risky-sexual behaviour engagement in learners (Verma, 2016). Safety within the school includes the physical safety of learners and their belongings as well as emotional safety such as the prevention of bullying, harassment and fights. De Palma & Francis (2014), indicate that school violence such as bullying and teasing, be it physical or emotional, is a major contributing factor for decreased school-connectedness and resultant high absentee rates which lead to an increased school drop-out rate. In addition, schools may also be used as a location of negotiation for off-school property violence (Verma, 2016). Strict disciplinary policies and monitoring of learners by school staff are likely to reduce violent behaviour within school property and outside, within school hours as well as outside of school hours. Supervision should be evident in the school to protect learners from bullying and criminal activity. The active presence of a school security guard, secure buildings and walls to protect learners and their belongings from outside elements/people will protect learners from sexual abuse and harassment as well as reduce consensual risky sexual behaviour from occurring on the school premises (De Palma & Francis, 2014).

Although schools are viewed as sources of care and the primary conduit of prevention of risky sexual behaviour in a bid to prevent increasing HIV/STI and teenage pregnancy rates, the very source that aims to protect them may also be the environment which enables the occurrence of risky-sexual behaviour (Sprecher et al., 2008). Verma (2016) notes that learners may be in danger of sexual harassment while at school. Waller, Gardner & Cluver (2014) have noted that school violence could be directly detrimental to learner well-being as learners may be coerced into risky sexual behaviours or raped on school property during or after hours. Reports are escalating regarding the extent of sexual abuse of children, especially girls, in the five to fourteen-year age group (Avert, 2017; Verma, 2016). The abusers are rarely strangers to the victims and may be educators or older learners in the school (Sprecher et al., 2008). In the process of the abuse, many children become infected with HIV/STIs and become potential transmitters of the infection to their school peers or educators (Bonnie, Stroud & Breiner, 2015). This may be compounded by schools not always being ideal HIV-free institutions (Sprecher et al., 2008). Schools face their own challenges with the disease such as infected staff and educators and the possibility of being

surrounded by a community or environment which is HIV-infested and encourages the transmission of HIV (Sprecher et al., 2008; Zuma et al., 2016). Learners who feel unsafe and disrespected in the school and are less likely to feel connected to the school and to practise the messages taught in the LO curriculum's sexuality education programme (Blag, 2014; Turunen et al., 2012).

Co-educational schools are a further contributory factor to schools being challenging environments to sexuality education message internalisation and practice by learners. Co-educational schools introduce learners to members of the opposite sex and foster heterosexual relations to a greater degree than single gender schools (Bonnie et al, 2015). A study by Sani et al. (2016), indicated that learners in co-ed schools were more likely to be sexually active and more frequently sexually active than learners in single gender schools. Abuse or harassment is also more likely to occur in co-educational schools than single gender schools (Department of Education, 2002; Sani et al., 2016).

Furthermore, school circumstances may aggravate risky sexual behaviour patterns. The need to pay school fees may lead young girls from poor families into the sale of sexual favours (Holtmann, 2011; Idele et al., 2014). Intense competition for academic success and progression to the next educational level may lead to sexual relationships with educators or fellow-learners (Idele et al., 2014). Long walking distances to and from a school that is located far from one's home and travelling consistently by the same route, may contribute to the risk of sexual harassment from school peers or from strangers (Holtmann, 2011). Schools run the risk of gender-based violence occurring on or around the school property as learners may initiate contact with peers within school hours and thereafter engage in or be victims of gender-based violence. According to De Vries, Eggers, Jinabhai, Meyer-Weitz, Sathiparsadet et al. (2014), coerced sex is a major occurrence in SA schools with as many as 4.1% of learners having experienced coerced sex as an adolescent by a peer (De Vries et al., 2014). Some learners also express a practice and belief in coerced sex with male adolescents having higher perpetrations of intimate partner violence and greater perceptions that sexual violence against female adolescents was acceptable as a means of punishing a partner or fulfilling sexual urges (Lunenburg, 2011; Rosenberg et al., 2015). The increased risks as a result of the myriad of challenges cited above are likely to be more severe in countries which already experience high rates of HIV/STI and teenage-pregnancy prevalence such as SA (Turunen et al.,

2012). Therefore, where challenges are greatest, school risks are highest and the capacity to deliver prevention messages is weakest (Turunen et al., 2012).

2.6.2. School discipline standards

Discipline is important to instil a sense of responsibility in youth in their transition to becoming responsible young adults (Dessie, Berhane & Worku, 2015). Classroom standards may be a contributory factor for learner discipline, where educators have the challenging task of defining the discipline and spontaneity of learners in order to best elicit creativity and yet maintain adherence to the content of sexuality education (Gaurdino & Fullerton, 2010). Educators may be judged on their care and organisation of the classroom by learners and, in this way, the educator is required to be a role model of discipline, respect and care for the school (Francis, 2010). In this manner, learners may emulate these attitudes and behaviour in order to promote school connectedness and, thereby, enhance learner internalisation of the messages taught by the sexuality education component of the LO curriculum (Adams-Tucker et al., 2016; Francis, 2010).

School discipline outside of the classroom is also highly important in creating a nurturing environment where learners and staff are treated with care, respect, fairness and equality (Francis & DePalma, 2015; Francis, 2010). Discipline policies, procedures and administration must be clearly indicated to learners through the school rules and school disciplinary-policies (Ahmed, 2009). All stakeholders (learners, educators and caregivers of learners) must be made aware of the school rules and disciplinary policies and these should be visible in the reception area for public viewing (Appleton et al., 2008). Discipline should be administered on an individual case-by-case basis to employ subjectivity when addressing any breaking of the school rules as this ensures fairness in the treatment of learners according to their actions (Appleton et al., 2008). However, it is also important to treat all similar cases of breaking of the school rules according to a standardised punishment system to ensure equality amongst learners. As with educator discipline, it is best to create a balance between discipline and the spontaneity of learners for school engagement as this develops and sustains respect and consideration for peers and school staff (O'Farrell, Morrison & Furlong, 2006).

2.6.3. School and classroom infrastructure and resources

Unsuccessful school environments are those where challenges, which stem from the lack of resources, outweigh the provision of the sexuality education messages (Lunenburg, 2011; Vanwesenbeeck, et al., 2016). This is echoed in the words of various participants in a South African study by Holland and Rendall-Mkhosi (2007), where one learner in particular states "I don't find the environment positive, safe, or stimulating. People are too much needy, so they become poor…something is missing" (p.13). Furthermore, educators have expressed the challenge of teaching sexuality education in lower-resourced schools (Zuma et al., 2016). The statement below, provided by an educator, indicates these discrepancies in expectations given the challenges (Holland & Rendall-Mkhosi, 2007, p.13):

> Because of the poor resources, I am unhappy to be working under these circumstances. I could go to a well-resourced school and become the best educator ever. There are so many issues that we work against here that would not be there: Desks for learners, more computers, shortages of books for learners, sports fields, and so many other issues.

Classrooms are required to have resources and infrastructure which will support the internalisation of messages against risky-sexual behaviour (Vanwesenbeeck, et al., 2016). A number of physical and human resources, which play a role in supporting the aims of the sexuality education programme in the LO curriculum, are provided below (Health Promoting Clearinghouse, 2009; UNAIDS, 2009). Classrooms are required to be kept clean not only in order to protect learners directly from HIV/STI transmission, but also to promote a greater respect for and connectedness to the school in order to promote the aims of the sexuality education programme. Furthermore, the physical classroom environment affects the extent of occurrence of best-practice pedagogy for learner internalisation of messages. The standard for many current classrooms' arrangement is desks aligned in rows within the classroom (Adams-Tucker et al., 2016; Gaurdino & Fullerton 2010; Shochet & Smith, 2014). This system of arrangement presents a barrier to learners' focus and encourages learners' disruption in the classroom while, at the same time, discourages interaction between learners and it focuses on the learner as an individual (Ruzek et al., 2016; Schafer & Sweeney, 2012). It also restricts the best practice of participatory learning which is necessary for impacting positively on attitude and behaviour-change during sexuality education lessons (Schafer & Sweeney, 2012). Structure, resources and colour all play a role in

determining whether or not the classroom will be conducive for learning (Schafer & Sweeney, 2012). These factors may not have a large effect individually. However, they may have a combined effect on learners' ability to learn and especially internalise important skills imparted during sexuality education lessons (Gaurdino & Fullerton 2010; Shochet & Smith, 2014). Studies of classroom management indicate that the arrangement of desks in a circle for smaller classes, or, into groups for larger ones, enables learners to engage in participatory learning while educators are enabled to maintain classroom discipline and stick to the content of the lesson (Gaurdino & Fullerton 2010; Kirby et al., 2011; Shochet & Smith, 2014). The non-physical environment is an additional factor which impacts positively or negatively on learners' ability to learn. This constitutes the sound, temperature and rapport of the classroom (Gaurdino & Fullerton, 2010; Schafer & Sweeney, 2012). These elements of the classroom are not physically tangible but may increase focus and classroom productivity (Shochet & Smith, 2014).

2.6.4. Hygiene and sanitation in South African schools

Bell and Murenha (2009), provide support for hygiene and sanitation as being fundamental to a positive school environment. Schools which are more organised, clean, neat and well-maintained than their more unsanitary counterparts are more likely to reduce the possibility of the transmission of communicable diseases in learners and staff by reducing absentee rates and thereby increase learner and educator presence in sexuality education lessons (Holtmann, 2011). Furthermore, schools which are clean, neat and well-organised communicate a message of positive school culture and increased learner school connectedness as learners feel that the school views itself as an important component of education and wellness promotion (Gann, 2015). Learner pride in the school is also increased as a result of being a part of a clean and well-maintained school (Holtmann, 2011). Schools should, therefore, ensure that classrooms are free of litter, school grounds and buildings are well-maintained and that lavatories are cleaned daily. Services should include employment of school cleaners and the provision of dustbins as well as introduce policies which promote non-littering, graffiti and non-abusive use of school facilities by learners. Current South Africa government policies include hygiene and sanitation regulations for all schools in the country. According to the *Government Gazette Staatskoerant No. 36837* (DoE, 2013) health regulations include water which is freely accessible for the purposes of drinking, personal hygiene and food preparation; a sufficient number of lavatories where pit bucket and bucket latrines are

not allowed and all schools to have sufficient ventilation in all rooms to prevent the spread of airborne disease and to promote comfortable conditions. The policy delineates specific norms and standards for public schools to adhere to.

2.6.5. Caring environment

As previously mentioned, educator and school care is a fundamental aspect of a positive school climate (Austin et al., 2011). Care is necessary on behalf of the educator, school staff and the school as a whole. The educator should convey an image which elicits the respect of learners, but which genuinely demonstrates care for learners' problems or questions (Gaurdino & Fullerton, 2010). Educators are more likely to be "liked" by learners if they demonstrate sincere care for them and the learners are able to recognise this care (Bell & Murenha, 2009). Furthermore, learners who feel cared-for by an educator, whom they feel has a sincere and vested interest in their (learner's) best well-being are more likely to respect their educator (Thapa et al., 2010). Learners are then more likely to listen to, internalise and support the educator's messages because they can identify with the educators (Roth & Brooks-Gunn, 2010). Educators also demonstrate learner-care because they are role models for the learners and adapt their teaching style in order to be relevant to their learners and this ensures a closer relationship with them (Earls, 2008).

The school is also responsible for providing an overall environment of care to learners, with staff other than educators, as well as peers, ensuring school safety, hygiene, order, discipline, fairness and equity, in order to create this caring environment (Clarke, Yankah & Aggleton, 2015). This will foster a greater liking, respect and care for the school and, therefore, an increased school-connectedness which will increase the likelihood that the sexuality education messages will be internalised and, thereby create more responsible youth (Fredericks, Blumenfeld, Friedel & Paris, 2005; Furlong & Christenson, 2008).

2.6.6. Learner's feeling of belonging and being respected and accepted in the school

School safety extends to the emotional safety necessary for learners to assimilate the teachings of the sexuality education of the LO curriculum. The emotional safety of learners is based on learners feeling truly accepted, respected and bonded to the school. If learners feel ostracised for any reason, they will not feel safe within the school and are less likely to listen to, internalise and practise the messages in the sexuality education programme as they would view

the messages as being irrelevant to them (Bell & Murenha, 2009; Earl, 2008; Holland & Rendall-Mkhosi, 2007).

2.6.7. Learner - educator relationship

As previously stated, in early adolescence young people begin to develop close relationships outside of the family unit and the role of educators begins to take on a more important role in their lives (Martin & Rabie, 2011). It is important to explore whether educators are role models for learners in schools and whether the learners can relate to their educators on a personal level. This would increase the effect of the teachings in the LO curriculum as well as the probability that they would be internalised by learners. An evaluation of the LO programme in Gauteng schools revealed that the lack of openness and trust between educators and learners was a major obstacle to the implementation of the programme (Fonner et al., 2014). Fonner et al. (2014) established that many educators in the schools were reluctant to become involved in delivering the programme because they did not feel that the quality of their relationships with learners would enable them to discuss sensitive issues with them. In contrast, positive learner-educator relationships that enable learners to feel supported and cared for, can produce a variety of positive outcomes amongst learners (Martin & Rabie, 2011). This includes increased academic motivation, higher levels of interest and enjoyment in school work, an increased sense of social cohesion and greater expectancies for success in the classroom (Goodenow, 1993; van Uden, Ritzen & Pieters, 2014). Within the classroom environment, positive relationships and interactions between learners and a climate of mutual respect between learners and their educator have been shown to enhance learners' motivation and engagement in sexuality education lessons (Ruzek et al., 2016). A study by Adams-Tucker et al. (2016), indicated that long-term relationships with LO educators supported the learners' preference for LO educators. Educator gossip, punitive approaches and discomfort with sensitive subjects discouraged learners from confiding in educators concerning these issues (Monahan et al., 2010).

2.6.8. Pedagogy

In order to have the maximum impact on learners' sexual behaviour, it is essential to implement the best practices that have been found to have worked for international schools into the sexuality education programmes of South African schools (Kirby et al., 2011; Kirby, 2002;

Matshoba & Rooth, 2014). The manner in which sexuality lessons are presented and delivered plays a large role in the internalisation of safe sexual behaviours by learners. It has been established that sexuality education in schools is often not taught well internationally or nationally (Adams-Tucker et al., 2016; Martin & Rabie, 2011). However, sexuality education within the school's curriculum, according to the *New Schools White Paper* in the DoE (2011 as cited in Martin & Rabie, (2011), recognises the need for young people to receive high-quality sexuality education in order for them to make informed decisions regarding engagement in sexual and other risky behaviour. Therefore, SA can look to the best international practices of pedagogy which have been successful in sexuality education programmes, for the way forward in terms of the implementation of sexuality education (Sulkowski et al., 2014). The following are best practice pedagogies for sexuality education in schools:

While it has been documented that practicing sex during teenage years is usually presented as a taboo by educators in sexuality-education classes internationally (with SA being no exception), this may have the reverse effect of creating an excitement and thrill associated with exploring the prohibited (Adams-Tucker et al., 2016; Matshoba & Rooth, 2014). However, research has established that if sex is presented to learners as a healthy and normal part of living, it reduces the thrill associated with the prohibited exploration and the resultant experimentation (Kirby et al., 2011). Learners are free to make their own choices regarding when to have their first sexual experiences without the notion that this is taboo, and they are more enabled to make their own decisions regarding safe sexual behaviours and to exercise their rights to practise safe sex (Verma, 2016).

Further best practices for pedagogy of sexuality education programmes consists of practical, participatory and varied methodologies of imparting information such as worksheets, textbooks, group-work, oral presentations, homework assignments, role plays etc. (Kirby et al., 2011; Mathews et al., 2006; Mertler, 2017; World Bank, 2003). With specific respect to HIV-prevention, studies have shown that interventions targeting adolescents are more effective if they target sexually-inexperienced youth and use fewer bio-medical approaches (Mertler, 2017). Most often, bio-medical topics and barrier methods of HIV/STI and teenage-pregnancy prevention appear to be presented without any effort being made to promote an understanding of relationships, respect for the other, and rights (Adams-Tucker et al., 2016; Francis, 2010; Francis, 2013; Verma,

2016). This has led to a tendency to equate prevention with the proper use of condoms and a concentration on the bio-medical/mechanistic aspects of sexuality (Adams-Tucker et al., 2016; Francis, 2010). A bio-medical or mechanistic approach to pedagogy of sexuality education has been indicated as failing to interest and challenge learners and, therefore, not having the desired outcomes of sexuality education programmes (Ahmed, 2009, Earls, 2008).

Educators' decisions and willingness to implement HIV and sexuality-education are influenced by a myriad of factors including their beliefs concerning the importance and value of HIV and sexuality education, self-efficacy, teaching experience in HIV education, sense of responsibility and adequate pre-service and in-service training (Ahmed, 2009; DoE, 2000b). Additional educator characteristics such as knowledge of HIV, comfort in teaching sensitive subject matter, personal responsibility and perceptions of stability and controllability of risk factors or behaviour are also correlated with their willingness and decision to implement HIV and AIDS-education within schools (Ahmed, 2009; Helleve et al., 2009; Helleve, Flisher, Onya, Mũkoma & Klepp, 2011; Mathews et al., 2006;). Some of these characteristics have even been proposed as screening criteria in the selection of educators to teach HIV and AIDS-education in South African school (Mathews et al., 2006). Factors pertaining to the interpersonal and school level such as a school HIV and AIDS policy, collegial support in delivering HIV and sex-education, school climate and good school-community relations are further influential factors for educator-willingness to teach sexuality education (Helleve et al., 2009; Helleve et al., 2011; Mathews et al., 2006). Recent studies into educators' roles in implementing life skills and HIV and sex-education have taken cognisance of the role of the surrounding school context (Mathews et al., 2006). From their findings amongst a sample of 324 educators in Cape Town, South Africa, Mathews et al., (2006, p.395) have argued that:

> In efforts to enhance educators' implementation of HIV and AIDS education, there is a need to focus on the broad social development programmes which improve school functioning and the quality of relationships between learners, caregivers, educators and community members.

School-based Life Skills require educators who are highly skilled and motivated and who possess an in-depth understanding of the issues they teach (Boler & Aggleton, 2005). Equally important as knowledge of the content, is having the required pre-service and in-service training

and skills to effectively teach and engage with learners concerning the LO material and related issues that may emerge in classroom lessons (Mertler, 2017; Mathews et al., 2006). Research suggests that educators lack adequate knowledge and the necessary skills to educate learners about HIV and AIDS and sexuality (Adams-Tucker et al., 2016; Matshoba & Rooth, 2014). It is currently being assumed that it is possible for educators to be able to teach a radically different curriculum in Life Skills with minimal in-service training (Adams-Tucker et al., 2016; Chapman & Werner-Wilson, 2008). LO pre-service and in-service educator training is essential since the LO programme has the dual aim of increasing learners' knowledge and assisting them to acquire skills. Therefore, the teaching of LO requires a teaching approach that is different from the normal didactic teaching styles normally used by educators (DoE, 2011c). Boler and Aggleton (2005) explain that expecting educators to adapt to a different type of teaching, whilst remaining within the confines of the classroom, presents a challenge. This is due to LO training being intended to be participatory, responsive, raising questions rather than providing clear-cut answers and challenging learners to find new ways of relating to each other and to the broader society (Department of Basic Education, 2015). As a result, the required method of teaching LO may be unfamiliar to educators as teaching in most classrooms is didactic, non-participatory, inflexible and assessment-driven (DoE, 2000b). In turn, this may be increasingly challenging given that many South African schools are appointing educators, who do not teach LO as a primary subject, into LO educator roles (Adams-Tucker et al., 2016; Matshoba & Rooth, 2014; Shisana et al., 2009). These educators may, therefore, lack the training and experience for the teaching of skills necessary in these roles (Mcgraw et al., 2008).

It is important to note that the role of educators when teaching LO is often not as clear as compared to teaching other subjects, given the expectations of learner-behaviour change (Verma, 2016). Consequently, educators may question their role in this form of education (Bhana et al., 2005). The manner in which educators conceptualise their role and the role of learners in the school environment has been shown to influence their delivery of HIV and AIDS and sexuality education (Matshoba & Rooth, 2014). It also influences the decisions they make about the information and topics learners should or should not be informed about (Bhana et al., 2005; Fonner et al., 2014; Helleve et al., 2009;). Educators have also reported feeling that their role is ambiguous due to having "anxiety concerns" and "resistance concerns" (Verma, 2016, p.23). Anxiety concerns expressed, include fear of violating taboos, giving caregivers reasons for taking offence as well as

being accused of encouraging promiscuity and loose moral behaviours in the young (Verma, 2016). Resistance concerns relate to doubts regarding whether sexuality education, the formation of appropriate sexual attitudes and the transmission of very specific behavioural guidelines really belong to their work as educators, when educator training and orientation are directed towards essentially academic areas (Shisana, Peltzer, Zungu-Dirwayi & Louw, 2005; Verma, 2016).

Research has indicated that educators teaching HIV and AIDS-education at schools are generally less confident in their ability to implement learner-centred teaching strategies such as role play, creative tasks and group discussions, which are important for learner acquisition of skills (Helleve et al., 2011; Zuma et al., 2016). South African educators reported lower levels of confidence with respect to teaching in general, than counterparts from other countries (Helleve et al., 2009). In response to this, Helleve et al. (2011) and Zuma et al. (2016) argued that many South African educators lack the emotional resources required to deal with these issues. Helleve et al., (2009) highlighted the importance of the attribution of learner education and influence on educators' confidence in their own ability to teach lessons on HIV and AIDS and sexuality as well as educators' confidence in their ability to influence learners' behaviour. The study also emphasised the importance of addressing educators' confidence in teaching lessons on HIV and AIDS and sexuality because they may perceive the content as controversial to their own values, or the values and norms of the learners, or the local community. Confidence in teaching has been shown to be significantly associated with the number of years in teaching about HIV and AIDS and sexuality, formal training in these subjects, experience in discussing the topics with others, school policy and priority given to teaching about HIV and AIDS and sexuality at school as well as self-reported successful implementation of school-based programmes (Francis, 2010). According to Helleve et al. (2009), educators were reported to lack confidence when teaching HIV and AIDS and sexuality in South African urban and rural schools. Further strengthening of their confidence levels could, therefore, be an important measure for improving the implementation of such programmes.

The use of rapport in the classroom is beneficial to the internalisation of sexuality education messages in learners (Gaurdino & Fullerton, 2010). Finding different leaders amongst learners within each class is beneficial to the building of educator-class rapport (Ruzek et al., 2016). Every set of learners will have two types of unofficial leaders within the group: The highly-academic

performers and the highly-sociable learners. If used wisely, these types of leaders could assist in the teaching of LO (Kirby et al., 2011; Gaurdino & Fullerton 2010; Shochet & Smith, 2014). The use of both types in peer-led lessons or positioning them near weaker learners, demonstrates educator care of all learners as it recognises strong learners and indicates care for weaker ones (Ruzek et al., 2016). Educators may then use this opportunity to further assist weaker learners (Ruzek et al., 2016). Social learners, in particular, are useful to set focus and discipline standards in the classroom (Fonner et al., 2014). These learners may be more likely to be more disruptive than their peers if not recognised (Ehrhardt, 2007). Their social ability to lead is useful in assisting focus in the classroom if they are identified and used as an asset since their peers are likely to follow their behaviour (Fonner et al., 2014; Gaurdino & Fullerton 2010; Shochet & Smith, 2014). It is imperative that the educator mentors learners in a manner which promotes positive interactions with themselves and their classmates in order to foster the learning of the social skills necessary to change attitudes towards risky-sexual behaviour, in order to ultimately enable positive behaviour-changes to take place. This communal-learning methodology will promote learning as a journey for individuals, which is more likely to assist learners to observe how their actions and behaviour affects others (Ehrhardt, 2007; Schafer & Sweeney, 2012). These learners are more likely to relate communal learning to the impact of their actions and behaviour outside of the classroom and school, than learners taught in a more individualistic manner (Adams-Tucker et al., 2016; Francis, 2010; Fonner et al., 2014).

2.6.9. Skills versus the promotion of knowledge

Most studies have indicated that, although most youth have certain knowledge of HIV, STI and teenage-pregnancy prevention, certain gaps in this knowledge remain (Idele et al., 2014; Panday et al., 2009; Shisana et al., 2009; Steffennson et al., 2011). According to Panday et al. (2009), there is a considerable lack of knowledge surrounding sex and the risks of contracting STIs/HIV. Youth require better information on reproductive physiology and sexual health, and more detailed information on contraception (Wood & Jewkes, 2006). In a 2012 South African study, 28% of males between the ages 15-19 years indicated slightly less correct knowledge and had misconceptions of HIV/STI and teenage-pregnancy prevention, compared to 29% of females in the same age group (Shisana et al., 2014). Knowledge about HIV that most youth aged 15-19 years should possess concerns whether or not the risk of HIV-contraction can be reduced by having

fewer sexual partners (Ehrhardt, 2007). Almost 35% of youth indicated their response that they did not possess this knowledge (Shisana et al., 2014). Almost 15% of the youth in the same study indicated that the consistent use of condoms during sex does not reduce the risk of HIV/STI contraction (Shisana et al., 2014). These findings were supported by two other South African studies which indicated that South African youth lack knowledge in two areas: One related to condoms preventing HIV and the other related to the risks of having multiple partners (Kincaid, Parker, Schierhout, Connoll & Pham et al., 2008; Shisana et al., 2009). Therefore, the message concerning multiple partners should be emphasised, especially regarding concurrent partnership networks and MARPs (Shisana et al., 2009). There are also varying levels of knowledge amongst youth depending on individual factors as well the level of knowledge provided to youth by their relative schools (Adams-Tucker et al., 2016; HSRC, 2014). Despite being regarded as fundamental knowledge, declining knowledge of the risk of multiple partnerships may be linked to the fact that multiple partnerships are common and are viewed as a norm (Kincaid et al., 2008). In effect, while levels of knowledge concerning this are generally high in SA, there are some major gaps in the knowledge, as illustrated by responses to questions on the issue of HIV risk and multiple partners. It is these areas which should be comprehensively addressed during sexuality education lessons.

As indicated by Kirby et al., (2011), knowledge is only the first step to improving safe sexual behaviour among youth when teaching sexuality education programmes and more is expected from the schooling system than simply an academic education. It is, therefore, fundamental for youth to possess the correct knowledge on sexuality. However, the next steps should be the improvement of skills, changing of attitudes, especially those relating to perceived susceptibility of risk, and, thereafter, the positive changing of behaviour and, finally, the sustainability of this (Idele et al., 2014; Svanemyr, Amin, Robles & Greene, 2015). According to Martin and Rabie (2011), sexuality education should involve the incorporation of social and emotional aspects of learning which will assist in helping learners make informed decisions around risky-sexual behaviour. Social and emotional learning is integral to the formation of moralistic attitudes and beliefs in youth (Kirby et al., 2011). Improved attitudes and beliefs assist in the implementation of correct behaviour, even in the face of peer or cultural pressure to conform to risky-sexual behaviours. Experiential learning is deemed best for skill-development in conjunction with the pedagogies mentioned in section 2.6.8. *Pedagogy* (Kirby et al., 2011; Kirby, 2002). Societies require schools to provide more attention to the teaching of values with a view to

reducing the deterioration of moral standards. These include the increasing engagement in risky sexual behaviour by learners (Health Promoting Clearinghouse, 2009; Kirby et al., 2011).

2.6.10. Relevance of sexuality education content according to cultural norms

Interventions are most successful because they deliver intensive content (Kirby et al., 2011). Content taught by the LO programme should include the encouragement of consistent condom-use and faithfulness, encourage monogamy, encourage the social unacceptability of age-disparate relationships, increase the demand for Voluntary Medical Male Circumcision (VMMC), promote HIV-prevention in urban informal settlements and discourage myths such as the need to prove one's fertility in teenage years (Harrison, Newell, Imrie & Hoddinott, 2010; Shisana et al., 2014). The LO curriculum covers each of these aspects. However, these topic areas need to be adapted to the cultural norms and socio-economic contexts of learners in different communities in order to ensure more commitment to safe sexual behaviours by learners (DoE, 2015).

In order to ensure the relevance of the content to diverse societies, it is important to hear and include the community's perspective on adolescent pregnancy and risky-sexual behaviour (Harrison et al., 2010). The School/Community Model of Sexual Risk Reduction is a promising approach which was pioneered in South Carolina, United Stated of America (USA) (Frederickson, Dunsmuir & Baxter, 2009). This model is being replicated in communities throughout the state of Kansas, USA. According to the model, best practices include keeping generalised records of the level of sexual activity amongst adolescents of the communities who attend the school (Frederickson et al., 2009). This may assist the school in adopting what has been taught in the sexuality lessons and to incorporate and address the challenges endured by youth from the communities attending the school. Sexuality education programmes may be informed by these challenges and would, therefore, be more likely to deliver material which would be more relevant to learners and result in sexuality education being more practically applicable in the learners' daily lives (Harrison et al., 2010). A number of other schools in the USA have also been able to achieve this collection of data (Coates et al., 2008; Goesling et al., 2014). Data could then be made available concerning the percentage of senior primary and secondary school-aged youth in the community who have had sexual intercourse or who have had it on a regular basis. Similarly, public health records could also be used to document the level of adolescent pregnancy in the

community. This data could also prove a useful evaluation tool and could be used to determine the effectiveness of the Life Skills programme in addressing the problem.

2.6.11. Gender sensitive approach to teaching sexuality education and LO

As previously mentioned, teenage males are more likely to be engaged in multiple-sexual partner relations behaviour when compared to their female peers (Cluver et al., 2016; Shisana et al., 2009). This is in accordance with the sexual double standard elicited by most cultures and societies where multiple sexual partnerships are viewed as more acceptable and therefore, encouraged among males, but less condoned among females (Cluver et al., 2016; Koen, 2011). School programmes should, therefore, concentrate on dispelling the myths that masculine identities are synonymous with early sexual encounters, multiple partners and frequent sexual activity which are considered as determinants of risky sexual behaviour engagement (Shisana et al., 2009; Wood & Jewkes, 2006). Focussing on girls in sexuality education is also imperative, due to the higher HIV rates in girls. For girls, awareness should be created around the determinants of the cultural and societal norms which play a role in teenage girls being required to prove their fertility to their community and families (Peltzer & Makusa, 2014; Koen, 2011). Skill-building is required for girls to be able to notice and abolish these cultural myths (World Bank, 2003). Skill-building in being confident and perseverant in requesting that condoms for girls are also a necessity since research has indicated that girls are usually not equally responsible for the use of condoms (Kirby et al., 2011). Furthermore, girls are less likely to request the use of condoms as a result of male-partner pressure, in a bid to build trust with their partners (Koen, 2011; Harrison et al., 2010). It is imperative to include the cultural perspective during sexuality education teachings in order to refute the myths which accelerate risky sexual behaviour. However, it is also necessary to use the morals and values in learners' cultural and religious perspectives in order to promote the aims of sexuality education (Sani et al., 2016; Shaw & El-bassel, 2014).

2.6.12. Availability of condoms at school

The controversial nature surrounding the availability of condoms at schools is possibly the reason for most South African schools not having condoms available (Protogerou, 2013). Condoms extricated from school lavatories have been stigmatised by learners in schools and often are used for comical purposes (Adams-Tucker et al., 2016; Protogerou, 2013). There is an ongoing debate

regarding whether or not convenient condom-access encourages earlier sexual activity and frequency of sexual activity, versus whether or not it will prevent risky sexual activity in adolescents who are already engaging in sexual activity (Department of Basic Education, 2015). An addition to the debate is whether condom-usage fosters a sense of responsibility in learners to obtain their own condoms and thus prepares them for a world of adulthood where the provision of their own condoms would be their own responsibility (Setsuko-Hendriksen, 2007). According to UNAIDS (2011), it is more beneficial to provide learners with condoms in schools. Studies were conducted internationally with Africa which produced the same results to support this proposition (De Lange et al., 2012; Earls, 2008; UNAIDS, 2011). This study further investigates learner preferences in this regard.

2.6.13. Presence of extra-curricular activities

Extra-curricular activities have been established as enabling youth to spend their time and effort on productive aspects as well as build skills and this limits the availability of time to engage in risky sexual and other behaviours (iKamvayouth, 2016). In addition, support for peer education in addressing risky sexual and other risky behaviour engagement has been established (Brown, 2013; Ehrhardt, 2007). NGOs and other organisations communicating with learners regarding the promotion of safe sexual behaviour have been received by learners in a positive manner as learners appreciate the impersonal nature of the interaction and, therefore, feel more comfortable to disclose personal issues to NGOs than to their LO or other educators (iKamvayouth, 2016; Neser, 2007). These sources, thereby, aim and have contributed to the support of sexuality education in the LO curriculum's aims (Erhardt, 2006; McGraw et al., 2008).

2.6.14. Government interventions and psychosocial services

It is essential for schools to have school policies concerning teenage-pregnancy, HIV and STIs in order for the school to know the way forward in dealing with these challenges in a fair and sensitive manner. These policies will assist in minimising school absenteeism and the dropout-rate for the learners who face these challenges (Aaro et al., 2014; Kirby, 2002). All stakeholders in the school need to be aware of these policies in order for standardised care to take place (Aaro et al., 2014).

In addition, it is of optimum advantage for the school to have a school nurse and counsellor (Kirby et al., 2011). Most schools in SA are not as privileged to have these on the school property. Therefore, in cases where these services are required, schools should have a contact educator to whom the learners can go when in need of counselling (Adams-Tucker et al., 2016; Matshoba & Rooth, 2014; Senior, 2012; Shisana et al., 2009). The number of government schools which have a school counsellor or psychologist is at best limited to quintile five schools. These are the schools that can financially afford to have these facilities (Adams-Tucker et al., 2016; Matshoba & Rooth, 2014).

2.6.15. External stakeholder network involvement

Preventive programmes targeting adolescents have been shown to be more effective if they take a fundamental approach. This includes several stakeholders at the level of the broader environment i.e. health personnel such as social workers, counsellors and nurses; the local police, NGO's and other government departments (Coates, Richter & Caceres, 2008). Ideally, preventative programmes would also include actions that influence macro-level factors such as policies that facilitate the implementation of programmes and promote health (Francis & DePalma, 2015). Learners reported that NGOs played a significant role in reinforcing the messages taught by LO educators and appreciated the fact that NGOs were separate and that, personal disclosures were unlikely to impact on school performance (Ybarra, Mwaba, Prescott, Roman, Rooi et al., 2014). Social capital theory is useful in explaining the benefits of social networks to learners in schools. The main premise of social capital is that social networks have value. Social capital refers to the collective value of all social networks and the inclinations that arise from these networks to do things for each other (Putnam, 1993). Social capital may be particularly useful in the forming of strong relationships and employing them to generate intangible and tangible benefits. The benefits may be social, psychological, emotional and economical (Helleve et al., 2009). External stakeholders are important for Bridging and Linking which are elements of social capital that learners and LO educators can use to assist them in teaching and learning about sexuality education (Helleve et al., 2009). Bridging between external stakeholders, such as between the school and student governing bodies, social workers, local South African police station, counsellors, clinic staff, as well as linking, such as between the school and the Department of Education and NGOs, are indicative of the social capital which LO educators can draw on from the greater environment

to assist them in their work as well as from whom learners may directly or indirectly learn from (Mertler, 2017). Social capital is important because it has implications for the availability of referral networks which function to assist learners in the optimal promotion of sexuality education messages and the influence they have on their practical lives. Research has also shown that the same messages, being repeated by different sources, reinforce learners' beliefs and practicing of the sexuality education messages (Ahmed, 2009; Anderson et al., 2007). Networks of social support outside of the school are essential to creating an enabling environment for learning (Mertler, 2017). This is in line with the Department of Education's (2011c) Strategic Outcome Five, in the *Integrated Strategy on HIV, STIs and TB 2012 – 2016*, where the development of relationships/associations between schools and the surrounding community, such as the local police service, governing body members, school transportation services, local NGOs, caregivers of children in the schools, social workers, community health workers and child-welfare, is crucial to meeting the sexual and reproductive health needs of learners and educators. The importance of social capital in learners' development for positive sexual behaviour practice, has been found to promote referral networks for learners in order for them to be able to access better care (Bradshaw et al., 2014; Gupta et al., 2008).

2.7. Caregiver Involvement in Learners' Lives and Support for School Connectedness

Adolescence is a difficult and often stressful period for adolescents and caregivers as there are physical changes as well as adolescents breaking away from family norms as the questioning of family behaviour occurs, in order for adolescents to form their own identity (Gutman & Eccles, 2007). It is both a period of opportunity and a time of vulnerability. This period of experimentation with new ideas is also filled with vulnerability to health-risk (Aarø et al., 2014). This may place strains on the caregiver-adolescent relationship. Adolescents seek approval and knowledge from other sources besides caregivers at this stage and may value these sources more than they do their caregivers (Bell & Murenha, 2009; Brown, 2013). It may also impact on the importance of the role a caregiver plays in teaching their children about sexuality and sexual relationships (Buehler et al. 2006). In addition, the influx of media of a sexual nature intensifies the issue of learning about sexuality from non-standardised sources (Mashele, 2014).

Caregiver involvement in learners' lives in general has been indicated to have a direct impact on learner behaviour and development (Sulkowski et al., 2014). Contrary to popular belief,

the need for caregiver involvement in adolescent years does not decrease in favour of peer relationships (Buehler et al., 2006; Finegood, Raver, DeJoseph & Blair, 2017; Jimmyns & Roche, 2010). Although adolescents do develop more meaningful relationships with peers than those of their younger aged peers and their younger selves, caregiver relationships form the foundation for adolescent behaviour and identity (Bonnie et al., 2015; Turunen et al., 2012). Caregiver involvement is, therefore also a protective factor against the pressure from peers to have early sexual engagements and, consequently, be open to risky sexual behaviour (Rupp and Rosenthal, 2007). Research has established a strong connection between the caregiver involvement in the child and adolescent in school life and academic achievement in their children (Bonnie et al., 2015; Buehler et al., 2006). Higher levels of caregiver involvement in their adolescents' lives are linked with lower levels of delinquency, violent behaviour, secondary-school drop-outs, drug abuse as well as high educational attainment (Khaleque, 2013). This extends to health and wellness in terms of engagement in substance abuse and risky sexual behaviour (Hutchinson, 2007). It has also been documented that high caregiver involvement is likely to lead to a delay in the onset of sexual activities, a decline in the number of sexual partners as well as an increase in the use of protective measures (Buehler et al., 2006; Namisi et al., 2013). Caregiver involvement is, therefore, a protective factor against the engagement in risky sexual behaviour and substance/alcohol abuse (Namisi et al., 2013). Caregiver monitoring and supervision of learners involves being aware of the whereabouts of companions and activities of learners (Buehler et al., 2006; Namisi et al., 2013). Openness and warmth in communication with adolescents, having 'the talk' with them to prepare them for sexuality and being a positive support system for learners are key to implementation of sexuality education in learners' lives (Buehler et al., 2006; Khaleque, 2013).

Caregiver involvement in the school is evidenced by caregivers' attendance at school functions and caregivers' meetings, participation in the school governing body and other extra-curricular school programmes as well as assistance and supervision of the learner's homework (Buehler et al., 2006). In addition, it includes provision of learner transportation (on a daily basis or for the purpose of sports/cultural activities), liaison with educators in the event of their child breaking the school rules and acknowledgement of current happenings in the school by reading and signing letters sent by the school (Buehler et al., 2006; Finegood et al., 2017). Caregivers may find it increasingly challenging to be involved in their child's school life due to single-parenting, heavy workloads, domestic responsibilities, poverty and lack of transport, amongst other factors.

Learner personality, type of community, as well as the geographic location of the school/home may be additional contributing factors to caregiver involvement (Namisi et al., 2013). Although there is much evidence for lower socio-economic status caregivers as being less involved in learners' lives and in their child's school, this may not necessarily need to be the norm as caregivers may be able to invest in their child's lives and schooling by prioritising this aspect in their lives, although this group do face more challenges in doing so than caregivers of a higher socio-economic status (Hutchinson, 2007; Koen, 2011).

In addition, schools are also responsible for caregivers' participation in the school and their children's academic lives (iKamvayouth, 2016). An SA study indicated that school-encouraged-caregiver -participation varied in different types of schools (Aaro et al, 2014). It was found that in rural schools caregivers are often not afforded the opportunity to play a full role in the governance of a school (iKamvayouth, 2016; Aaro et al., 2014). In most cases decisions were taken by the senior management team instead of the school governing body (Aaro et al., 2014). It is imperative for schools to encourage caregiver participation by not taking on sole responsibility for learners, thereby disengaging caregivers from the school. The study also revealed that the lower the socio-economic status or PQ of the school, the more likely schools were to take sole responsibility for learners, to the detriment of caregiver involvement. Schools may feel that they are making a positive impact by relieving caregivers of responsibilities. However, it is recommended that they recognise and act on the positive impact that caregivers can have on learners' lives (Rupp & Rosenthal, 2007).

2.7.1. Caregiver involvement and prevention of risky sexual behaviour

Caregivers of learners are viewed as an integral component of the attitude and behaviour-change in the process of safe sexual behaviours, as they instil and validate the values, morals and teachings echoed by the sexuality education component of the LO curriculum (Bonnie et al., 2015; Koen, 2011). The extent of caregiver involvement in the school, learners' lives and reinforcing the teachings in the LO curriculum plays an important part in the promotion of learner safe sexual behaviours (Scalici & Schulz, 2014). A study by Finegood et al. (2017) indicated that one half of 12 to 19-year-olds reported that their caregivers had the most influence on their decisions about sex. However, studies also indicate that caregivers are less likely to discuss aspects of sexuality with their children (Adams-Tucker et al., 2016; Jimmyns & Roche, 2010; Johnson et al., 2008).

Caregiver failure to discuss sex with their children, gives an implicit message that sex is something which should not be discussed across age divides (between adults and youth), but only between the young people themselves, as equals, or that it is taboo for youth to discuss it at all (Amoateng, 2006; UNAIDS, 2009). According to learners' perspectives, there is a distinct preference for caregivers to be involved in their sexuality education. However, this is actually less likely to occur in practice. With reference to past literature, caregivers are unsure of the nature and age at which to communicate with their children regarding sex (Hutchinson, 2007; Khaleque, 2013). In addition, they do not view themselves as a viable and relevant source of sexuality information, preferring the school to be responsible for their child's sexual education (Khaleque, 2013; WHO, 2006). Despite caregivers being mostly aware that sex is being discussed by peers, they feel outdated as a source of sexual education for youth and do not believe that youth will view them as a reputable and reliable source (Finegood et al., 2017; Khaleque, 2013). Caregivers may also be of the opinion that if they speak to their children about sex and or purchase contraceptives for them, it will encourage early sexual activity and increase the engagement in risky sexual behaviour (Hutchinson, 2007).

2.7.2. Best practices for caregivers to prevent learner risky sexual behaviour

Programmes such as the sexuality education programme in the LO curriculum are usually focused on promoting communication between adolescents and their caregivers (Adams-Tucker et al., 2016; DoE, 2011c). This includes examining effects on the frequency and quality of caregiver-adolescent communication regarding issues related to sexuality. A secondary objective is to study challenges in caregiving skills and caregivers' attitudes towards sexuality communication with their adolescent children (Aaro et al., 2014; Namisi et al., 2013). According to iKamvayouth (2016), caregivers can be supportive and involved in their children's lives and assist in risky sexual behaviour prevention in the following manner:

- By attending caregivers meetings;
- Monitoring their child's awareness of their status;
- Supporting their child through the process of becoming aware of their status;
- If a caregiver has been affected by HIV and AIDS they could give motivational talks to learners at the school (iKamvayouth, 2016);

- Communicate with and be open with their children about sex and encourage their children to talk to them regarding any concerns they have about sex;
- Be supportive when obtaining contraceptives;
- Encourage and monitor their school attendance;
- Knowing and monitoring their child's whereabouts and with whom they spend time; and
- Encouraging their children to be responsible for themselves.

Caregiver bonding with their adolescents may enable more comfortable communicating with caregivers about sex (Namisi et al., 2013). Adolescents who have a closer bond with caregivers may also share or feel more influenced by their caregivers' values (Buehler et al., 2006). Caregivers may, in turn, have a better understanding of their adolescent's sexual behaviours (Finegood et al., 2017). Bonding is created through openness in communication between caregivers and children (Finegood et al., 2017). It is apparent that what youth would prefer is more openness with their caregivers regarding their sexual lives so that their caregivers can almost exist in the role of a more respected and knowledgeable peer (Jimmyns & Roche, 2010). This would be a preferable situation as youth can then learn more and correct information from more mature and experienced adults who have their best interests in mind, have the support they require when obtaining contraceptives and not be abandoned to face the stigma by nurses/other staff at clinics when they attempt to obtain contraceptives (Wood & Jewkes, 2006). As a result of caregiver-child bonding, relations of the family experience of sex education impacts on learner participation and perceptions of school sexuality education (Buehler et al., 2006). For example, if communication on sex in the home is taboo, learners are less likely to engage in the topic at school due to the associated embarrassment (Bonnie et al., 2015). In addition, experiences that are outside of the learners' and caregivers' active role affect learner experiences of school sex education (Namisi et al., 2013). For example, a learner with caregivers affiliated to a religious organisation may be influenced by the moralistic views on sex and abstinence before marriage, resulting in the learner's perception of discussions around sex as being taboo (Hutchinson, 2007). The child may, therefore, experience embarrassment regarding discussions on sex at school, emanating from the belief that it is forbidden to discuss before marriage (Turunen et al., 2012).

Research has indicated that in some cases, learners are being encouraged by caregivers or by cultural norms to engage in unsafe sexual behaviours such as sex for financial gain, which may

benefit the family, and the need for teenage girls to prove their fertility by becoming pregnant during their teenage years (Koen, 2011). Further cases may be for boys to prove their masculinity by having multiple partners and promoting an unequal responsibility for the use of condoms (Coetzee, Dietrich, Otwombe, Nkala, Khunwane et al., 2014; Bell et al., 2008). For example, boys should not require their female partners not to use condoms as a demonstration of trust (Bell, Bhana, Petersen, McKay, Bell et al., 2008; Coetzee et al., 2014).

Caregivers are role models for their children and set a precedent as to the extent to which safe sexual behaviour is adhered (Rupp & Rosenthal, 2007). Research has indicated that some children are ill-affected by caregivers' risky sexual behaviours and, therefore, shun these behaviours in their own lives (Finegood et al., 2017). It is also important for caregivers to be role models due to the direct impact this can have on their children if caregivers become HIV positive. In SA a considerable number of learners have been orphaned by caregivers with HIV and are left vulnerable to poverty (Makiwane & Mokomane, 2010; Shisana et al., 2009; Willan, 2013). Therefore, their attempts to cope with lack of finances places them at a risk of participating in risky sexual situations, sometimes, for purely financial reasons. This cycle has a higher possibility of being repeated in HIV-induced poverty-stricken environments (Roth & Brooks-Gunn, 2010; Shisana et al., 2009; Willan, 2013).

The involvement of caregivers and the community in sexuality education needs to be addressed so that compromising social and cultural norms may be improved in order to reduce risky sexual behaviour (Bornstein, 2016; Brown, 2013). It is imperative that caregivers show their children how to apply sexuality education messages in practice in their daily lives, as caregivers often live or have lived in the same or similar environment and have a working knowledge of the challenges that that specific environment presents to engaging in safe sexual behaviours (Rupp & Rosenthal, 2007). It is crucial that caregivers be aware of the barriers to safe sexual behaviours in their specific cultural, societal and socio-economic environment. In addition to being aware, caregivers should also do their best to protect and teach children skills to overcome these barriers so that children are protected from risky sexual behaviour even if it is their own responsibility or that of another (i.e. rape or sexual abuse) (Amoateng, 2006; Peltzer, 2013).

Research suggests that the absence of paternal involvement influences the sexual debut and sexual risk-taking behaviour, especially for female youth (Brown, 2013; Finegood et al., 2017;

Idele et al., 2014; Shefer et al., 2013). The importance of positive paternal involvement in female learners' lives from birth to adolescence has been highlighted as a protective factor for female youth's sexual behaviour, increasing the age when they partake in sexual activity and reducing participation in risky sexual behaviour (Centers for Disease Control, 2013); Chilton, Pearson & Anderson, 2015). Theories posited for this premise range from female adolescent's need to secure a male figure as early in their lives as possible, due to the fear of the paternal figure leaving, as modelled by their own father, as well as the more biological theory of pheromones being given off by the father which secures the presence of a male figure (Centers for Disease Control, 2013; Chandra-Mouli, Camacho & Michaud, 2013; Chilton et al., 2015; Lee, Cheng & Leger, 2005). According to Finegood (2017), adolescents of both genders, who reported higher levels of caregiver awareness, were less likely to have had sexual intercourse before 16 years of age. Maternal involvement also affects adolescent girl's sexual behaviours (Buehler et al., 2006). Adolescent girls with higher levels of paternal and maternal awareness were less likely to have initiated sex before 16 (Namisi et al., 2013). It is, therefore, recommended that both caregivers be equally involved in female and male youth's lives.

Provided that the school is a source of sex education, caregivers may have an additional support system in the school when promoting safe sexual behaviours and a later age of sexual debut (Namisi et al., 2013). Caregivers are then provided the opportunity to make an impact on their children's lives by re-entering through the school system as a support system to reinforce the messages of anti-risky sexual behaviour prevention, which the school is already promoting (Koen, 2011). If there is consistency between the messages promoted by the school and those provided by the caregiver, it becomes less challenging for the caregiver, school and adolescent and, consequently, it becomes easier for the learner to internalise the messages of risky sexual behaviour prevention (Bell & Murenha, 2009; Bundick & Tirri, 2014; Coetzee et al., 2014). It is, therefore, important for caregivers to bridge the gap between the school and the home environments. It is necessary for caregivers to be involved in the school so that they can become more aware of what sexuality education taught via through the LO curriculum's messages, amounts to. These can then be reinforced at home. Caergivers should be responsible for promoting these messages as values and morals as well for pointing out the practicality of these messages to their children (Coetzee et al., 2014).

2.8. Theoretical framework:

Bronfenbrenner's Ecological Systems Theory (Bronfenbrenner, 1979) was used as the conceptual framework for the study while the Proposed Theoretical Framework for School Connectedness provides a systematic perspective on the internal school environment (Waters et al., 2009).

Bronfenbrenner's Ecological Systems Theory (Bronfenbrenner, 1979)

Bronfenbrenner's Ecological Systems Theory was used as a paradigm through which to understand how the contextual factors of the school environment impacts learners (Bronfenbrenner, 1979). As per Figure 3 below, a contextualised approach has been used to view the school environment's impact on learners lives and in particular, their choices around risky sexual and other risky behaviours. Learners are the centre of the scheme and are influenced by the microsystem of the school, home and peers. The relationship between the educators and learners' caregivers, educators and learners' peers as well as learners' caregivers with learners' peers is the mesosystem. The exosystem is the geographic environment surrounding the school and networks of social support offered via the school. The macrosystem serves as the overall definition of a learner's culture. This includes the political and social beliefs of the culture, defined by being part of a group with a common heritage or identity. The chronosystem is made up of the major life transitions, environmental events and historical events that occur during development. The specific incidents tend to change or transition how the learner interacts with others.

Figure 3: Bronfenbrenner's Ecological Systems Theory Applied to the Research

Life transitions and events

Learners culture

Geographic environment and networks of social support

Relationships between peers, educators and caregivers

School, home & peers

Learners
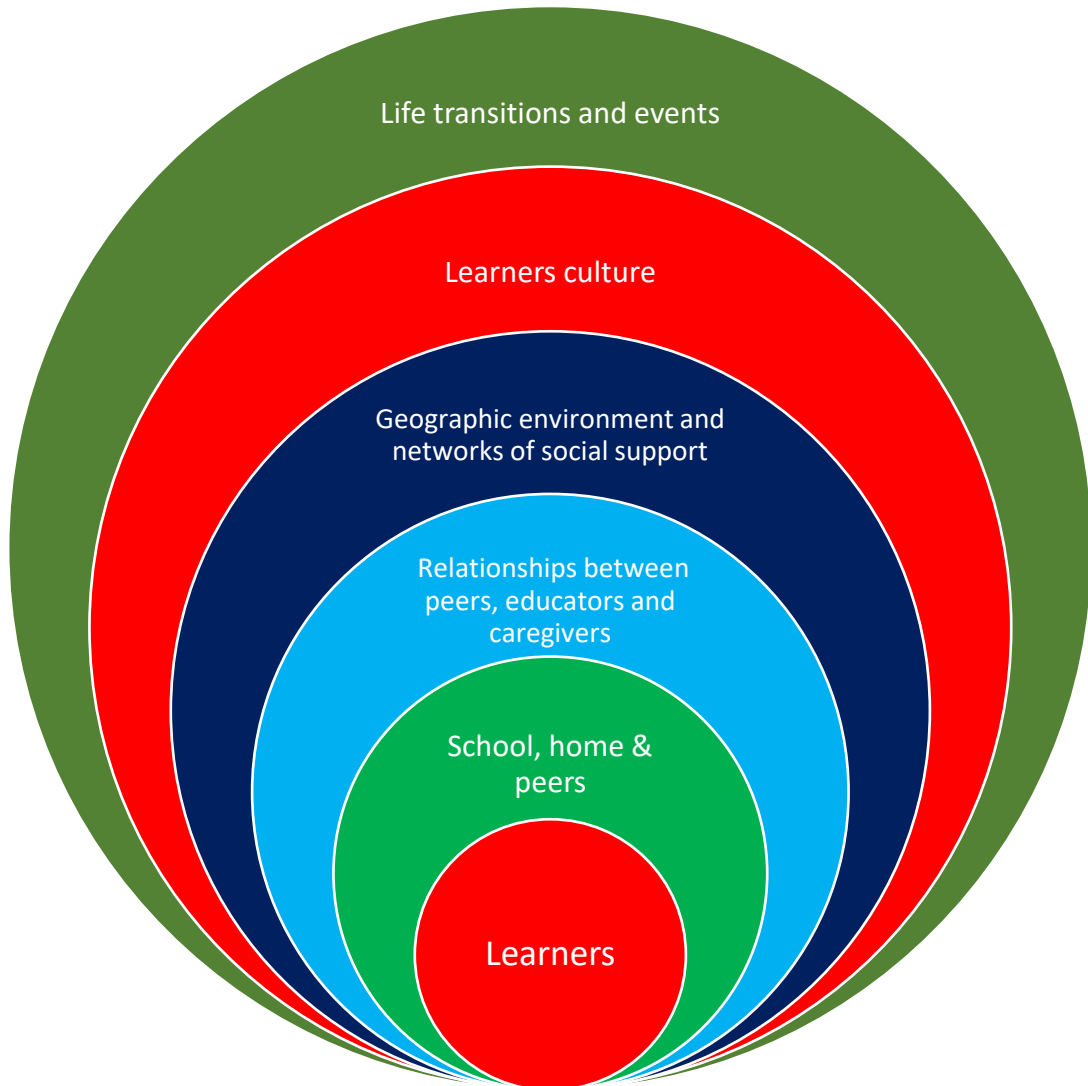
A proposed theoretical framework for school connectedness (Waters et al., 2009)

The theoretical framework that was developed for the study (Figure 4: The Thesis Model Summary) was grounded in the theory of Waters, Cross and Runions, (2009) which is a proposed theoretical framework for school connectedness. Figure 4 below is the model used for the study and highlights the various contributing factors which constitute the school environment. It also indicates the responsibilities and contributions to the school environment, of the various role-players in ensuring a positive environment in order to support the aims of sexuality education.

Figure 4: The Thesis Model Summary

Inputs

Outputs

Policies, programmes, safe & sanitary environment & healthy relationships between school staff and parents.

Parents' involvement in the school, school connectedness and relationships with learners.

Educator and other staff engagement with the LO curriculum & learners, school connectedness & being role models to learners.

Learner engagement in the school curriculum & connectedness with educators and parents.

School culture and climate

Parents

Educators and school staff

Learners

The internalisation of messages in the LO curriculum which impacts on learner sexual behaviour and attitudes (likelihood of engagement in risky sexual behaviour).

All relationships between each sphere are inter-related and affect each other which impact on learner sexual behaviour and attitudes. Learners sexual behaviours and attitudes are influenced by school staff, parents and the school environment. Learners are affected by the school climate in the same way that they form the school climate. School staff and parents also affect the school climate.

Waters et al. (2009), proposed a theory for social and ecological structures supporting adolescent connectedness to the school in light of a systematic review carried out amongst school-connectedness theories. This model is a model of school connectedness and proposes a

comprehensive explanation of how a school's ecological and social environment dynamically and reciprocally interacts with adolescents to satisfy their innate needs of autonomy, competence and relatedness in order to meet their evolving developmental needs and to improve developmental health outcomes. The theory consists of four phases: Phase 1) School Social Ecology; Phase 2) Developing a Connection to School; Phase 3) Person-Environment Fit and Phase 4) Health Outcomes. The theory is outlined in relation to the study below:

2.8.1. Phase 1: School Social Ecology

This is a combination of the organisational and interpersonal processes. The organisational process consists of the structural, functional and built environment the school presents. For the purposes of the study, this component of the phase will assist in understanding the physical safety of the school and its structural organisation in terms of the number of learners, leadership and departmental organisation. Functional aspects include the discipline and morality systems, level of learner involvement in decision-making, approaches to teaching and learning, caregiver involvement and availability as well as learner involvement in extra-curricular activities. The interrelationship component of this phase will assist in describing the relationships between school staff, learners and educators, between peers and between learners and their caregivers. In addition, school resources such as the physical building, furniture, security measures, communication tools, technological equipment, teaching aids etc. are important aspects of the school environment.

2.8.2. Phase 2: Developing a Connection to School

Autonomy, competence and relatedness all play a role in the development of the connection to the school. Connectedness is defined as the extent to which learners feel autonomous yet supported and related to adults (educators and caregivers) and peers.

2.8.3. Phase 3: Person-Environment Fit

The school context, specifically with its ability to adapt to the changing needs of the learners given the decreased reliance on caregiver support and increased reliance on peer support, is engaged with in this phase. The second component of this phase is the external support such as caring and supportive relationships, structured use of time and clear and consistent boundaries that are tailored to the developmental needs of adolescents. The theory is based on the ideology that

young people seek more autonomy over their decision making and benefit from the development of positive values, social competencies and a commitment to education. These needs should be taken into account by the school when tailoring the learners' academic years to create a more responsive person who will fit into the environment. This 'person-environment fit' construct is based on the premise that the implementation of developmentally appropriate school ecology helps young people feel as though they belong, are respected and are valued by others. This, in turn, promotes adolescent development and health.

2.8.4. Phase 4: Health Outcomes

Possessing a high level of connection to the school has been associated with health, academic and social outcomes for young people (Waters et al., 2009). This phase is characterised by the level of safety, care, structure, expectations for learning, fairness and clarity of discipline expectations. The higher the levels of these constructs, the more likely learners are to be connected to the school and experience positive academic, health and social outcomes which include lower rates of risky sexual behaviours. This can also occur vice versa i.e. the more learners, caregivers and educators are inter-connected and connected to the school, the greater the degree of safety, care, structure, expectation for learning, fairness and clarity of discipline expectations. Therefore, an environment of school connectedness creates further school connectedness.

2.9. Conclusion

Given the numerous factors that may increase learners' HIV, STI and teenage pregnancy risk and vulnerability, responses to these issues need to address both individual and structural factors. A review of individual behaviour-change strategies in the Lancet in 2008, (as cited in Coates, Richter & Caceres, 2008) found that the effectiveness of behaviour-change interventions in reducing risky sexual behaviour was greatly improved when the interventions incorporated strategies to address structural factors that impacted on the individuals' risk-behaviour. The sexuality education component of the LO programme, therefore, needs to be positioned within the merging of determinants of HIV/STI and teenage pregnancy risk and vulnerability that permeates the lives of South African youth. In its implementation and delivery, the sexuality-education programme needs to ensure that it effectively addresses the different levels of factors that create circumstances of risk and vulnerability in the lives of school-going youth. Prior research suggests

evidence that curriculum-based life skills and sexuality education is largely falling short of its aims to affect the behaviour of youth positively. What is required is to better understand the influences within the school environment that contribute to the failure of these programmes. This line of inquiry is especially pertinent at this time when the LO curriculum in SA is being reviewed and revised. If there is no clear understanding of the factors that can either enhance or hinder the effective implementation of the revised LO programme in diverse school contexts in South Africa, then the potential positive gains associated with effective revision of the LO programme will not be fully realised. The effective implementation of Life Skills education requires a school environment that is conducive to a participatory approach as well as assumes child-centred learning and positive role models (Boler & Aggleton, 2005). Ultimately, sexuality education specific LO lessons carried out in an environment where learners' do not feel supported, cared for, and have no positive role models to look up to are of limited value for learners (Smith & Harrison, 2012). The study aims to understand how learners and educators perceive and experience their school environments to determine whether these external conditions are conducive to the aims of the LO programme. This study, therefore, presents a positive investment which aims to assist school principals, educators, caregivers and learners in gaining the full benefit of the revised sexuality education component of the LO curriculum.

CHAPTER 3

RESEARCH METHODOLOGY

3.1. Introduction

This chapter outlines the methodology used for the study. First, a brief description of the study setting is provided. This is followed by the study's permissions and ethical principles. Phase one of the study which is a pilot study to assess the feasibility of instruments and the refinement thereof, is presented. Thereafter, phase two, which is the main study is presented. The general research design for both phases are covered. The general research design is an overview and provides a rationale for the use of a concurrent mixed-method approach, involving observations, cross-sectional surveys with learners and qualitative in-depth interviews and focus groups with educators and caregivers respectively. This is followed by the various categories of the stakeholders sampled. The sampling, instruments used, data collection and procedures followed, and data analysis used for each stakeholder is presented in the same order in which the research design was covered i.e. 1) School observations, 2) Learner cross-sectional surveys, 3) Qualitative in-depth interviews with educators and 4) Focus group discussions with caregivers. The section is concluded with a summary of the findings. An integrated analysis and a section on study rigour are presented in the sections which follow.

3.2. Study Setting

The research study was conducted at four secondary schools with Poverty Quintiles (PQs) of two to four in the Umlazi district in the Ethekwini region of the province of KZN in SA. The Umlazi district within KZN was chosen for the research study because the district recorded the highest HIV prevalence in 2008, 2010 and 2016 and because the incidence of HIV was recorded as the third highest source of morbidity in the district in 2016 (Department of Health, 2010; Department of Health, 2013b; Department of Health, 2016). Figures from the Department of Health (2016), indicated that HIV prevalence in the Umlazi district was 45.7% which was the highest in the districts within KZN in 2016. In the Umlazi district municipality there are 586 schools; 158 of which are combined or secondary public schools. Fee-paying schools constitute those schools in the higher PQs and vice versa for No-Fee paying schools (DoE, 2016). In 2016 the DoE (2016), reflected the following dispersion of secondary or combined public schools in

each of the PQs in the Umlazi district: PQ one has 18 public schools at 11.4% (N=18), quintile two has 30 public schools at 19% (N=30), quintile three has 50 public schools at 31.6% (N=50), quintile four has 28 public schools at 17.72% (N=28), quintile five has 17 public schools at 10.8% (N=17).

Matriculation pass rate (based on the scholastic academic results of the last grade i.e. Grade 12 secondary school level, which is ultimately the school exit examination) was also used as a criterion for the selection of schools in the study. This is due to the schools' performance being un-reliant on socio-economic status alone i.e. schools from lower PQs may not necessarily have a lower academic performance and learner wellbeing (Bond et al., 2007; Frederickson et al., 2009). Generalised findings are that the more affluent the school, the higher its pass rate and vice versa (DoE, 2011). However, there are exceptions to this generalisation. There are schools with 100% pass rate in all quintiles in the Umlazi district and schools with a 0% pass rate in PQs one, two, three and in the more affluent schools categorised as PQ four. There are no schools with 0% pass rate in PQ five in the Umlazi district however, there are some PQ five schools which have performed below the level of lower level PQ schools. For example, there is one PQ five school where only 40.2% of learners passed (DoE, 2015).

It has been established that socio–economic circumstances have impacted negatively on average matriculation pass rates (Bond et al., 2007; Sulkowski et al., 2014). As previously mentioned, KZN, is one of three provinces with the most under-resourced schools. KZN and other provinces in SA, such as Limpopo and Eastern Cape also consistently record pass rates well below the national average (DoE, 2015). Ultimately, school access to resources is an important factor influencing matriculation performance (DoE, 2015; DoE, 2016). The majority of learners from ordinary public schools with the lowest pass rates of below 30%, are in PQs one and two in South African schools (DoE, 2016). Conversely, no PQ five school in the entire country recorded a pass rate of less than 20% in 2016 (DoE, 2016). Furthermore, most learners from public ordinary schools who qualify to study towards a Bachelor's degree are from quintiles four and five (DoE, 2015). In 2015, the Umlazi district recorded a matriculation pass rate of 74% and was rated third in the province of KZN (DoE, 2016). The Umlazi district was therefore selected for the study due to having recorded the highest HIV prevalence in the country in 2008, 2010 and 2016 and yet a relatively higher matriculation pass rate than other districts in the KZN province in the same years

(DoE, 2015; DoE, 2016). For the study, data from the quantitative and qualitative studies were collected during the period of February 2016 to April 2016. Figure 5 below indicates a geographic location of the Umlazi district situated in the Ethekwini region in the province of KZN.

Figure 5: Map of South Africa showing the location of study – Umlazi, Ethekwini, KwaZulu-Natal
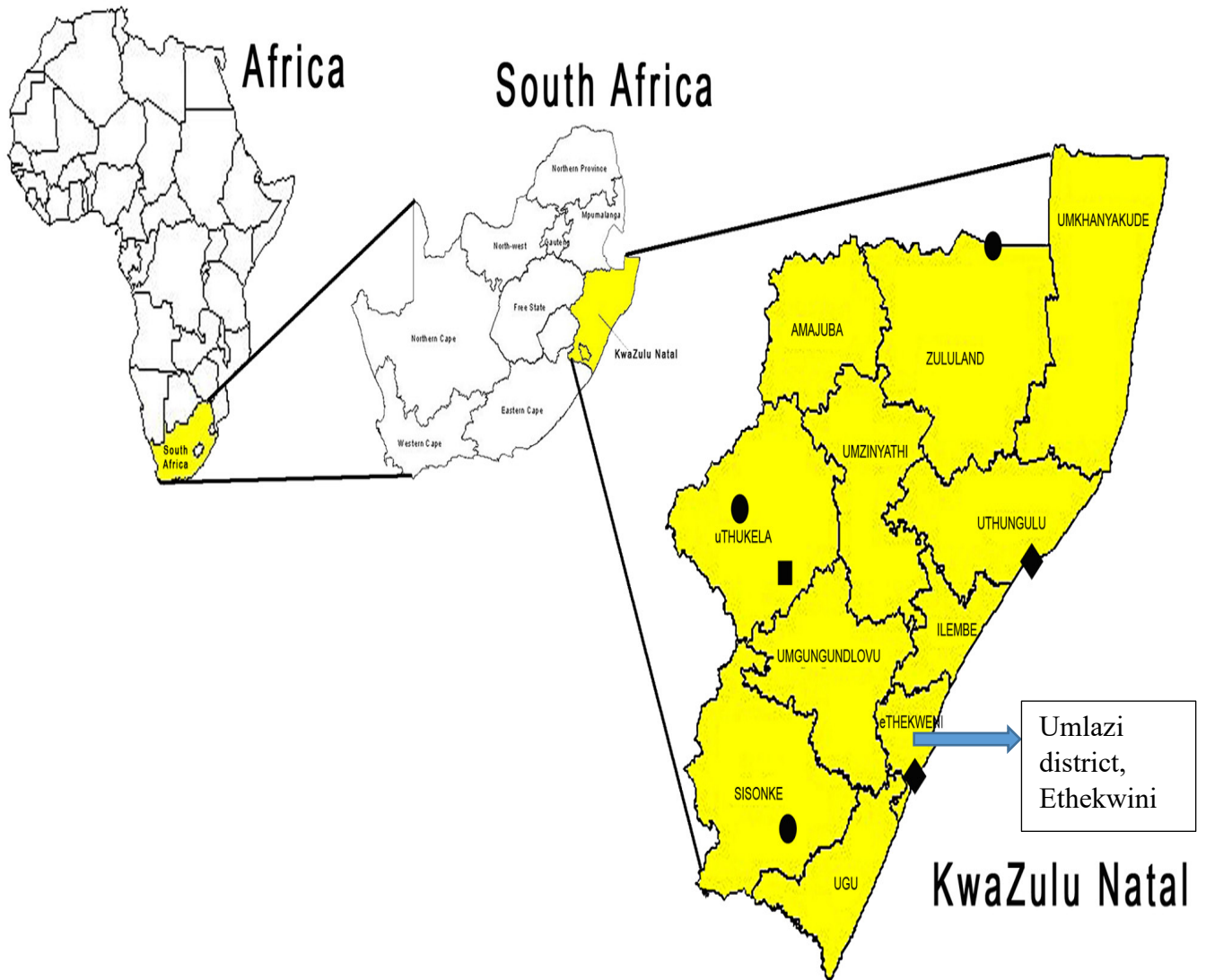
3.3. Study Permission and Ethical Principles

In order to conduct research in schools in SA, it is a requirement to obtain permission from the relevant provincial Department of Education which in this study was the KwaZulu-Natal

Department of Education (DoE, 1999). The provincial DoE was consulted for permission to carry out the study involving learners, caregivers of learners and educators as well as for the researcher to conduct school observations at schools in the Umlazi district of KZN. The DoE document providing permission is in the Appendices section and labelled Appendix M: 'Permission from the KwaZulu-Natal Department of Education.'

The Faculty of Humanities, Howard College, University of KwaZulu–Natal, Durban, granted ethical approval for the study (Humanities and Social Sciences Research Ethics Committee, 2015). The study is on the sensitive topic of sex education and therefore ethical procedures and precautions were necessary to ensure that the learners' identities were and are protected. The Ethical Clearance from the Faculty of Humanities, University of KwaZulu-Natal's approval document is in the Appendices section and labelled Appendix N: 'Ethical Clearance from the University of KwaZulu-Natal.'

Letters to the principal were sent to the principals of all schools in order to inform them of the nature of the research and to obtain permission (See Appendix K: 'Letter Requesting Access to Schools – School Principals'). Letters of consent with the purpose of informing the learners' caregivers of the research and obtaining the learners' and their caregivers' permission had been sent to the caregivers and the learners before the cross-sectional survey was administered (See Appendices F: 'Letter of Informed Consent–Caregivers of Learners' and E: 'Letter of Informed Consent– Learners' respectively).

All respondents and participants' (learners, educators and caregivers) autonomy was protected and participants remained anonymous at all times throughout the study. Participants were invited to participate on a voluntary basis. In addition, the study adhered to the ethical principles of confidentiality, anonymity and the right to withdraw. The researcher engaged in an explanation of the aims and objectives of study to the target audiences in order for them to understand the purpose and importance of the impact of the study for themselves and their role in the study's purpose. These considerations were provided in the instructions that were provided to the learners, educators and caregivers before the cross-sectional survey, educator in-depth interviews and caregiver focus group discussions commenced (See Appendices E to I). Participants of educator in-depth interviews and caregiver focus group discussions were also informed of the permission to audiotape qualitative in-depth interviews and focus group discussions (Please refer to Appendix

I: 'Informed Consent letter for Educators and Caregivers for participation in Interviews and Focus Group Discussion Recordings' in this regard). There were no refusals from learners, educators and caregivers to participate. Regarding caregiver recruitment, letters of request were sent to caregivers of learners and those who were able to participate attended the focus group discussion session.

Regarding the cross-sectional survey for learners, letters to obtain permission from caregivers of learners were also submitted to caregivers to sign if they permitted their child/children to participate in the cross-sectional survey. Only those learners whose caregivers had signed and returned the letter to the school, who returned it to the researcher, were allowed to participate in the cross-sectional survey (Please refer to Appendix F: 'Letter of Informed Consent - Caregivers of Learners'). Since the learners were of adolescent age, the researcher had ensured that the school psychologists/counsellors or LO educators (in the case of there not being a psychologist/counsellor present at the school); were available in case adolescents required any psycho-social support. Cross-sectional surveys were administered during the school day, usually during the LO period and this facilitated the availability of the school counsellor/psychologist/LO educator during the cross-sectional survey completion. The researcher also ensured that participants were informed that they had voluntary participation and were able to withdraw from the study at any time (Please refer to Appendix E for the Learner Consent letter). All adolescents who were contacted to participate in this study obtained their caregivers' permission to participate. (Please refer to Appendix F: 'Letter of Informed Consent–Caregivers of Learners' for the letter to caregivers requesting permission for their child to participate in the study.) Informed consent letters were provided to the schools to hand out to the learners and caregivers of learners from two classes each of Grade 9 and 11 learners, from each of the four schools. There was a total sample size of N=600 to whom the letters were provided prior to the date cross-sectional surveys were administered, in order for caregivers to sign and have them returned to school. These signed letters of consent were collected by the researcher on the day of cross-sectional survey administration.

School Observation ethical principles were adhered to in order to observe the school environment in its most natural state, in keeping with the principles of ethnography to ensure objectivity (Kazdin. 2003). In addition to requesting of the school principal's permission for the researcher to observe the school environment (Please refer to Appendix K: 'Letter Requesting Access to Schools – School Principals' for the letter requesting permission to conduct the study in

the school with the inclusion of permission to observe the school), the researcher attempted to remain as unobtrusive as possible in order to gain an optimal overview of the school environment (Kazdin, 2003; Neuman, 2011). No direct interaction was conducted with any stakeholder (learner, educator, staff member or caregiver) (Patton, 2002). The researcher's observation was conducted at a time when school lessons were in session and it was therefore a period of minimal presence of stakeholders outside of the classrooms (Neuman, 2011). Given that the observations were primarily of the physical school environment, no interactions were recorded and that the observations posed no risk or harm to any of the individuals who may have been present, it was deemed unnecessary to have informed consent of any of the individuals present (Neuman, 2011; Neuman, 2006)

3.3.1. Data storage

The section below notes how the quantitative and qualitative data were stored by the researcher to ensure that the ethical principles have been adhered to adequately. All cross-sectional surveys, audio files and transcribed content from the qualitative in-depth interviews and focus group discussions were submitted for safe keeping in a secure compartment provided by the researcher's supervisor in the Discipline of Psychology, School of Applied Human Sciences, Howard College Campus, University of KwaZulu-Natal, Durban, South Africa. The cross-sectional surveys, files and transcriptions will be kept in this compartment for a period of five years before being destroyed. Electronic copies of the quantitative data are only available to the researcher and the researcher's supervisor and are being safely stored so as to ensure confidentiality and to avoid possible access by any third party.

3.4. Research Design Overview

The overall research design is discussed followed by the different phases of the study with their particular methodology i.e. sampling, instruments, data collection and procedures as well as data analyses employed. The phased approach included a pilot study and thereafter a main study. The study uses a pragmatic, Post-Positivist paradigm due to the multiple methodologies used as well as the equal priority assigned to the three main sources of data i.e. the learners' cross-sectional survey, qualitative educator in-depth interviews and caregiver focus-group discussions (Hanson, Creswell, Plano-Clark, Petska & Creswell, 2005). According to Babbie and Mouton (2005),

Hanson et al. (2005) and Smith (2015), pragmatism is the best paradigm for mixed methods research. Pragmatism is a set of ideas which draws on multiple stakeholders' perspectives ideas including ideas on best practices, using diverse approaches within a study, and valuing both objective and subjective knowledge (Denzin & Lincoln, 2000; Hanson et al., 2005). This approach is thus directly relevant to the study's reliance on multiple stakeholder perspectives for best practices being implemented in schools, the use of quantitative and qualitative methodology and the reliance on objective and subjective means of obtaining data.

The research study is a concurrent mixed methodology design, which is considered a legitimate, stand-alone research design (Hanson et al., 2005). According to Hanson et al., (2005. p.244), a concurrent mixed methodology design may be defined as:

> The collection or analysis of both quantitative and qualitative data in a single study in which the data are collected concurrently, are given a priority, and involve the integration of the data at one or more stages in the process of research.

The use of a concurrent mixed methodology design is especially valuable in this study due to the methodology being established as being supportive of the integration of the data during the research process with the aim of convergence of the results and the resultant triangulation thereof (Babbie & Mouton, 2005; Hanson et al., 2005). This research design is especially relevant since the study intends to triangulate data which consists of quantitative cross-sectional survey for learners, qualitative educator in-depth interviews, focus group discussions with caregivers and the researcher's observations of the school environment, in order to better understand the school environment. In addition, the rationale for using a mixed method design is that using both qualitative and quantitative forms of data allows the study to gain a deeper understanding of the phenomenon of interest (Babbie & Mouton, 2005; Neuman, 2011). A further valuable and relevant attribute of a concurrent mixed-methodology design is that it allows the results of precise, instrument-based measurements (such as in the case of this particular study's learner cross-sectional survey) to be improved on by contextual and field-based information (in this study's case, the qualitative data generated by the study) (Babbie & Mouton et al., 2005; Hanson et al., 2005; Neuman, 2011). Qualitative research methods were used in conjunction with quantitative methods in order to determine the factors which play a role in the school environment that either support or inhibit the extent to which learners are able to retain and implement the sexuality

education messages learnt. In addition, concurrent research data collection methods were used for the purpose of prevention of possible response bias in the data by the possible priming of future participants, if the study were to be of a sequential nature (Babbie & Mouton, 2005; Hanson et al., 2005; Neuman, 2011). Figure 5 below presents a summarised diagrammatic representation of the study's research design.

Non-probability, namely, purposive quota sampling was used to gather all samples which meant that schools, learners, educators, and caregivers were selected based on their PQ (Babbie & Mouton, 2005; Robson, 2003). According to Patton (2002) and Smith (2015), purposive sampling intensifies in-depth enquiry and ensures thick descriptions. Participants are selected due to them being information-rich and illuminative and with the goal of obtaining insight into a phenomenon (Patton, 2002). This is particularly relevant to the study's intention to explore perceptions of sexuality education and its relevance to learners' lives from the perspectives of the various key stakeholders. Inclusion criteria included the fact that each school was purposefully selected on account of the PQ status to ensure that there was one school from each PQ which was within the Umlazi district of KZN. Further inclusion criteria applied, was that within each school, only grade nine and eleven learners, LO educators and their caregivers were selected for reasons pertaining to the increase of sexual activity between the relevant learner age groups cited in various prior studies (HSRC, 2014; Medical Research Council, 2008; Reddy et al., 2010; Shisana et al., 2009). A further reason for selecting these particular grades was for the purposes of comparison between the age groups which encompass a change in identity according to Erikson's *Stage five: Identity versus Role Confusion* component of the *Stages of Psychosocial Development theory* (Erikson, 1984). This is relevant for adolescents and their independent identity formation and resultant shifting away from familial normative values between the ages of adolescents in grade nine (usually 13/14-year-old learners) as opposed to those in grade eleven (usually 16/17 year old learners) (Erikson, 1984).

It is believed that the gathering of a diversified sample of public schools from across the Poverty Quintiles in the Umlazi district in the KZN province made provision for a relatively representative sample of the various poverty quintile schools (Babbie & Mouton, 2005; Neuman, 2011). The study was able to compare findings with schools which were considered to be amongst the best performing and worst performing schools in the country, according to the National Senior

Certificate pass rates for 2016. In selecting the schools and the participants therein from the Umlazi districts, the intention was to stratify the sample by PQs so that the sample was composed of a relatively equal number of schools from the lower PQs two and three, that are classified mainly as rural schools and schools from PQs four and five, that are primarily urban and more affluent schools. In addition, the nearest PQ one school, was further away than schools within the quintiles two to five, in terms of geographic location. Therefore, the researcher did not want to compromise data quality by conducting research in a school that was located on the outskirts of the Umlazi district and possibly out of the study setting. It was also assumed that the PQ two school would encompass the challenges and would be representative of the poorer and more disadvantaged schools in the Umlazi district. Therefore, for the purposes of the study, only schools from quintile two, three, four and five were used.

The research design consists of Phase one which was a pilot study in order to assess the feasibility of the instruments and refinement thereof (Please refer to section 3.4.1. 'Pilot Study' for the pilot phase of the study). Phase two consisted of the main study which comprised the researcher's observations of the school, cross-sectional surveys with learners, qualitative in-depth interviews with educators and focus group discussions with caregivers. Figure 6 below presents an illustrative guide of the study's phases:

Figure 6: Overview of the research study design, with steps followed
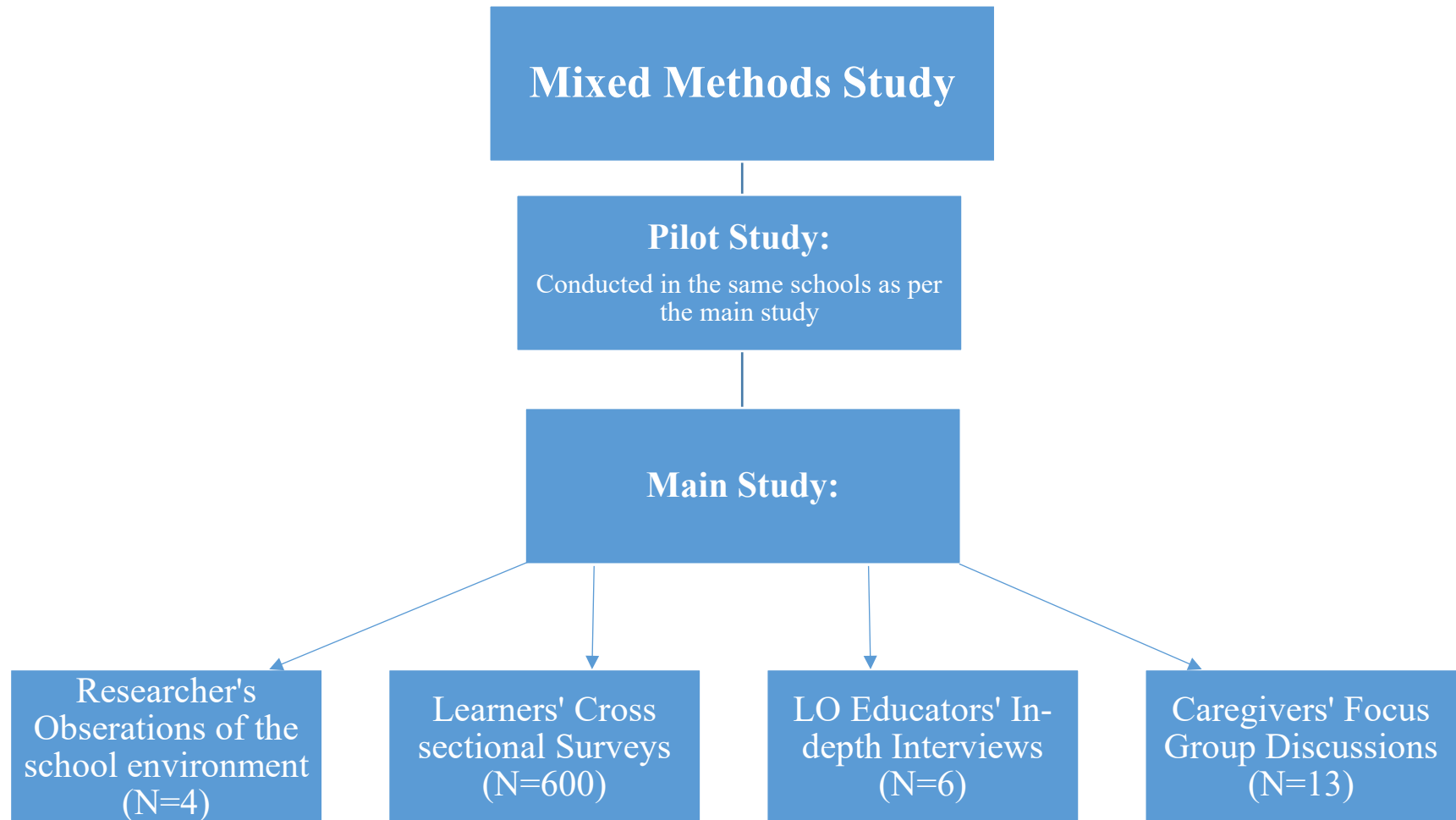
Further information regarding specific sampling strategies is provided in each sampling section within this chapter. (Please refer to Sections: 3.5.1. 'Sampling strategy and research participants' for school observations, 3.6.1. 'Sampling strategy and research participants' for the learner cross-sectional survey, 3.7.1. 'Sampling strategy and research participants' for educator in-depth interviews and 3.8.1. Sampling strategy and research participants' for caregiver focus group discussion sampling).

3.4.1. Pilot study

The first phase of the research was the pilot study which aimed to improve the feasibility and refinement of the instruments. All schools used for the pilot study were in the Umlazi district in KZN and were to be the schools the researcher would be contacting for the main study. The required amendments were made to the instruments thereafter. The pilot study was conducted at various schools in line with school availability and researcher adherence to the time schedule as delineated by the permission letter from the KZN Department of Education; which provided a year in which to complete data collection. (Please refer to Appendix M: *Permission from the KwaZulu-Natal Department of Education*).

All schools were selected on the basis of maximising the impact of refining the research instruments. Participating schools were informed of the objective of the pilot study and all respondents and participants were recruited by purposive sampling. Although the same schools were used, different respondents were used for the pilot and the main study. For the pilot study, different classes within the same school were contacted to participate in the study, than that of the main study. The learners were also informed not to disclose any information regarding the study to other learners and educators within the school due to it being a pilot study.

In improving the feasibility of and in refining of the *School Observation Guide*, a quintile five school was the location of the pilot school observation in order to observe the best availability of resources at the highest PQ school level. The rationale for this was to observe the resources which were absent in lower PQ schools. Thus, the PQ five school, served as a benchmark for best available resources in schools.

With regard to the learner cross-sectional survey, a PQ three school was used as the pilot for this portion of the data collection. The cross-sectional survey pilot aimed to refine and assess the comprehension of the level of language used in the items of the cross-sectional survey. The cross-sectional pilot survey was conducted amongst 20 grade nine learners. The rationale for this purposive sampling selection was that it is a school of middle PQ level and would thus assess the comprehension of learners from an average socio-economic level in this cross-sectional survey. An additional reason for selecting this school was that it was composed primarily of non-English first language speaking learners and would therefore assess the comprehension of this group. Grade nine level learners were selected since this was representative of the lowest grade level to complete the cross-sectional survey which served the purpose of gauging cross-sectional survey comprehension at the lowest academic comprehension level.

The in-depth interview guide for the educators was piloted at a quintile two school since the researcher could assess comprehension of the English language medium in which the instrument was conducted, at the lowest PQ with non-English first language speakers. The pilot caregiver focus group discussion was conducted with two caregivers who were caregivers of a PQ two school with the objective being to assess the comprehension of caregivers of learners at the lowest PQ level school, who were not first language English speakers.

3.4.2. Research design of the school observations

School observations were conducted by the researcher that document the negotiation process, as well as the initial researcher's observation of the school's physical environment in order to obtain a broader view of this environment and to triangulate the research with other measures. This view corresponds with that of Patton (2002), who indicates that observations allows the researcher to get closer to the phenomenon under study and thereby gains personal insight/experience into the inquiry which is critical to the overall understanding thereof. A qualitative ethnographic naturalistic observational research design was used and allowed for the presentation of the researcher's perspective and experiences of the physical school environment of each school selected to participate in the study, as explained above (Babbie & Mouton, 2005; Neuman, 2011; Patton, 2002). Naturalistic observation is often used to generate new ideas as it provides the researcher with the opportunity to study the situation comprehensively and this

approach often suggests avenues of enquiry previously unconsidered (Babbie & Mouton, 2005; Kazdin, 2003; Neuman 2011). Therefore, the observation approach allowed for an holistic understanding of the school environment (Patton, 2002). In addition, the researcher's observations of the school provided an account of the data which is comprehensible and provided feeling over and above empirical content (Neuman, 2011). In addition, this account of the data interpreted the information from the basis of the theoretical framework and from the relative perspectives of other individual educator participants (Babbie & Mouton, 2005; Hanson et al., 2005; Neuman 2011). Although, the school observation guide covered the observable physical aspects of the school environment, these observations of the physical environment may be proposed to inform the school climate against which to compare the perspectives of the respondents/participants i.e. learners, educators and caregivers of learners (Bradshaw et al., 2014; Gaurdin et al., 2010;). According to Kazdin (2003) and Smith (2015), naturalistic observational research methods are beneficial and were therefore found to be relevant to this phase of the study due to it affording the researcher the ability to observe the flow of the behaviour (in this case, the school environment and climate) in its own setting and thereby generate a study with greater ecological validity.

The researcher attempted to be as objective as possible and this was made increasingly possible by having a standardised *School Observation Guide* for all schools (Denzin & Lincoln, 2000; Neuman 2011). This guide was first developed and thereafter the researcher observed and made field notes upon attendance at the schools in line with the *School Observation Guide*. The researcher walked around the school to view resources and sanitation and made notes on the school as a whole, including classrooms, with a printed version of the *School Observation Guide* in hand (Neuman, 2011). In keeping with the principles of ethnography by Kazdin (2003), no persons were engaged in communication with the researcher during this period of observation of the school, so as to ensure objective observations of participants and physical environment settings in their natural setting.

3.4.3. Research design of the cross-sectional survey

Quantitative cross-sectional surveys with learners (psychometric measures) were concurrently used with qualitative in-depth interviews with educators and caregiver focus group discussions to understand learners' perceptions of school climate and culture, educator/learner

school connectedness and engagement with the LO curriculum's sexuality education component. The cross-sectional survey with learners included aspects related to school safety, the extent to which learners felt respected and accepted in the school as well as whether or not learners felt that they could be themselves in the school and to what extent. The cross-sectional survey with learners also covered whether and or not the school provided a conducive climate that reflected the values taught in LO and to what extent. The cross-sectional surveys with learners were compiled from various sources and partially based on the information gathered from the school observations completed in this study. However, the cross-sectional survey with learners was primarily informed by the researcher's review of prior literature and the theoretical framework which formed the origin of the study objectives. The instrument was developed in line with the study's objectives numbers one to five: 1. To investigate and understand the extent to which learners feel safe, cared for and respected by peers, educators and support staff within their school; 2. To determine and explore if learners have networks of social support they can access within their schools; 3. To examine and explore if learners feel they have positive role models at the school from which they can learn positive behaviour; 4. To study and to understand learners' perceptions of the discipline and order within the school environment; 5. To examine and gain an understanding of the overall school climate and values in terms of discrimination, stigma, acceptance, and tolerance etc. and how learners feel about being able to apply what they have learnt during LO, in the context of their school environment.

According to Babbie and Mouton (2005), Neuman (2011) and Neuman (2006), a cross-sectional survey is a research tool used to capture information based on data gathered during a specified period of time. Since the research study aimed to investigate learners' perceptions of the school environment and to examine relationships between school connectedness, school climate and the impact on learner internalisation of sexuality education messages over a period of time, a cross-sectional design was appropriate. This was due to this design being suitable for studies that are ideally descriptive and predictive in nature (Babbie & Mouton, 2005; Neuman, 2011; Trochim, 2002). According to Stewart & Shamdasani (2015), surveys are effective in determining the prevalence of any given attitude or experience. Thus, surveys were the selected form of instrument to measure sexual activity and attitudes surrounding the school environment. In addition, a cross-sectional rather than a longitudinal survey was used to determine the prevalence of learners'

attitudes and experiences across age differences (as differentiated by the two different Grade levels) over the same period of time. The data gathered is also from a sample of respondents with varied characteristics/demographics (Babbie & Mouton, 2005). The research findings help remove assumptions and replace them with actual data on the specific variables studied during the time period accounted for in the cross-sectional study (Babbie & Mouton, 2005; Neuman, 2011).

According to Babbie and Mouton (2005) and Neuman (2011), cross-sectional surveys have the following advantages: They can be used to prove and/or disprove assumptions, they capture prevalent conditions over a specific period in time, they contain multiple variables at the time of the data collection and many findings and outcomes can be analysed to create new theories/studies or in-depth research. For this particular study, quantitative cross-sectional surveys were also selected on account of them being less invasive (as compared to close-ended questions or alternate forms of qualitative data collection methodologies) and thereby lowering response bias (Strauss & Corbin, 1999); especially regarding personal questions relating to sexual activity. Response bias is decreased by the objectivity of the cross-sectional survey (Cluver et al., 2016; Morojele et al., 2013). In addition, according to Stewart & Shamdasani (2015) and Shai (2012), surveys which are self-reporting to a source which is not human reduces response bias. According to HSRC (2014) and Shai (2012) and the, risky sexual activity reporting is a sensitive topic and may possibly be perceived as threatening to respondents/participants. Literature postulates that the perceived threat of the sensitive nature of sex as a topic in a cross-sectional survey, may be reduced by self-reporting, respondent completion in large numbers and self-reporting to a source which is inhuman (HSRC, 2014; Neuman, 2011; Shisana et al., 2014). In addition, the reassurance of the ethical principles (Please refer to section 3.3. "Study Permission and Ethical Principles' for further details), enabled respondents to feel less threatened by the sensitive sexual activity questions during cross-sectional survey completion (Neuman, 2011; Neuman, 2006). The study incorporated all the threat-reduction factors as mentioned above, in order to ensure that respondents perceived the cross-sectional survey in the least threatening manner possible. Despite having taken any precautions, there is likely to be a response pattern in responses regarding a sensitive topic like sex.

The cross-sectional survey contained a few integrated open-ended questions of a qualitative nature to support the research findings of selected quantitative questions that required more

disclosure. The intention was for brief explanatory purposes for certain quantitative questions which required more disclosure. These open-ended questions were integrated into the quantitative cross-sectional survey. The usefulness of this approach is established as supporting integrated open-ended questions indicating that it may act as a "safety net" (Cathain & Thomas, 2004, p.2) and to assist the researcher in comprehensive coverage of the issues associated with the phenomena. Thus, it may serve to identify issues not covered by the closed questions, either by elaborating or explaining some of the findings from closed questions or by identifying new issues (Cathain & Thomas, 2004; Neuman, 2011).

3.4.4. Research design of the qualitative in-depth interviews with educators and caregiver focus group discussions

The qualitative component of the study included in-depth interviews with educators and focus group discussion with caregivers at the school environment. The intent was to gain a comprehensive and in-depth understanding of educators' and caregivers' views of sexuality education in general, message internalisation and the application of these by learners. This is in line with Braun and Clarke (2006) and Neuman (2011), who have established that in order to gain a deeper understanding of the perceptions of the topic as well as the manner in which topics are engaged with, a qualitative component of a study is more beneficial than a quantitative component. The purpose of conducting a qualitative study for the research study was to observe and to collect richer information from the participants in their natural setting which was especially important in this study due to it directly reflecting the various stakeholders' (learners, educators and caregivers) perceptions of the school environment, climate and culture (Neuman, 2011; Neuman 2006). Moreover, Denzin and Lincoln (2000), state that qualitative research can identify target populations, show the impact of programmes on these target groups and identify the challenges which present themselves in the implementation of current policy. This is particularly relevant to the study given its aims to view the educator challenges to implementation of the sexuality education programme in their schools as rolled out by the DoE policy. It also aims to establish the impact of the sexuality education programme on learners from the perspective of their caregivers and LO educators.

The qualitative aspect of the research is characterised by the following (Bogdan & Biklen, 1982):

- Natural setting: The research was conducted in schools and in school classrooms;

- Actor's perspective: An attempt was made to view the school environment as experienced from the participants' viewpoints to try to understand their actions and decisions from their own perspectives; and

- Focus on process: Events as they occurred were studied such as in the case of the school observations where observations were made based on occurrences at the time of the researcher's presence in the school;

- Ideographic motive: A contextual understanding of participants' and the schools' events, actions and processes were attempted. Thus, the broad context was taken into account.

Qualitative in-depth interviews were conducted with educators to explore their perspectives on the school as an enabling factor for implementation of best practice delivery of sexuality education for optimum learner internalisation and practice of sexuality education messages. Qualitative methodology was preferred to provide a richer understanding across ecological relationships and with specific reference to this study, the processes and relationships within the school environment and school climate (Babbie & Mouton, 2005; Hanson et al., 2005; Neuman, 2011). The qualitative research design allowed for a description of educators' perceptions and their experiences, as well as their subjective feelings regarding the teaching of sexuality education in their own schools. Furthermore, the in-depth interview approach allows for an understanding of educators' perceptions and experiences (Hanson et al., 2005; Neuman, 2011). According to Patton (2002), the purpose of in-depth interviews is to capture direct quotations regarding educators' perspectives on the topics. The intention is to provide an account of the data which is comprehensible, and which records feeling over and above empirical content (Hanson et al., 2005; Patton, 2002). In addition, it aims to interpret the information from the basis of the theoretical framework and from relative perspectives of other individual educator participants (Babbie & Mouton, 2005; Bogdan & Biklen, 1982; Hanson et al., 2005). The in-depth interview was used rather than focus group discussions due to in-depth interviews producing greater depth than breadth of the perceptions and experiences around the topics discussed (Stewart & Shamdasani, 2015). This was a necessity in this study which aimed to gauge the educator challenges to and enabling factors for optimal sexuality education teaching. In-depth individual

interviews differ from focus group discussions, not only in the number of ideas they produce, but in the comparability of the results, which are essentially more in-depth (Greenbaum, 1998; Krueger & Casey, 2015; Stewart & Shamdasani, 2015).

An additional component of the study was qualitative focus group discussions with caregivers to explore their opinions, perceptions and experiences on the school context. It also aimed to explore whether or not and to what extent, caregivers are included as a part of the LO curriculum's aims for learner HIV, teenage pregnancy, STI and risky sexual and alternate risky behaviour prevention. Focus group discussion data were generated by the participants in the research, who collectively focused on a provided theme (Vicsek, 2007). The qualitative research design using focus group discussions allowed for a thick description of caregivers' perceptions and their experiences, as well as their subjective feelings about their children learning about sexuality education at school and involvement in their children's lives (Stewart & Shamdasani, 2015; Vicsek, 2007). According to Stewart & Shamdasani, (2015) and Patton (2002), the qualitative focus group discussion approach allows for a collective understanding of caregivers of learners' perceptions and experiences. Researchers interpret the information from the basis of the theoretical framework and from the relative perspectives of other participants (Bogdan & Biklen, 1982). According to Stewart & Shamdasani, (2015), the advantages of focus group discussions include the group effect which is the manner in which group interaction affects the behaviour and motivations of those participants in the group. A further advantage is the researcher's ability to view the extent of the agreement and disagreement between participants first hand (Greenbaum, 1998; Vicsek, 2007). In-depth interviews differ from focus group discussions in that in-depth interviews are more likely to delve into deeper and into more focussed issues than gather information on the manner in which the themes are collectively communicated about, as in the case of focus group discussions (Krueger & Casey, 2015; Vicsek, 2007). In comparison, surveys differ from focus group discussions in that they are inherently limited by the questions they pose, and that data is bound by aggregating individual data to obtain a general consensus. However, in focus group discussions the researcher can obtain a first-hand comparison of how participants differ in their perceptions by asking them directly (Greenbaum, 1998; Krueger & Casey, 2015). According to Stewart & Shamdasani, (2015) and Vicsek (2007), it is increasingly common to use focus group discussions to provide data on how the respondents themselves talk about the topics

of the survey. This is relevant for this study due to similar topics being covered by the cross-sectional survey and the focus group discussion. Therefore, the focus group discussions for this particular study can, in addition to having different stakeholders' perceptions, provide more insight on how the participants talk about their individual and collective perceptions of the school environment and their individual as well as collective perceptions of their caregiver involvement in their children's personal and schooling lives.

3.5. School Observations

After obtaining permission from the school principals to conduct school observations, the researcher conducted observations of the physical school environment. (Please refer to Appendix K: 'Letter Requesting Access to Schools – School Principals' for requested permission to conduct school observations). The sampling strategy, research participants, measuring instruments, data collection and procedures, data processing and data analysis of the school observations are explained below.

3.5.1. Sampling strategy and research participants

Schools were purposively selected based on PQ. Schools which were eligible were from PQs two, three, four and five and had to be based in the Umlazi district in KZN. The realised sample was one school per PQ (N=4) which were selected from PQ two, three, four and five within the Umlazi district of the province of KZN.

3.5.2. Observation guide

The *School Observation Guide* was finalised after the outcome of the pilot study conducted for the purpose of refining the instrument. (Please refer to section 3.4.1. 'Pilot Study' for further details of the pilot phase of the study.) The measuring instrument was a pre-drafted structured school observation for standardised coverage of topics across all schools. (Please refer to Appendix A: 'Instrument – School Observation' for the instrument). Literature based on elements of physical school safety, hygiene, classroom environment and available resources informed the *Observation Guide*. More specifically, the school observation was informed by the 32 item scale with three subscales assessing the overall school safety in terms of infrastructure, hygiene and physical and emotional safety of learners/educator perceptions of learner safety named the *Classroom*

Observation: Healthy school environment scale (Hanson & Kim, 2007). The school observation instrument consisted of Likert rating scales and open-ended questions which covered aspects of the learners' cross-sectional survey. The intention was to establish standardisation i.e. the study uses other measures which used the same scale but were completed by the different stakeholders. Due to schools having varying socio-economic statuses, the school observation process assisted in obtaining data on the school environment in a standardised manner. Therefore, the school observation consisted of the same set of observation categories for each school which were used to obtain a comprehensive overview of the physical school environment. However, this was the researcher's attempt to provide a perspective on the school physical environment (Denzin & Lincoln, 2000; Patton, 2002). In addition, school observations were conducted first in each school by the researcher to reduce response bias which may have been present in other data due to those measures being participant self-reporting measures (Neuman, 2011).

3.5.3. Data collection and procedures

The school principals were contacted telephonically and thereafter this was followed up by correspondence over email. Principals who provided permission for the research to take place in their schools were then contacted for a point of liaison which was usually the LO head of department at their school. Arrangements were made by the LO head at each school for the security guard at the schools to be notified of the negotiated date and time of the researcher's arrival and entry into the schools for the purpose of the school observation. At the time of the observation period, the researcher carried a pen and the observation guide as well as extra paper to make notes while walking around the schools. All physical venues of the school were observed including the school toilets, staff toilets, classrooms, reception areas, school halls, school fields, parking areas, trophy cabinets, school library, corridors, staff rooms etc. Depending on the size of the school the observation took between two to five hours. Data was collected via the ethnographic process of the researcher's observation of the school environment from which future participants in the learner cross-sectional survey, educator in-depth interviews and caregiver focus group discussions originated, in order to observe their natural context and settings for the purposes of triangulation. School observations were noted on the school observation sheet in real time during the initial visit to each of the schools. The researcher noted all the physical school environment attributes according to the school observation guide in an abbreviated manner.

3.5.4. Data processing and data analysis

The original school observation notes were transcribed by writing the already noted observations in full immediately after the visit to the school while the notes were still fresh in the researchers' mind. Themes were generated by thematic content analysis according to the processes directed by Bogdan and Biklen, (1982). (Please refer to the section 3.7.4. 'Data processing and data analysis' for details pertaining to the use of Thematic Content Analysis)

3.6. Cross-Sectional Survey with Learners

The objectives, sampling strategy, research participants, measuring instruments, data collection and procedures, data processing and data analysis of the learner cross-sectional survey are explained below. (Please refer to section 3.4. Research Design Overview" for the study's research design and section 3.3. 'Study Permission and Ethical Principles' for ethical principles.)

3.6.1. Sampling strategy and research participants

Grade nine and 11 learners were selected due to national estimates indicating that the prevalence of HIV infection increases markedly among adolescents aged between 12 and 14 years (2%) and 15 and 19 years of age (6.7%) (Shisana et al., 2009). This cohort of adolescents (of these particular age groups) is especially vulnerable to contracting HIV during their secondary school years (Shisana et al., 2009). Moreover, there has been a dramatic rise in HIV prevalence figures for youth aged between 15 and 19 (Avert, 2017). The records reflect 6.7 % in 2009 (Shisana et al., 2009). This must then be compared with 7.3 % in the same age group in 2016 (Avert, 2017). This highlights the importance of this research in attempting to enhance the LO programme and its positive impact on the sexual behaviour and HIV vulnerability of youth in secondary schools.

Learners who were eligible to participate in the study were limited to Grade nine or 11 learners within the selected schools and had to be proficient in English in order to complete the cross-sectional survey. The intention was for a sample of 600 learners to participate in the study with equal proportions of learners from each grade i.e. 300 learners from grade nine and 300 learners from grade 11. The sample would therefore be from four classes of grade nine and 11 learners from each school i.e. two classes of grade nine learners and two classes of grade 11 learners. The realised sample was six hundred (N=600) learners who participated in the study with

150 (N=150) learners from each PQ and 300 (N=300) learners per grade from grade nine and grade 11. In PQ two, only two classes of learners were sampled (one class from Grade nine of 81 learners and one class from Grade 11 of 69 learners), due to double the number of learners in a class as compared to other PQ schools where a total of four classes were sampled (two classes from Grade nine and two classes from Grade 11). The total realised sample was almost equally proportioned in gender with 301 male (50.2%) and 299 female learners (49.8%).

3.6.2. Measuring instruments

The cross-sectional survey with learners was developed in line with the study objectives numbers one to five of the study. (Please refer to section 3.4.3. *Research design of the cross-sectional survey.*) The various subscales which formed the cross-sectional survey were all components of the school environment as mentioned by Bradshaw et al. (2014), Hanson and Kim (2007) and Gaurdino, and Fullerton (2010). The learner cross-sectional survey was finalised after the outcome of the pilot study conducted for the purpose of refining the instrument. (Please refer to section 3.4.1. 'Pilot Study' for further details pertaining to the pilot phase of the study.) (Please also refer to Appendix B: 'Learner Cross-sectional Survey' for the learner cross-sectional survey.) The psychometric tests in the learner cross-sectional surveys have their own validity and reliability of all constructs. (Please refer to Table Six: "Learner Cross-sectional Survey: Summary of Psychological Measures Used to Measure Constructs as per the Original Measures" for the psychometric properties and descriptions of the constructs of the measure.) Components of the cross-sectional survey are indicated below. The order of categories of the cross-sectional survey are the following: First the demographic scale, then the physical school environment, thereafter the psycho-social school environment and finally learners' health behaviours For the purposes of the study the original scale names have been changed to better describe the requirements of the school environment. These are as follows in accordance with Table 5 below:

Table 5

Original names of the scale and new name of the scale used by this study

Original name of scale	Name of scale as used by this study
Physical School Environment	
School hygiene + Safe classroom and school environment	Safe & Clean Classroom and School Environment
Psycho-social School Environment	
Peer emotional safety	Caring Environment scale
School fit	Sense of Belonging
School connectedness	Psychological Sense of School Membership Scale
School engagement	School engagement
School Discipline and Fairness	School Discipline scale
School climate	Comprehensive School Climate
Parent School Partnership Scale	Parent School Partnership Scale
Learners' Health Behaviour	
Sexual Activity Scale	Sexual Activity Scale
Substance Use/Abuse Scale	Substance Use/Abuse Scale

3.6.2.1. Demographic Data

Demographic data was collected and used to gain an understanding of the characteristics of the sample and to aid statistical investigation. Demographic data included: the name of the school, PQ, home location, language spoken at home, gender, age, race, religious affiliation, number of siblings living with and number of adults living with the learner.

3.6.2.2. Physical School Environment

Safe & clean classroom and school environment

The *Healthy Kids Survey (HKS)* (Hanson and Kim, 2007) measures learners' perception of school safety along three individual dimensions of the physical school environment (school buildings, school violence and sanitation) in the form of a 32-item, self-administered cross-sectional survey. The scale is rated on a four-point Likert type ranging from four (fully achieved) to one (not achieved). The HKS internal reliability Cronbach's coefficients are Cronbach's alpha: 'Safe & clean classroom and school environment' $\alpha = 0.78$, 'School violence' $\alpha = 0.80$ and

'Hygiene and sanitation' α = 0.76. Discriminant Validity was used. The overall Cronbach's alpha coefficient for the present study was 0.78.

3.6.2.3. Psycho-social School Environment

Caring environment

The *California Healthy Kids Survey (CHKS)* (Hanson & Kim, 2007) measures learners' perceptions of school care along three dimensions consisting of peer, educator and caregiver care in the form of an 11-item, self-administered cross-sectional survey. The scale is rated on a five-point Likert type ranging from five (strongly disagree) to one (strongly agree). Construct Validity was used. The overall Cronbach's alpha coefficient for the present study was 0.81.

Sense of belonging

The *Sense of Belonging Scale (SBS)* (Gambone & Arbreton, 1997), measures learners' perceptions of the school climate and more specifically, learners' perceptions of learner's experiences of learner-school connectedness and belonging; in the form of an five-item, self-administered cross-sectional survey. The scale is rated on a four-point Likert scale ranging from four (Always) to one (Never). Construct Validity was used. The overall Cronbach's alpha coefficient for the present study was 0.88.

Psychological Sense of School Membership

The 12 item *Psychological Sense of School Membership (PSSM)* scale (Goodenow, 1993) measures learners' perceived psychological school membership in a self-administered cross-sectional survey. The scale is rated on a four-point Likert scale ranging from four (Always) to one (Never). Construct Validity was used. The overall Cronbach's alpha coefficient for the present study was 0.88.

School Engagement

The *School Engagement Scale (SES)* (Fredericks et al., 2005) is a six-item scale which measures learners' perception of the school environment on two dimensions: Learners' behavioural engagement and emotional engagement. The scale is rated on a five-point Likert scale

ranging from five (All of the time) to one (Never). Construct Validity was used. The overall Cronbach's alpha coefficient for the present study was 0.72.

School discipline Scale

The *School Discipline Scale (SDS)* which is a component of the *California School Climate Survey (CSCS)* (Hanson & Kim, 2007), measures learners' experiences of the discipline and order within the school environment along two dimensions: Fairness and clarity. The scale is in the form of a six-item, self-administered cross-sectional survey. The scale is rated on a four-point Likert scale ranging from four (Strongly disagree) to one (Strongly agree). The SDS internal reliability Cronbach's coefficients is Cronbach's alpha was 0.80. Construct validity was used.

Comprehensive school climate

The *Comprehensive School Climate (CSC)* scale (Hanson & Kim, 2007) measures learners' perceived school values and climate along four dimensions: Discrimination, stigma, acceptance and tolerance, in the form of a 15-item, self-administered cross-sectional survey. The 15 item scale is rated on a four-point Likert scale ranging from five (Strongly disagree) to one (Strongly agree). Discriminant Validity was used. The overall Cronbach's alpha coefficient for the present study was 0.83

Parental School Partnership Scale

The *Parent School Partnership (PSP) survey* which is a component of the *California School Climate Survey (CSCS* (Hanson & Kim, 2007) measures learners' perceptions of their caregivers' experiences of the school environment along three dimensions, caregiver involvement in learners' personal lives, caregiver engagement in the school and schools' encouragement for caregiver involvement in the form of a 19-item, self-administered cross-sectional survey. The scale is rated on a four-point Likert scale ranging from four (All of the time) to one (Never). Discriminant Validity was used. The overall Cronbach's alpha coefficient for the present study was 0.88.

3.6.2.4. Learners' Health Behaviours

Sexual Activity Scale

Participant's sexual activity was assessed based on 10 individual items inquiring into sexual behaviour and originate from *The Sexual Activity Scale* by Bennett & Dickinson (1980). These questions were primarily focused on sexual behaviours and condom/contraceptive use. Examples of such questions (quoted from the questionnaire) include "Have you ever had sexual intercourse?", and "The last time you had sexual intercourse, what one method did you or your partner use to prevent pregnancy?" These questions were used individually in the analysis and not as an overall measure of sexual risk behaviour.

Substance Use/Abuse Scale

In the same manner, respondents' substance and alcohol use was also investigated though the six individual questions for the purpose of gauging substance/alcohol use in conjunction with sexual activity which originated from the *Substance Use and Abuse* scale (Centre for Substance Abuse & Mental Health Services, 2007). Question examples included "Did you drink alcohol or use drugs before you had sexual intercourse the last time?" and "Do most of your friends drink alcohol?" The response items were nominal dichotomous 'Yes' or 'No' responses with some questions including a 'Does not apply' option. Discriminant validity was used for both scales and the overall Cronbach's alpha coefficient was 0.87 for The Sexual Activity Scale and 0.85 for the Substance Use and Abuse scale.

Table 6 below indicates the measures used in the learner cross-sectional survey and presents the psychometric properties of each scale in accordance with validity and reliability based on their original and prior studies which have used these scales.

Table 6
Learner Cross-sectional Survey: Summary of Psychological Measures Used to Measure Constructs as per the Original Measures

Scale/ Assessment	Developer	Characteristics	Target Groups	Psychometric Properties of the instruments used in other SA studies.	Appendix number
Safe & clean classroom and school environment (Hanson & Kim, 2007)	California school climate survey, 2012	A 32 item scale with 3 subscales assessing the overall school safety in terms of infrastructure, hygiene, physical and emotional safety of learners/educator perceptions of learner safety.	Youth aged 13 - 18 years old	Cronbach's alpha: Safe & clean classroom and school environment α = 0.75 School violence α = 0.72 Hygiene and sanitation α = 0.71. Discriminant Validity. Minimum=32, Maximum=128, N=1405 Mean=3.24, SD=0.61, Scale range=1-4 (Mutinta et al., 2013).	B
Caring Environment scale (Hanson & Kim, 2007)	California healthy kids survey, 2011	An 11 item scale assessing the learners' perception of learner care by the school.	Youth aged 13 - 18 years old	Cronbach's alpha: Caring Environment α = 0.73. Construct Validity. Minimum=11, Maximum=55, N=1564 Mean=2.15, SD=0.54, Scale range=1-5 (Rooth, 2005).	B
Sense of Belonging scale (Gambone & Arbreton, 1997)	(Gambone and Arbreton, 1997)	5 item scale assessing learners' perceptions of learner's experiences of learners' school connectedness and belonging.	Youth aged 13 - 18 years old	Cronbach's alpha: Sense of Belonging Scale α = 0.84. Construct Validity. Minimum=5, Maximum=20, N= 1098 Mean=2.49, SD=0.781, Scale range 1-4 (Anderson et al., 2007).	B
Psychological Sense of School Membership Scale (Goodenow, 1993)	Goodenow, 1993	12 item scale assessing learner and educator perceptions of learners' experiences of the school as a supportive environment in terms of whether learners have networks of social support they can access within their schools.	Youth aged 13 - 18 years old	Cronbach's alpha: Supportive Environment scale α = 0.84. Construct Validity. Minimum=18, Maximum=90, N=241 Mean = 3.84, SD=0.65, Scale range =1.0 to 5.0 (Govender et al., 2013).	B
School Engagement (Fredericks et al., 2005)	Fredericks et al., 2005.	6 item scale assessing learners' behavioural and emotional engagement in the school.	Youth aged 13 - 18 years old	Cronbach's alpha: α = 0.79. Construct Validity. Minimum=10, Maximum=40, N=1560 Mean=2.74, SD=0.53, Scale range=1-4 (Anderson et al., 2007).	B

School discipline scale (Hanson & Kim, 2007)	California school climate survey, 2012	6 item scale assessing learners' perceptions of learners' experiences of the discipline and order within the school environment.	Youth aged 13 - 18 years old	Cronbach's alpha: School Discipline scale α = 0.80. Construct Validity. Minimum=8, Maximum=28, N=1214 Mean=7.75, SD=2.28, Scale range=1-4 (George, Govender & Reardon., 2010).	B
Comprehensive School climate inventory (The Centre for Social and Emotional Education, 2012)	The Centre for Social and Emotional Education, 2012	15 item scale overall school climate and values in terms of discrimination, stigma, acceptance and tolerance.	Youth aged 13 - 18 years old	Cronbach's alpha: α = 0.81. Discriminant Validity. Minimum=15, Maximum=155, N=852 Mean=2.67, SD = 0.51, Scale range 1-5 (Thapa et al., 2013).	B
Parent School Partnership (Hanson & Kim, 2007)	California School Climate Survey	19 item scale which investigates learners' perceptions of their caregivers' experiences of the school environment in terms of being conducive to LO's sexuality educations' aims. It assesses learners' perception of their caregivers' support for learner school connectedness and whether the school allows input and welcomes caregivers' contributions.	Youth aged 13 - 18 years old	Cronbach's alpha: α = 0.88. Discriminant Validity. Minimum=19, Maximum=40, N=2576 Mean=5, SD=0.66, Scale range=1-4 (Hutchinson, 2007)	B
The Sexual Activity Scale (Bennett & Dickinson, 1980)	Youth Risk Behaviour Survey (High School Cross-sectional survey) Questions on Sexual Behaviour, 2008	10 individual items measuring the level of sexual activity in learners.	Youth aged 13 - 18 years old	Cronbach's alpha: α = 0.74. Discriminant Validity. Minimum=10, Maximum=40, N= 179 Mean=3.17, SD=0.56, Scale range=1-4 (Jimmyns and Roche; 2010).	B
Substance use/substance abuse scale (Centre for Substance Abuse and mental Health Services, 2007)	Centre for Substance Abuse and mental Health Services, Sexual risk profile, 2007	5 individual questions measuring substance abuse and substance use in conjunction with sexual activity.	Youth aged 13 - 18 years old	Cronbach's alpha: α = 0.81. Discriminant Validity. Minimum=6, Maximum=24, N=2334 Mean=3.25, SD=0.52, Scale range=1-4 (Visser, 2005).	B

3.6.3. Data collection and procedures

Two weeks prior to the cross-sectional survey completion, the researcher had sent caregiver consent forms to each school which were then sent to caregivers via learners to sign and returned to the LO educator who was the gatekeeper at each school. As previously stated, only learners whose caregivers had signed and returned the caregiver consent forms were allowed to participate in the study and the caregiver consent forms were collected by the researcher. The researcher administered the cross-sectional surveys to all learners per class in each of the schools. Access was gained by prior arrangements with the LO educator for the day and time of the cross-sectional survey administration. On the scheduled day, the researcher arrived at the school reception 15 minutes before the scheduled time for the cross-sectional survey completion to meet with the gatekeeper and involved LO educators. The LO educator(s) proceeded to accompany the researcher to the classroom venue where the cross-sectional survey completion took place. The cross-sectional survey completion took place during an LO lesson and the duration of cross-sectional survey administration and completion was approximately 45 minutes to an hour, which is the equivalent of one lesson. The remaining three classes at each school were subsequently administered to in a similar manner on the same day or consecutive days per school. The educator introduced the researcher to the class of learners/participants and was then present during the cross-sectional survey completion for disciplinary and information purposes. First, an explanation by the researcher was conducted, which covered an introduction of the researcher and explanation of the objectives of the cross-sectional survey. Regarding the explanation of the learner consent forms conducted by the researcher with the learners before the cross-sectional survey completion commenced, the following details were covered: Learners were reminded that answers need to be honest and that no one answer will necessarily be correct or incorrect as they will be subjective. Additional explanations of anonymity, how confidentiality would be conserved and guidance through signing the consent form was provided. This was followed by an explanation of how to complete the close-ended and open-ended questions by going through the example question with the respondents. The researcher paced the classroom between learners to ensure discipline was maintained so that the cross-sectional surveys were completed in the allocated time without distraction. Any questions that learners had were answered by the researcher and explained to the whole class where necessary. Once learners completed the cross-sectional survey, they put up their hands and the researcher would skim through the cross-sectional survey to ensure that all responses

had been completed and thereafter they were provided with the reward of a lollypop; as promised in the initial introduction. Often learners would be more motivated to complete once they saw the first respondent receiving their incentive.

The study took place in English-speaking schools however, not all learners were English first-language speakers. The questions were sometimes not easily understood by learners who were not fluent in English. Despite efforts to simplify questions to learner level, the language barrier for a few non-English first-language speaking respondents presented a minor issue for a few questions. To resolve this, the researcher was present and answered and explained any challenging questions at the time of instrument administration. The cross-sectional surveys were administered to one class at a time to maximise learner assistance and motivation during completion. Learners were also often challenged with regards to maintained motivation to complete the cross-sectional survey despite incentives being used. This occurred in spite of the learner cross-sectional survey being pilot tested to ensure that the length of the cross-sectional survey is succinct and unnecessary questions were removed. There was therefore a possibility of compromised quality of the data with learners completing quantitative cross-sectional surveys due to the level of motivation and the possibility of response bias. To assist in full completion of the questionnaire, the learners were only provided with the incentive once the researcher had quickly browsed through their survey instrument to ensure that responses were provided to all questions. This process was also explained upfront upon entering the classroom. The researcher supervised learners as they were completing the cross-sectional survey and also emphasised the importance of the data as being for the benefit of the learners with the reminder that reports would be provided to the school, but that these reports would only contain generalised data.

Data collection took place over the period of two days for the pilot study and over four months for the main study. A further challenge encountered in negotiation of access was that many schools were unwilling to participate in the research for reasons pertaining to time limitations. The availability of the schools and caregiver cooperation/availability were factors which played a role in the time taken to complete the data collection phase of the study. Schools which indicated a willingness to participate were also obstructed by lack of resources (human resources and venues) and time; leading to numerous re-arrangements being made. The schools were informed that they would be receiving a report of the results at the end of the research process, which would highlight

the best practices which they could possibly use to promote the school and maintain practice of best practices highlighted. Schools' reports also included the challenges schools' faced which they could possibly use to lobby for resources and learn from. This increased schools' interest in the study and assisted in obtaining access.

3.6.4. Data processing and statistical analysis

Quantitative data was entered into the Statistical Package for the Social Sciences (SPSS) version 23.0 for Windows (IBM SPSS Inc., Chicago IL, USA). Prior to data analysis, data underwent a comprehensive in-depth quality control process to ensure completeness and accuracy. Frequencies were calculated for each variable to check for errors i.e. duplicate entries, erroneous data and missing values. No missing values were recorded. Negatively worded items were reverse-coded to ensure that all the items were loaded in the same direction for further analysis techniques. In answering the research objectives number one to five, the following statistical analyses were conducted:

The factor structure and psychometric properties of the measures were investigated for the cross-sectional survey which was a component of Phase Two of the study. Principal component analysis (PCA) was used to investigate the underlying factor structure of the 32 items contained along the three dimensions of the scale which measured the *Safe & clean classroom and school environment*. The purpose was to refine the measures and scales of the components of *The Healthy Kids Survey* scales. The requirements for PCA were met by an examination of the suitability of data for factor analysis. This was indicated since the factorability was adequate as the Bartlett's test of sphericity was significant at 4255.16 with $p < .001/ (p = 0.000)$ and the Kaiser-Meyer-Olkin (KMO) index (0.853) is greater than 0.60. Therefore, the variables were applicable for PCA. The intention of the PCA was to develop a factor model which included the following requirements:

- The resulting components explained 50% or more of the variance in each of the variables, for instance those having a communality greater than .50;
- No variable has a loading, or has correlations of .40 or higher for more than one component; and
- None of the components of the subscales have fewer than three variables.

In order for the requirements to be fulfilled, problematic variables were removed from the analysis. Thereafter, the principal component analysis was repeated to give rise to an adequate solution. Principal component analysis with Varimax rotation revealed the presence of three components with eigenvalues exceeding one. Varimax rotation (orthogonal rotation) was used due to the uncorrelated factors. This is in accordance with Tabachnick and Fidell (2007), who indicate that if correlations do not exceed 0.32 then there is less than 10% or more overlap among factors which is enough variance not to warrant oblique rotations. Items with loadings of less than .40 were not included. After removal of 21 problematic variables and numerous duplications, a three component Varimax rotation solution which, in addition appeared to be the best in terms of prior literature and theoretical background, was retained. The components items were then subjected to inter-item reliability analysis.

In the PCA, all 32 items from the *Safe & Clean Classroom and School Environment Scale* were entered as equal priorities into the analysis process. PCA produced eigenvalues from the three factors. These were compared to decide the number of factors to be extracted. Based on this comparison, the three factors were kept for further analysis. The 21 items which did not meet the inclusion criteria (i.e. having a commonality value < 0.50) were excluded from the analysis due to limited shared variance with the remainder of the items in their factor structures. The following items (quoted from the questionnaire) were removed: 1a) "Your classroom(s) is/are protected from the elements (solid roof, walls, and floor)", 1b) "The classroom has enough ventilation", 1c) "The classroom is a comfortable temperature", 1d) "The classroom lighting is enough for learners to work", 1g) "Learners each have enough space to work", 1h) "Furniture is of the right size for learners to work comfortably", 1i) "There are examples of learners' work or projects shown in the classroom", 2a) "Do you feel that your belongings are safe at your school", 2b) "Do you feel that you are safe from bullying at your school", 2c) "Do you feel that you are safe from physical abuse and violence at your school", 2d) "During the past 12 months, how often have you been pushed, shoved, hit, etc.", 2e) "During the past 12 months, how often have you seen or heard of learners being in a physical fight on school property", 2f) "During the past 12 months, how often have you been involved in a physical fight on school property", 2g) "During the past 12 months, how often have you seen or heard of learners being afraid of being beaten up on school property", 3ab) "Sinks that work properly with soap are near the toilets", 3af) "Toilets are close to classrooms", 3ba) "Grounds are clean", 3bb) "Hallways are clean", 3bd) "School buildings provide enough

protection from the rain, heat, cold, wind and dust.", 3be) "The school grounds are kept free of litter and garbage, except in selected bins." 3bf) "The school grounds are kept free of unwanted animals (for example, Stray dogs and cats) as well as animal waste. Any school pets are kept in clean conditions." The Principal Component Analysis (PCA) with Varimax rotation yielded three factor structures with 11 items. The three factor model explained 51.839% of the total variance. The three factors identified could be approximately interpreted as follows:

- Factor one (four items) related to "Hygiene and Sanitation"
- Factor two (four items) related to "School Safety"
- Factor three (three items) related to "School Physically Organised"

The highest contributing factors are: "Hygiene and Sanitation" and explained 20.047%, "School Safety" explained 16.159% and "School Physically Organised" explained 15.633% of the variance in the items respectively and 51.839 % in total. The loading values/factor structure for the three new components are shown in Table 7 below:

Regarding the construction of measures, items which were negatively coded were recoded to load in the same direction as the rest of the scale. The components' items were assessed in terms of their inter-item reliability analysis. Upon obtaining satisfactory Cronbach's alpha coefficients, scales were developed by summing the relevant items. Items which formed scales within the cross-sectional survey were collated to form individual scale measures. Normality of the new constructs was assessed using the Explore function of SPSS version 23.0 for Windows (IBM SPSS Inc., Chicago IL, USA) and outliers were removed with the intention of improving normality. Shapiro-Wilkes tests and a visual inspection of the histograms, normal Q-Q plots and boxplots were conducted to confirm normal distributions and homogeneity of variance of the dependent variables (DVs) for the purposes of parametric testing. A Shapiro-Wilk's test ($p>0.05$), (Shapiro & Wilk, 1965), and a visual inspection of their histograms, normal Q-Q plots and boxplots indicated that the *Safe & Clean Classroom and School Environment Scale* scores were approximately normally distributed. Table 8 indicates the descriptive statistics of the components. Parametric tests were used in the further analysis due to the relative normal distribution of the measures.

Table 7
Principal component analysis loading matrix after Varimax rotation with loading factors >.40

11 variables	Hygiene and sanitation	School safety	School physically organised	Commonalities
3ae) Toilets are safe and in a good state	.797			.693
3ag) Toilets and sinks are clean and hygienic	.664			.596
3ac)Toilets are designed to allow learners privacy	.631			.582
3ad) There are enough working toilets available so that learners do not have to wait too long to use them.	.507			.541
1l) There are security gates and walls at your school		.639		.555
1k) Your school is physically safe		.627		.520
1j) There are security guards at your school		.604		.651
3aa) Learners and staff have ongoing, easy access to drinking water.		.568		
3bc) Classrooms are clean			.626	.578
1e) The classroom is clean and orderly			.579	.571
1f) Outside noise does not affect communication within the classroom.			.571	.589
Eigenvalue	7.694	7.448	6.230	
Contribution rate	20.047	16.159	15.633	51.839
Inter-item reliability co-efficient (N=600)	.74	.66	.65	

Loading values more than 0.600 indicate excellent structural validity

Table 8

Descriptive statistics of continuous and categorical variables for Setting 1 data

Continuous	N	Number of items	Min/Max	Inter-item reliability co-efficient *(N=600)*	Mean	95% CI for mean		SD	Kurtosis	Skewness
						Lower	Upper			
School Safety	600	4	2.48-2.94	.74	10.71	2.72	2.90	3.276	-.883	-.201
Hygiene and sanitation	600	4	2.23-2.81	.66	10.31	2.60	2.82	3.264	-.776	-.221
School physically organised	600	3	2.32-2.61	.65	7.43	2.47	2.63	2.065	-.781	.016

Note: SD=standard deviation; CI= confidence interval

Codes used for items: 1= Not achieved, 2= Somewhat achieved, 3= Mostly achieved, 4= Fully achieved

Construction of Scale Measures

Table 9 below indicates how the scales were constructed for the purposes of the cross-sectional survey analysis in the study. The scale, developer, characteristics, target groups, recoding, inter-item reliability, summing of items & Cronbach's alpha, psychometric properties & descriptives, normality & removal of outliers and appendix numbers are presented in the Table 9.

Table 9

Construction of Scale Measures According to this Study

Scale/ Assessment	Developer	Characteristics	Target Groups	Recoding, inter-item reliability.	Summing of items & Cronbach's Alpha Psychometric Properties & Descriptives	Normality & removal of outliers	Appendix number
Caring Environment scale (Hanson & Kim, 2007)	California healthy kids survey, 2011	An 11 item scale (4a-4k) assessing the learners' perception of learner care by the school.	Youth aged 13 - 18	None of the items out of all the items (4a-4k) were recoded due to them all loading in a positive direction (the higher the score, the more positive the result on the item).	Cronbach's alpha: Caring Environment α = 0.86. Minimum=1, Maximum=4, N=600 Mean=3.00, SD= .769, Scale range=3, 95% CI for mean lower=2.91 95% CI for mean lower Upper=3.05	A Shapiro-Wilk's test (p>0.05), (Shapiro and Wilk, 1965), and a visual inspection of their histograms, normal Q-Q plots and boxplots indicated that the Caring Environment scale scores were approximately normally distributed for Grade 9 and Grade 11 learners with a skewness of 0.141 (SE=0.281) and kurtosis of 0.583 (SE=0.715) for Grade 9 learners, a skewness of -0.124 (SE=0.387) and kurtosis of (SE=0.141) for Grade 11 learners. No outliers were removed.	B
Sense of Belonging scale (Gambone & Arbreton, 1997)	(Gambone & Arbreton, 1997)	5 item scale assessing learners' perceptions of learner's experiences of learners' school connectedness and belonging.	Youth aged 13 - 18 years old	5c was reverse-coded of all the items (5a-5e) due to the rest of the items all loading in a positive direction (the higher the score, the more positive the result on the item).	Inter-item reliability co-efficient Sense of Belonging Scale α = 0.86. Minimum=1, Maximum=5, N=600 Mean=2.48, SD=0.88, Scale range 4. 95% CI for mean lower=2.38 95% CI for mean lower Upper=2.58	A Shapiro-Wilk's test (p>0.05), (Shapiro and Wilk, 1965), and a visual inspection of their histograms, normal Q-Q plots and boxplots indicated that the Sense of Belonging scale scores were approximately normally distributed for Grade 9 and Grade 11 learners with a skewness of 0.375 (SE=0.142) and kurtosis of -0.111 (SE=0.284) for Grade 9 learners, a skewness of 0.142 (SE=0.142) and kurtosis of -0.250 (SE=0.282) for Grade 11 learners. Six outliers were removed.	B
Psychological Sense of School Membership Scale (Goodenow, 1993)	Goodenow, 1993	10 item scale assessing learner and educator perceptions of learners' experiences of the school as a supportive environment in terms of whether learners have networks of social support they can access within their schools.	Youth aged 13 - 18 years old	None of the items (6a-6l) were recoded due to them all loading in a positive direction (the higher the score, the more positive the result on the item).	Cronbach's alpha Supportive Environment scale α = 0.89. Minimum=1, Maximum=4, N= 600 Mean = 25.25, SD=6.94, Scale range =3 95% CI for mean lower=1.91 95% CI for mean lower Upper=2.06	A Shapiro-Wilk's test (p>0.05), (Shapiro and Wilk, 1965), and a visual inspection of their histograms, normal Q-Q plots and boxplots indicated that the Psychological Sense of School Membership scale scores were approximately normally distributed for Grade 9 and Grade 11 learners with a skewness of 0.342 (SE=0.142) and kurtosis of 0.077 (SE=0.284) for Grade 9 learners, a skewness of -0.327 (SE=0.144) and kurtosis of -0.085 (SE=0.286) for Grade 11 learners. No outliers were removed.	B
School Engagement scale (Fredericks et al., 2005)	Fredericks et al., 2005.	6 item scale assessing learners' behavioural and emotional engagement in the school.	Youth aged 13 - 18 years old	None of the items (11a-11f) were recoded due to them all loading in a positive direction (the higher the	Inter-item reliability co-efficient = 0.79. Minimum=1, Maximum=4, N=600 Mean=, SD=0.75, Scale range=3 95% CI for mean lower=2.73	A Shapiro-Wilk's test (p>0.05), (Shapiro and Wilk, 1965), and a visual inspection of their histograms, normal Q-Q plots and boxplots indicated that the School Engagement Scale scores were approximately normally distributed for Grade 9 and Grade 11 learners with a skewness of 0.268 (SE=0.141) and kurtosis of	B

				score, the more positive the result on the item).	95% CI for mean lower Upper=2.91	0.699 (SE=0.281) for Grade 9 learners, a skewness of 0.249 (SE=0.141) and kurtosis of -0.704 (SE=0.281) for Grade 11 learners. No outliers were removed.	
School discipline scale (Hanson & Kim, 2007)	California school climate survey, 2012	6 item scale assessing learners' perceptions of learners' experiences of the discipline and order within the school environment.	Youth aged 13 - 18 years old	None of the items (9a-9f) were recoded due to them all loading in a positive direction (the higher the score, the more positive the result on the item).	Inter-item reliability co-efficient = 0.87. Minimum=1.68 Maximum=2.29, N= 600 Mean=2.07, SD=0.55, Scale range=.617 95% CI for mean lower=2.56 95% CI for mean lower Upper=2.78	A Shapiro-Wilk's test (p>0.05), (Shapiro and Wilk, 1965), and a visual inspection of their histograms, normal Q-Q plots and boxplots indicated that the School Discipline scale scores were approximately normally distributed for Grade 9 and Grade 11 learners with a skewness of 0.04 (SE=0.141) and kurtosis of 0.09 (SE=0.281) for Grade 9 learners, a skewness of -0.249 (SE=0.141) and kurtosis of -0.519 (SE=0.281) for Grade 11 learners. No outliers were removed.	B
Comprehensive School climate inventory (The Centre for Social and Emotional Education, 2012)	The Centre for Social and Emotional Education, 2012	15 item scale overall school climate and values in terms of discrimination, stigma, acceptance and tolerance.	Youth aged 13 - 18 years old	12c, 12e, 12m and 12o of all the items (12a-12o) were reverse-coded due to the rest of the items all loading in a positive direction (the higher the score, the more positive the result on the item).	Cronbach's alpha Comprehensive School climate inventory α = 0.76. Minimum=1, Maximum=4, N=600 Mean=2.56, SD = 0.62, Scale range=3 95% CI for mean lower=2.85 95% CI for mean lower Upper=3.11	A Shapiro-Wilk's test (p>0.05), (Shapiro and Wilk, 1965), and a visual inspection of their histograms, normal Q-Q plots and boxplots indicated that the Comprehensive School Climate Inventory scale scores were approximately normally distributed for Grade 9 and Grade 11 learners with a skewness of 0.078 (SE=0.141) and kurtosis of -0.413 (SE=0.281) for Grade 9 learners, a skewness of -0.117 (SE=0.141) and kurtosis of -0.141 (SE=0.281) for Grade 11 learners. No outliers were removed.	B

Parent School Partnership (Hanson & Kim, 2007)	California School Climate Survey	19 item scale which investigates learners' perceptions of their caregivers' experiences of the school environment in terms of being conducive to LO's sexuality educations' aims. It assesses learners' perception of their caregivers' support for learner school connectedness and whether the school allows input and welcomes caregivers' contributions.	Youth aged 13 - 18 years old	None of the items (14a-14s) were recoded due to them all loading in a positive direction (the higher the score, the more positive the result on the item).	Cronbach's alpha Parent School Partnership α = 0.90. Minimum=1, Maximum=4, N= 600 Mean=3.05, SD=0.69, Scale range=3 95% CI for mean lower=2.97 95% CI for mean lower Upper=3.13	A Shapiro-Wilk's test (p>0.05), (Shapiro and Wilk, 1965), and a visual inspection of their histograms, normal Q-Q plots and boxplots indicated that the Parent School Partnership scale scores were approximately normally distributed for Grade 9 and Grade 11 learners with a skewness of -0.371 (SE=0.141) and kurtosis of -0.603 (SE=0.281) for Grade 9 learners, a skewness of -0.222 (SE=0.141) and kurtosis of -0.502 (SE=0.281) for Grade 11 learners. No outliers were removed.	B
Sexual Activity Scale (Bennett & Dickinson, 1980)	Youth Risk Behaviour Survey (High School Cross-sectional survey) Questions on Sexual Behaviour, 2008	10 individual items measuring the level of sexual activity in learners.	Youth aged 13 - 18 years old	15.6 & 15.7 out of all the items (15.2, 15.3, 15.4, 15.5, 15.6, 15.7, 158b & 15.8c) were reverse coded due to the rest of the items all loading in a positive direction (the higher the score, the more positive the result on the item).	The Sexual Activity Scale Cronbach's alpha α = 0.83. Minimum=1, Maximum=4, N=600 Mean=3.01, SD=0.48, Scale range=3 95% CI for mean lower=2.82 95% CI for mean lower Upper=3.18	A Shapiro-Wilk's test (p>0.05), (Shapiro and Wilk, 1965), and a visual inspection of their histograms, normal Q-Q plots and boxplots indicated that the Sexual Activity Scale scores were approximately normally distributed for Grade 9 and Grade 11 learners with a skewness of 0.256 (SE=0.393) and kurtosis of -0.750 (SE=0.796) for Grade 9 learners, a skewness of -0.313 (SE=0.374) and kurtosis of 0.319 (SE=0.733) for Grade 11 learners. No outliers were removed.	B
Substance use/substance abuse scale (Centre for Substance Abuse and mental Health	Centre for Substance Abuse and mental Health Services, Sexual risk profile, 2007	5 individual questions measuring substance abuse and substance use in conjunction with sexual activity.	Youth aged 13 - 18 years old	None of the items out of all the items (15.8e-15.8i) were reverse coded due to them all loading in a positive direction (the higher the score, the more positive the result on the item).	Inter-item reliability co-efficient = 0.73. Minimum=1, Maximum=4, N=600 Mean=2.51, SD=0.453, Scale range=3 95% CI for mean lower=2.46 95% CI for mean lower Upper=2.56	A Shapiro-Wilk's test (p>0.05), (Shapiro and Wilk, 1965), and a visual inspection of their histograms, normal Q-Q plots and boxplots indicated that the Substance Use/Abuse scale scores were approximately normally distributed for Grade 9 and Grade 11 learners with a skewness of 0.136 (SE=0.141) and kurtosis of 0.270 (SE=0.281) for Grade 9 learners, a skewness of --0.292 (SE=0.141) and kurtosis of -0.717 (SE=0.281) for Grade 11 learners. No outliers were removed.	B

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Learner-educator Relationship Index	California school climate survey, 2012	3 individual questions measuring Learner-Educator Relationship quality.	Youth aged 13 - 18 years old	None of the items out of all the items (8a,8b,8c) were reverse coded due to them all loading in a positive direction (the higher the score, the more positive the result on the item).	Dichotomous – The Learner-Educator Relationship Index Cronbach's alpha α = 0.84. Inter-item reliability co-efficient α=0.86	n/a	B
Educator Expertise Index	California school climate survey, 2012	2 individual questions measuring Educator Expertise.	Youth aged 13 - 18 years old	None of the items out of all the items (13d-13e) were reverse coded due to them all loading in a positive direction (the higher the score, the more positive the result on the item).	Dichotomous - The Educator Expertise Index Scale Cronbach's alpha α = 0.76. Inter-item reliability co-efficient α=0.83	n/a	B

Scales were constructed by recoding the items which required to be reversed-coded in order to load in the same direction as the rest of the items in the scale. Psychometric properties of the scale were assessed in terms of their inter-item reliability analyses which were the Cronbach's alpha for scales with more than 10 items and the inter-item correlation coefficients for those scales which consisted of less than 10 items. Upon obtaining satisfactory Cronbach's alpha coefficients/inter-item correlation coefficients, scales were developed by summing the relevant items in order to collate them to form individual scale measures. Normality of the new constructs was assessed using the Explore function of SPSS version 23.0 for Windows (IBM SPSS Inc., Chicago IL, USA) and outliers were removed with the intention of improving normality. Shapiro-Wilkes tests and a visual inspection of the histograms, normal Q-Q plots and boxplots were conducted to confirm normal distributions and homogeneity of variance of the DVs for the purposes of parametric testing. The scales constructed with relevant above-mentioned details are in Table 9 above.

Data was coded and thereafter entered onto SPSS version 23.0 for Windows (IBM SPSS Inc., Chicago IL, USA) for analysis. The study is descriptive and inferential in nature and therefore the possible relationships between various independent variables (IVs) as impacting on sexual activity and perceptions of the school environment, as set out by the cross-sectional survey, has been examined. Each item and topic was entered into SPSS version 23.0 for Windows (IBM SPSS Inc., Chicago IL, USA) individually in the sequential nature it appeared in the cross-sectional survey. A data check was conducted via frequencies to ensure that all data was entered and that it was entered correctly. Recoding of certain variables was conducted to improve the response categories for analysis. The demographic data regarding age was recoded into specific age categories i.e. 13-15 years, 16-17 years and 18 – over 20 years in order to obtain categorical data and run Chi-squares against the various DVs i.e. "Feel able to apply LO messages about sexuality in personal life" and "School environment support application of LO sexuality messages in personal life." The recoding was conducted by coding the ages 13, 14 and 15 as code one; ages 16 and 17 as code two and ages 18, 19, 20 and over as code three in Statistical Package for the Social Sciences (SPSS) version 23.0 for Windows (IBM SPSS Inc., Chicago IL, USA). All statistical tests were performed using two-tailed tests, and a p value of 0.05 or less was considered statistically significant. For the frequencies of school environment component scales, responses were compounded into dichotomous variables by transforming the variables for these items by

recoding 'Never' and 'Sometimes' to 'No' and 'Almost always' and 'Always to 'Yes.' The DVs were all dichotomous variables with learners either having selected 'Yes' or 'No' to these items to enable the researcher to view the differences in learners' perception of the different school environment components more clearly. This transforming of variables was only used for the presentation of frequencies of these scales. For the inferential statistical tests, each scale was used in its response category scale form ("Never", "Sometimes", "Almost always" and "Always"). Each of the quantitative research questions of the study (pertaining to learners' responses) is presented in detail in chapters' four and five. Chi-squares and relevant parametric tests of significance were conducted including: t-Tests, One way ANOVAs, Two way ANOVA, correlations and Regression analysis. Details regarding independent and DVs used are provided in the sections below in accordance with the order they appear in Chapter 4 and 5 which are the quantitative data chapters:

In Chapter 4, first the socio-demographic profile of learners are presented. Thereafter, the frequencies of learners' sexual and other risk behaviours which are the individual items of the *Sexual Activity Scale* are presented. Thereafter, demographic differences in these individual dichotomous items are presented via Chi-Square tests. Only statistically significant differences in items which presented demographic differences were reported and these items were "Availing condoms at school," "Ever having had sexual intercourse," "Condoms used at every sexual intercourse" and "Substance used before last sex." The results were presented for learners who wanted the school to avail condoms i.e. those respondents who responded 'Yes' to wanting condoms to be available in their schools. The same process was applied to the other three items. For items "Condoms used at every sexual intercourse" and "Substance used before last sex," the variables were recoded into new variables by removing the "I have never had sex" response category in order to run the Chi-square (χ2) against the two remaining nominal responses i.e. "Yes" and "No."

Thereafter in Chapter 4, Chi square (χ2) significance tests were used to look at the significant differences between demographic data mentioned above and learners' views regarding sexuality education's applicability in their personal lives and their perceptions of the school environment. The single item dichotomous DVs: *Able to apply sexuality education to personal life* and *School environment supports application of sexuality education messages in personal life* were used.

Chapter 4's analysis is concluded with an independent sample t-test which was used to examine the mean score differences in positive or negative responses to *Learner's Perceptions of Sexuality Education's Applicability to their Lives,* which is a dichotomous variable with learners either having selected 'Yes' or 'No' to this item against the continuous *Sexual Activity Scale*. The Cohen d effect size was used to measure the magnitude of such differences where they existed. The independent sample t-test was then used to examine the mean score differences between the *School Environment as being Supportive to Sexuality Educations' Application to Personal Life,* which was a dichotomous single item variable and the *Sexual Activity Scale*.

Chapter 5 commences with the independent sample t-test which was used to assess the mean score differences in demographic data by the physical school environment as measured by the *Safe & Clean Classroom and School Environment* scale. The researcher was interested in viewing the mean score differences between the demographic data i.e. gender and grade on the *Safe & Clean Classroom and School Environment* scale. Thereafter, a One-Way ANOVA was used to determine the effect of PQ, age, race, religion, home location and number of adults living with learners; on the *Safe & Clean Classroom and School Environment* scale. Where necessary, Post-hoc analyses, specifically Tukey-HSD, were used to examine where specific differences exist with regards to PQ, age, race, religion, home location and number of adults living with learners, on the *Safe & Clean Classroom and School Environment* scale.

The independent sample t-test was used to assess the mean score differences in demographic data in the psycho-social school environment. Mean group differences were investigated between the demographic data variables i.e. gender and grade on the components of the psycho-social school environment scales: *Caring Environment, Psychological Sense of School Membership, Sense of Belonging, Comprehensive School Climate Inventory, School Discipline* and *School Engagement* scales' scores. Each component scale was individually run against each of the demographics. Thereafter, One-Way Between-Groups ANOVAs were used to determine the effect on PQ, age, race, religion and the number of adults in household differences in the psycho-social school environment. As mentioned for the t-tests above, each component scale was individually run against each of the demographic items. Where necessary, Post-hoc analysis, specifically Tukey-HSD was used to examine where specific differences exist with regard to PQ,

age, race, religion, home location and number of adults living with learners, on the components of the psycho-social school environment scales.

The Pearson product-moment correlation coefficients were conducted to examine the relationships between components of the school environment and learners' sexual activity as measured by the DV, the *Sexual Activity Scale*. This scale was measured against the perceived school environment. The IVs were the school environment component subscales. Scales which formed the components of the school environment were: *Safe & Clean Classroom and School Environment*, *Caring Environment, Psychological Sense of School Membership, Sense of Belonging, Comprehensive School Climate Inventory, School Discipline*, *School Engagement* and *Parent School Partnership*. Each component scale was individually run against the *Sexual Activity Scale.*

A simultaneous multiple standard regression was conducted to examine the different components of the school environment as a protective factor for learners' engagement in sexual activity. The *Sexual Activity Scale* was used to measure sexual activity. Only variables that had significant relationships with sexual activity were used in the regression analysis. The components of the school environment scales which were significant (i.e. *Safe & Clean Classroom and School Environment*, *School discipline, Caring Environment*, *Psychological Sense of School Membership, Sense of Belonging, Comprehensive School Climate, School Engagement* and *Parent School Partnership*) scales were entered as predictors and sexual activity was entered as the criterion variable, into the regression model.

The independent sample t-test was used to examine the mean score differences on learners' perceptions of the school environment and its influence on learners' perceptions of their ability to implement sexuality education in their personal lives. Mean score differences on each of the components of the school environmental measures, were used. The school environment component scales used were: *Safe & Clean Classroom and School Environment, School discipline, Caring Environment*, *Psychological Sense of School Membership, Sense of Belonging, Comprehensive School Climate, School Engagement* and *Parent School Partnership.* The question on learners' perceptions of the school environment and its influence on learners' perceptions of their ability to implement sexuality education in their personal lives involved, is a dichotomous IV and included a 'Yes' or 'No' response.

Educator support was measured by the *Educator Learner Relationship* index, the *Educator Expertise* index and the *Educators as role models* single item. The *Learner-Educator Relationship* scale is composed of: '*Go to their LO educator for help with a sensitive issue,*' '*Like their LO educator*' and *LO educator shows support and respect.*' The *Educator Expertise* scale consists of*: 'Educator does a good job teaching sexuality*' and '*Educator has good knowledge of HIV and AIDS, teenage pregnancy, STIs and sexual issues.*' Chi square tests were used to investigate the socio-demographic differences in educator support and whether learners ever had had sexual intercourse. The IVs were socio-demographic differences i.e. PQ, age, race, religion, home location and number of adults living with learners. Index DVs were the dichotomous *Learner-Educator Relationship* index and *Educator Expertise* index along with two individual item DVs which were: *LO educator as a role model* and *Ever had sex.*

The relationship between educator support on sexual activity and substance use and abuse was investigated via their mean score differences on the independent sample t-tests. Educator support was measured by the three variables: *Learner-Educator Relationship* Index, *Educator Expertise* Index and *Educator as a Role Model* item. The DVs were the *Sexual Activity Scale* and the *Substance Use and Abuse Scale.*

Two-Way ANOVAs were also used to determine the difference in mean scores on the impact of the *Number of sexuality education lessons* and learners' perceptions of *Learner-Educator Relationship* on learners' sexual activity and substance use and abuse. The IVs were the five categories of the *Number of sexuality education lessons* and the two categories of the *Learner-Educator Relationship Index*. The DVs were the *Sexual Activity Scale* and the *Substance Use/Abuse Scale.* Where necessary, Post-hoc analysis, specifically Least-Significant Difference (LSD), was used to examine where specific differences exist with regards to learners' sexuality activity.

A simultaneous standard multiple regression was used to investigate the best predicting factor of the educators as a form of support for sexuality education application in their lives. Predicting factors were: the *Learner-Educator Relationship* index, the *Educator Expertise* index, *LO educator as a role model*, and *Number of Sexuality Education Lessons.* These factors were run in order to investigate the influence on the DV, learners' sexual activity, as measured by the *Sexual Activity Scale.*

The individual items of the *Parent School Partnership* scale are presented as frequencies in Chapter 5. For ease of reference, these items were compounded from scale response categories to dichotomous items, i.e. "Never" and "Sometimes" were recoded into "No" and "Most of the time" and "All the time" were recoded into "Yes." Thereafter, demographic differences in learners' perceptions of caregiver involvement in learners' lives were investigated using independent samples t-tests for investigation of the mean group differences on gender and grade. Mean group differences were investigated, using the One-Way Between-Groups ANOVAs for PQ, age, race, religion, number of adults living with learners; with the DV being the *Parent School Partnership* scale. The scale response items were maintained for the t-tests and ANOVAs.

A simultaneous standard multiple regression analysis was used to investigate the best predicting factors of the overall statistically significant predictors on learners' sexual activity as measured via the *Sexual Activity Scale*. This was conducted in order to investigate the influence of the overall school environment on learners' sexual activity and the best predicting factor of learners' sexual activity.

Regarding the analysis of the integrated open-ended questions which supported certain questions within the cross-sectional survey with learners, formal analysis was conducted in a rigorous manner in order for the findings to be useful and convincing (Cathain & Thomas, 2004; Hruschka, 2004). In accordance with Babbie and Mouton (2005) and Neuman (2011), content analysis was undertaken, with the researcher implementing the following steps:

1. A sub-set of the comments was read and re-read;

2. A coding frame was devised to describe the thematic content of the comments;

3. Codes were assigned to all the comments. The coding frame was applied using NVivo 10.1;

4. Two coders tested the reliability of assigning codes, which were the researcher and the researcher's supervisor (Hanson et al., 2005; Patton, 2002); and

5. The codes were then entered into SPSS version 23.0 for Windows (IBM SPSS Inc., Chicago IL, USA) alongside the data from the closed questions and treated as variables in a quantitative analysis.

3.7. Educator In-depth Interview

The sampling strategy, research participants, measuring instruments, data collection and procedures, data processing and data analysis of the educator in-depth interviews are explained below. (Please refer to section 3.4. 'Research Design Overview' for the study's research design and section 3.3. 'Study Permission and Ethical Principles' for ethical principles.)

3.7.1. Sampling strategy and research participants

The qualitative in-depth interviews with educators were aimed at the school head of LO/LO educators who teaches or who teach Grade 9 and/or 11; and these have been used to understand the overall school culture and climate. Four schools from different PQs; two, three, four and five; in KZN were approached for the qualitative in-depth interviews with the LO educators. It should be noted that the same schools were used for each of the four measures (researcher's school observations, educator in-depth interviews, learner cross-sectional surveys and caregiver focus group discussions) in order to maintain insight into best practices and areas of improvement in each of the schools.

Educators who were eligible to participate in the study were selected by strategic purposive sampling according to inclusion criteria and were selected from each of the schools that participated in the other components of the study. The criteria were LO educators who teach Grade nine and/or 11 LO as a primary subject or one of their subjects in public secondary schools. It was necessary to have one or two of these educators in each of the PQs. Educators also had to be proficient in English in order to complete the in-depth interview. In addition, they had to have taught LO at the school for the minimum period of a year in order to gauge their perceptions on teaching of LO and having covered sexuality education in the syllabus at their current school. The LO educators who had completed the qualitative in-depth interviews were a sample size of N=6 as one or two LO educators, per school completed the in-depth interview. Educators were selected by their LO heads or school principals to participate in the in-depth interview and taught Grade nine and 11 LO in each of the four schools at the time of data collection. There were two LO educators, each from the PQ two and four schools and one LO educator each from PQ three and five schools. Table 10 below presents the LO educators interviewed per school.

Table 10

Number of Educators Interviewed by Poverty Quintile

Poverty Quintile	PQ2	PQ3	PQ4	PQ5
Number of Educators	2	1	2	1

3.7.2. Measuring instruments

The qualitative in-depth interview guide was primarily a guide and therefore probing questions were used to further explore the educators' perceptions and experiences during the in-depth interview process. The in-depth interview guide used for the in-depth interview was developed based on the literature review and the theoretical framework. In addition, it was also based on the researcher's understandings of the school environment as a supportive factor to sexuality education message internalisation gained from critical engagement with subject-related prior literature. The educator's in-depth interview guide was finalised after the outcome of the pilot study conducted for the purpose of refining the instrument. (Please refer to section 3.4.1. 'Pilot Study' for the details pertaining to the pilot phase of the study.) The same topics as those covered in the learner cross-sectional survey have been covered by the educator in-depth interview for the purposes of triangulation with learners' perspectives. These content areas are: *Safe & clean classroom and school environment, caring school environment, educator sense of belonging, educator perceptions of the school as a supportive environment for themselves and learners*, and *school discipline*. (Please refer to Appendix C for the *Educator In-depth Interview Guide*.) In addition to those topics covered by the learner cross-sectional survey, the *Educator in-depth Interview Guide* covered the following issues:

- Educators' descriptions of the relationship with the learners in LO classes;
- The manner in which educators' relationships with learners influenced their pedagogy of teaching LO;
- Perceptions about themselves as educators as a good role model for learners;
- Relationship between themselves as educators and learners i.e. whether or not learners approached educators in the past to discuss personal issues;

- Educators' perceptions of support from fellow educators, the Head of Department for LO and the principal to teach LO and HIV and AIDS, teenage pregnancy, STIs and risky sexual activity;

- Educators' perceptions of caregivers' influence or involvement in the school and LO programme and its component of sexuality education;

- Broader school/structural environment and influence on the delivery of LO by educators;

- Educators' perceptions of enabling and disabling factors in teaching LO and sexuality education in the school environment;

- Educators' perceptions of learner willingness to learn about sexuality in the LO curriculum;

- Educators' perceptions of the effects of school environment on learner willingness to learn from the sexuality component of the LO curriculum;

- Educators' opinions on the most important factors that assist in teaching the LO programme to learners at the school; and

- Educators' awareness and perceptions of policies on the school environment, such as a pregnancy/HIV policy and whether or not and to what extent extra-curricular prevention/peer education programmes on sexuality education are being run.

3.7.3. Data collection and procedures

In-depth, semi-structured interviews using an interview guide were conducted during free periods/breaks for educators. These lesson times and free periods for the data collection were discussed and negotiated with the LO head/educator or principal at the various schools beforehand. A number of schools were contacted in order to negotiate the approval of entry for data collection. The principal was first contacted and the researcher was then referred to the gatekeeper/point of liaison which was the LO Head of Department or academic head who assisted with operational arrangements to conduct the study at each school. Meetings with the point of liaison were held in order to inform the school of the nature, purpose, benefits and requirements of the study. This also included logistical arrangements such as the times, dates, letter of consent delivery dates and details. Once, the LO head in each school referred the educator(s) for interviewing, the researcher made direct contact with the intended participant to set up a time and date for the in-depth interview. In the instance of attending a non-English medium school, the LO educator selected was ensured by the LO head to be proficient in communicating in English. The educators'

telephonic contact details were provided to the researcher to arrange a date, time and venue at the school where and when the in-depth interviews would be conducted. Upon arrival at the school on the day of in-depth interview, the researcher reported to the reception office where the receptionist notified the educator of the researcher's presence. The educator and researcher proceeded to the venue in which the in-depth interview was to be conducted. First, an explanation by the researcher was provided which covered an introduction to the researcher and an explanation of the objectives of the in-depth interview. Regarding the educators' consent form obtained by the researcher from the educators before the in-depth interview commenced, the following details were covered: A reminder that answers were required to be honest and that no answer would necessarily be correct or incorrect but that they would be subjective, that anonymity and confidentiality would be honoured, and the length of the in-depth interview was disclosed. The researcher also reminded the educators of the permission which had been granted by the Humanities and Social Science Research Ethics Committee (HSSREC) for the researcher to audio-tape the in-depth interview. The researcher then assisted the educators in overcoming any fears related to audio-taping by reassuring them of recording being available to the researcher and the researchers' supervisor alone. Thereafter, the educators were guided through signing of the consent form. Educator in-depth interviews were conducted in English by the researcher as this was the language the researcher was proficient in. LO educators were all proficient in the English language as they taught in English medium schools, except for one school which was an Afrikaans medium school. The in-depth interviews were between 45 and 60 minutes in duration and were conducted in a classroom, office or private area on the school grounds outside of teaching times. An reward of a chocolate per participant was provided upon in-depth interview completion.

3.7.4. Data processing and data analysis

All qualitative data gathered through educator in-depth interviews was recorded with a digital recorder and later transcribed. Transcripts of the data were quality controlled by the researcher. Qualitative data collected was transcribed and analysed using thematic content analysis and by using NVivo version 10.1. According to Babbie and Mouton (2005), Braun and Clarke (2006) and Neuman (2011), thematic analysis is a method of identifying, analysing and reporting patterns which are labelled themes within data. The purpose of thematic content analyses is to organise and describe the data set in rich detail and may also be used to interpret various aspects

of the research topic (Braun & Clarke, 2006; Denzil & Lincoln, 2000). According to Neuman (2006, p. 325):

> Measurement in content analysis uses structured observation, which is systematically done with written rules. These rules guide the categorisation process. Categories should be mutually exclusive and exhaustive and therefore improves reliability. Coding identifies four characteristics: 1) Frequency – counting occurrences, 2) Direction – direction of messages in the content, 3) Intensity – strength of a message in a direction, 4) Space – recording the size/space allocated to text/message. (p.325)

Support for the use of thematic content analysis for the qualitative component of the study is further illustrated by the words of van Uden et al. (2014, p.6), who state that: "Qualitative thematic content analysis is primarily an inductive process of organising data into categories and identifying patterns and relationships among the categories."

Thus, thematic content analysis is best placed in the process of reviewing, synthesising and interpreting data to describe and explain the phenomena in the school environment being studied (Gibbs, 2007). Codes according to the provided indicators have been determined. The coding with data driven as themes have been allowed to emerge from the text. Opler's terminology of "expressions" and "themes" have been used in coding the data (1945, as cited in Ryan & Bernard, 2003, p.12), where "expressions" denote the basic units of data or incidents in the text that through a process of synthesising and comparison across cases; develop into sub-themes and "themes." A theme therefore captures an important aspect regarding the data in relation to the research question and represents some level of patterned response or meaning within the data set (Hanson et al., 2005). Hence, the use of themes and sub-themes provide a manner of grouping similar expressions that appear in the text. With the aid of qualitative data analysis software, NVivo 10.1, the researcher made meaning from the data by using descriptive codes to identify basic expressions in individual transcripts. These have been compared with other expressions emerging from other in-depth interviews, and through comparing and synthesising, these expressions were categorised into sub-themes and given more analytical coding-labels as recommended by Gibbs (2007). Ryan and Bernard's (2003) techniques for identifying themes from basic expressions in the text have been used.

The researcher used the data analysis technique proposed by Creswell (1994) for the procedure in which to analyse the data collected:

1. The researcher had written down from transcripts, word for word, the interviews that the researcher had audio-taped. Since the audio-files were in the English language, there was no need for translation. Expressions such as sighing, laughing, pausing were noted in brackets in the transcripts to allow for deeper meaning in accordance with the recommendations of Hanson et al., (2005).

2. In terms of the methodological approach for the qualitative data analysis, the process of analysing the data has been guided by the methodology of *thematic content analysis* as outlined by Gibbs (2007) and Ryan and Bernard (2003). As recommended by Bogdan and Biklen (1982), the transcripts were read twice by the researcher to be familiar with the data before coding begins which was the process adhered to for preliminary analysis of the major codes.

3. The researcher then selected one document (one interview) – the most interesting /the shortest /the one on top of the file pile.

4. The researcher coded a list of all the topics together and listed these topics in columns that were headed "major topics," ''unique topics'' and ''leftovers.''

5. The researcher found suitable abbreviations for each of the identified topics.

6. The researcher then found the most descriptive wording for topics and turned them into themes or categories.

7. The researcher made a final decision on the abbreviation for each theme or category and alphabetised these codes.

8. The researcher grouped the data belonging to each theme or category in one place and conducted a preliminary analysis. As mentioned NVivo version 10.1 was used to link the themes and subthemes.

9. The researcher reflected with the supervisor on themes and subthemes. Themes and subthemes were identified, discussed and verified with the researcher's supervisor for joint decision-making purposes. Support for more than one data analyst is established by Hanson et al., (2005), who indicate that it enhances the credibility of the themes.

3.8. Caregiver Focus Group Discussion Guide

The caregiver focus group discussion was aimed at exploring caregivers' opinions, perceptions and experiences regarding the school context. It also explored whether or not and the extent to which caregivers are included as active stakeholders for the LO curriculum's aims for learner HIV, teenage pregnancy, STI and risky sexual activity prevention. In addition the focus group discussion aimed to gauge caregivers' overall involvement in the school. The sampling strategy, research participants, measuring instruments, data collection and procedures, data processing and data analysis of the Caregiver Focus Group Discussion Guide are explained below. (Please refer to section 3.4. 'Research Design Overview' for the study's research design and section 3.3. 'Study Permission and Ethical Principles" for ethical principles.)

3.8.1. Sampling strategy and research participants

Caregivers of learners in grade nine and grade 11 who had completed the cross-sectional survey in the sampled schools were eligible for participation in the focus group discussions. Participants were selected on the basis of those who responded to the caregiver focus group discussion letters which were sent out to their caregivers, with grade nine and 11 learners who had completed the learner cross-sectional survey. If caregivers consented and were able to be available at the focus group discussion time as determined by the availability of most caregivers, they were selected to participate in the focus group discussion. The original number of caregivers aimed for was enough to enable the setting up of one focus group discussion of six caregivers each per grade for the four schools. However, this component of the research fieldwork proved especially challenging, as caregivers were not always contactable and not always reliable due to work and other commitments or because they lived far from the school venue. This also impacted negatively on the timetable for the study. Five-hundred and sixty parents did not send back the consent forms. It was planned that one focus group discussion with four to six caregivers of learners was to be carried out within each of the four secondary schools. As mentioned, the schools selected were the same schools selected for the school observations, educator in-depth interviews and learner cross-sectional survey. However, in the end only four focus group discussions were held within each of the four schools with N=3 caregivers in each of the PQ two, three and four schools and four caregivers in the PQ five school (N=4). The total sample size of caregivers was N= 13.

3.8.2. Focus group with caregivers discussion guide

The focus group *Discussion Guide* was finalised after the outcome of the pilot study conducted for the purpose of refining the instrument. (Please refer to section 3.4.1. 'Pilot Study' for further details pertaining to the pilot phase of the study). *Focus Group Discussion Guides* for caregivers were developed from various sources based on the researchers' perusal of literature on the topic. The focus group discussions aimed to address the study objectives six: 'To explore caregiver-school connectedness in terms of perceptions and experiences of the school environment in relation to it being conducive to the sexuality education programmes' sexuality and overall health and well-being' aim and objective seven: 'To develop guidelines for improving school climate/culture and caregiver involvement.' (Please refer also to Appendix D for the "Focus Group Discussion Guide for Caregivers of Learners"). *Focus Group Discussion Guides* for caregivers were developed to include aspects of the three additional measures i.e. the learner cross-sectional survey, educator in-depth interview and the researcher's observation of the schools, due to the intended convergence with these measures for the purposes of triangulation of the data. The instruments included information on school safety, the extent to which learners felt respected and accepted in the school, whether or not and to what extent learners felt that they could be themselves in the school and to what extent the school provided a context in which the values taught in LO lessons are respected and adhered to. *The Focus Group Discussion Guide* explored information on the physical surroundings of the school and classroom environments that were theoretically linked to learner engagement, school cohesion and educational outcomes. Specific to the caregiver focus group discussion guide, was information on perceptions on school inclusion of caregivers and perceptions of caregiver-school connectedness. Additional information explored involved perceptions of the school environment as being supportive to sexuality education and supportive to their role as caregivers in preventing HIV, teenage pregnancy, STIs and risky sexual behaviour in their children. Furthermore, the focus group discussion guide explored whether or not and to what extent caregivers were included as part of the LO curriculum's aims in reducing risky sexual behaviour. More specifically, this covered whether or not they felt encouraged/inhibited by LO in their support for youth reducing risky sexual behaviour. In addition it covered, whether or not caregivers agreed with what was being taught, whether or not they agreed with how it was being taught and whether or not they felt that they could actively participate in their child's learning and internalisation of the LO curriculum's aims. The extent of caregivers' reliance on sexuality

education to provide information to change risky sexual behaviour in their children, was also explored. The *Focus Group Discussion Guide* covers the following outline in the order of topics covered:

1. Caregivers' perceptions of the school's safety in terms of infrastructure, physical, hygiene and emotional safety;
2. Caregivers' perceptions on whether or not their child is cared for and the extent of their child being cared for by the school;
3. Caregivers' perceptions of their child being respected and supported in the school and their child's school connectedness;
4. Caregivers' perceptions and awareness of social networks of support for their child within the school and external networks of social support;
5. Caregivers' perceptions of the presence of positive role models at the school from which their children can learn positive behaviour.
6. Caregivers' perceptions of the discipline and order within the school environment;
7. Caregivers' perception of the school environment's impact on risky behaviour change and how the school provides a supportive environment for programmes that target behaviour change;
8. Caregivers' opinions of the overall school climate i.e. the values, morals, discrimination, stigma, acceptance and tolerance of their child in the school;
9. Caregivers' perceptions of how their child felt about being able to apply what they have learnt in LO in the context of their school environment; and
10. Caregivers' perceptions and experiences of the school environment in terms of being conducive to LO's sexuality educations' aims. This also explored caregivers' overall support for learner school connectedness.

3.8.3. Data collection and procedures

Caregivers of grade nine and 11 learners were provided with informed-consent letters. Caregiver focus-group discussions were conducted in English by the researcher as this was the language the researcher was proficient in. Caregivers were all proficient in the English language as they were informed that this was a prerequisite on the letter of request for them to participate in the focus group discussion. This was also due to their children attending English medium schools

where communication between them and the schools was in English. There was an exception of one school which taught in Afrikaans and English mediums. In this instance, only caregivers who were comfortable with communicating in English were requested to respond via the letter of request to participate in the focus group discussion. Caregivers who indicated an interest in participation in the study returned the consent letters to the school receptionist who provided it to the school gatekeeper. The school gatekeeper then provided the completed consent forms to the researcher. The consent forms had a space for telephonic details of the caregivers. Caregivers who were available for the study were telephonically contacted by the researcher to arrange a date and time most convenient to all caregivers who responded. The focus group discussion venues were the respective schools of the caregivers' children. This occurred with the exception of the PQ three school where the discussion was held at iKamvayouth which is an NGO in the community, which specialises in youth academic assistance after school hours, due to it being a more convenient and accessible location for caregivers to meet. Within the schools, focus group discussions were conducted either in a classroom, office or private area in the school grounds outside of teaching times. The focus group discussion started with an introduction to the researcher and a summary of the study aims and rationale as well as the average time taken to complete the focus group discussion. The caregiver letters of informed consent (Please refer to Appendix I: 'Informed Consent letter for Educators and Ceargivers for participation in Interviews and Focus Group Discussion Recordings' and Appendix H: 'Letter of Informed Consent–Caregivers') were also covered and caregivers signed the letters of consent to participate in the focus group discussion. A reminder was provided regarding the use of the audio-tape for recording of the focus group discussion as per permission provided by the Humanities and Social Science Research Ethics Committee (HSSREC). The researcher assisted caregivers in feeling more comfortable with the recording by reminding them that the recording would only be available to the researcher and the researcher's supervisor. All ethical principles as per section 3.3. 'Study Permission and Ethical Principles' were covered. A reward of a chocolate per participant was provided upon focus group discussion completion. The focus group discussions were between 45 and 60 minutes in duration.

Caregivers were unreliable due to time constraints and although all caregivers of Grade nine and 11 learners in the sample were contacted via letters, very few consented to avail themselves to participate in the focus group discussion and the arrangements of any date, time and venue proved challenging for all caregivers to attend.

3.8.4. Data processing and data analysis

The same process as per that used for transcription and analysis of the qualitative educator in-depth interviews was used for the caregivers' focus group discussions. (Please refer to section 3.7.4. 'Data processing and data analysis' for further details.)

3.9. Integrated Analysis

Regarding convergence of mixed methodologies in a study, the term 'triangulation', signifies the use of multiple reference points to locate the exact position of a perspective (Denzin & Lincoln 2000; Neuman. 2011; Patton, 2002). The purpose of triangulation is to uncover a unique variance which otherwise may have been neglected by a single method (Hanson et al., 2005; Neuman, 2011). This approach would be relevant and useful for this particular study due to the multiple stakeholders' perspectives originating from the data from the different measuring instruments. Multiple stakeholders' perspectives may thus add value to the experience of the school as a supportive environment for sexuality education message internalisation and practice in learners' lives (Neuman, 2011; Patton, 2002). All qualitative measures have been analysed and triangulated with the quantitative findings for an overall understanding of the school climate, culture, connectedness and their impact on the implementation of the sexuality education messages by learners. In turn this focuses on the resultant impact on learner HIV, teenage pregnancy, STIs and other risky behaviour prevention. The instruments have common thematic content areas and this has enabled the study to view standardised themes from the perspectives of the various stakeholders involved in the study (Neuman, 2011; Patton, 2002). Factors which enabled triangulation for the study involved the qualitative and quantitative data gathered from participants in the same schools, i.e. learners' cross-sectional survey data, qualitative focus group discussion data from caregivers and qualitative in-depth interviews with educators. This aided the examination of commonalities and discrepancies that were further explored during the analysis (Babbie & Mouton, 2005; Patton, 2002). The researcher's perspective was captured by the school observation and was aimed at reducing possible response bias which may emanate from the other participant/respondent measures (Denzin & Lincoln, 2000; Patton, 2002). In accordance with Denzin and Lincoln (2000) and Patton (2002), the ability of the measures to be triangulated was in line with the aim of the study from the outset as the research investigated the perspectives of the various stakeholders in the school which form the components of the school environment.

3.10. Study Rigour

The study aims to ensure that data is based on participants perceptions and the researcher's understanding of the perceptions. Therefore dependability/consistency was used for the purpose of qualitative analysis while reliability was used for quantitative analysis (Neuman, 2011; Neuman, 2006). Credibility was aspired to in the school observations as with the rest of the qualitative section of the learner research phase as this element of rigour demands that the reviewer ensures that the research adequately and appropriately captures what was learnt in the research context (Patton, 2002). The procedures were credible in that the techniques and data-gathering instrument (researcher's observations of the school, qualitative in-depth interviews with educators and focus group discussions) were designed to facilitate an analysis of the data (Stewart & Shamdasani, 2015; Vicsek, 2007). These principles of credibility also apply to the educator in-depth interview and the caregiver focus group discussions which are specifically referred to in section 3.4.4. 'Research Design of the Educator In-depth Interviews and Caregiver Focus Group Discussions.' Further detail on study rigour is covered according to the following: School observations are covered in section 3.4.2. 'Research design of the school observations' and further detail for the cross-sectional survey's study rigour are covered in section 3.4.3. 'Research design of the cross-sectional survey.'

3.11. Conclusion

The concurrent mixed methods approach (i.e. including both quantitative and qualitative phases) and techniques used in this study were defined by the research aims and were described and justified. Triangulation was used to assess the environmental factors supporting the sexuality component of the LO curriculum in KZN schools. Cross-sectional surveys, in-depth individual interviews and focus group discussions were used to collect the data from learners, educators, and caregivers. The study also incorporated the researcher's own observations of the school environment. The pilot study was used to design and develop the research instruments. The research setting, design, research participants, measuring instruments, data collection and data analysis were outlined. Chapter four to seven outlines the findings of the research. All the chapters pertaining to the research findings consist of a short introductory section followed by a more detailed presentation of the results and discussion sections.

CHAPTER 4

RESULTS

BIO-SOCIO-DEMOGRAPHIC BACKGROUND OF LEARNERS

4.1. Introduction

The focus of this chapter is the bio-socio demographic characteristics of learners. Firstly, the socio-demographic profile of learner respondents and the demographic group differences of the respondents are presented. Thereafter, learners' sexual and other health risk behaviours are presented. Finally, learners' perceived ability to apply sexuality education to their personal lives and the school as a supportive environment to enable the application of sexuality education in their personal lives, are presented. Only statistically significant results were reported.

4.2. Socio-demographic Profile of Respondents

The total realised sample size obtained by purposive sampling was 600 respondents (N=600). The researcher selected one school in each poverty quintile (PQ) (two to five) with 150 learners per school within each PQ. As mentioned earlier, the PQ refers to the categorisation used by the DoE as an indication of the socio-economic status of the school with PQ one being the poorest category of schools and PQ five schools as the highest level of socio-economic status. While different for each school, the overall sample consisted of equal numbers of respondents by grade with 50% of learners (N=300) in Grade 9 and 50% of learners (N=300) in Grade 11. Similarly, for gender groups, while different for each school, the overall sample consisted of almost equal numbers of each gender of respondents with 50% (N=301) for male and 50% (N=299) female respondents.

The socio-demographic characteristics of the learners are depicted in Table 11 below. The learners' ages ranged from 13 to 20 years with the eldest respondent being 23 years. Most of the learners were aged 16 years at 23.3% (N=140) and 14 years at 20% (N=120). The lowest proportion of the sample was 13 years at 3.2% (N=19). Regarding race, over half the sample was Black African at 50.3% (N=303) and the smallest proportion of the sample being Coloured at 6.5% (N=39). Zulu was the most spoken home language indicated by half the respondents (N=300).

English and Afrikaans were spoken by one quarter of the sample each (N=150). The majority of the sample of 42.3% indicated living with more than three adults (N=254).

Table 11

Socio-Demographic profile of the learners

Characteristics	N	%
Poverty Quintile (PQ)	**600**	**100%**
2	150	25%
3	150	25%
4	150	25%
5	150	25%
Grade	**600**	**100%**
9	300	50%
11	300	50%
Gender	**600**	**100%**
Male	301	50.2%
Female	299	49.8%
Age	**600**	**100%**
13 years	19	3.2%
14 years	120	20%
15 years	96	16%
16 years	140	23.3%
17 years	87	14.5%
18-19 years	108	18%
20 years and over	30	5%
Race	600	100%
White	143	23.8%
Black African	303	50.3%
Indian	116	19.3%
Coloured	39	6.5%
Home Language	**600**	**100%**
English	150	25%
Afrikaans	150	25%
Zulu	300	50%
Religious Affiliation	600	100%
Christian	421	70.2%
Hindu	83	13.8%
African Religious	96	16%
Number of siblings living with	600	100%
0	65	10.8%
1	165	27.5%
2	176	29.3%
+3	194	32.3%
Number of adults living with	**600**	**100%**
0	20	3.3%
1	117	19.5%
2	209	34.8%
+3	254	42.3%

4.3. Learners' Sexual and Other Health Risk Behaviours

The below section including Table 12, presents the learners' sexual and other health risks of the sample. The overall frequencies of all sexual and other risk behaviours are first presented and thereafter the demographic group differences pertaining to the sexual and other risk behaviours are presented.

A total of 145 (24%) learners indicated ever having sexual intercourse. Most of the sample, at 75.8%, had not ever engaged in sexual intercourse (N=455). The most frequent age of sexual debut was 14 years at 22.8% (N=33) followed by 13 years at 20.7% (N=30) and lastly 17 years and older at 15.2% (N=22). There were almost equal numbers (49%) of learners who wanted condoms to be available at their school (N=295) versus those who did not at 51% (N=305). Most learners indicated using contraceptives during their last sexual intercourse with 61% of those learners (N=88) who had ever had sex reporting contraceptive use, versus those learners who reported no method of contraception at 39%, (N=49). Contraceptives most used were condoms at 46% (N=66), birth control pills at 17% (N=27), injectable birth control at 1% (N=2) and withdrawal at 1% (N=1). Of those learners who had reported ever having sexual intercourse, 32% reported engaging in substance use before their last sexual intercourse (N=46) versus 68% of those who did not indicate substance use before their last sexual intercourse (N=99).

Table 12

Learners' sexual and other health risk behaviour of the learner sample

Characteristics	%/N	%
Ever had sexual intercourse	**600**	
Yes	145	24%
No	455	76%
Age of sexual debut	**145**	
11 years or younger	12	8%
12 years	13	9%
13 years	30	21%
14 years	33	23%
15 years	17	12%
16 years	18	12%
17 years or older	22	15%
No. of people had sex with in lifetime	**145**	
1 person	50	34%
2 people	42	29%
3 people	19	13%
4 people	10	7%
5 people	4	3%
6 or more people	20	14%
Past 3 months no. of people had sex with	**145**	
Had sex but not within last 3 months	43	30%
1 person	54	38%
2 persons	19	13%
3 persons	14	10%
4 persons	9	6%
5 persons	4	3%
6 or more	2	1%
Contraceptive used at last sex	**145**	
No method	49	39%
Birth control pills	27	17%
Condoms	66	46%
Injectable birth control	2	1%
Withdrawal	1	1%
Condom used at every sexual intercourse	**145**	
Yes	120	83%
No	25	17%
Substance use before last sex	**145**	
Yes	46	32%
No	99	68%
Past 30 days drunk +1 sip of alcohol	**600**	
Yes, once	100	17%
Yes, more than once	74	12%
No	426	71%
Past 30 days drank +5 alcoholic drinks on 1 day	**600**	
Yes, once	72	12%
Yes, more than once	72	12%
No	456	75%
Past 30 days used drugs	**600**	
Yes, once	86	14%
Yes, more than once	30	5%
No	484	81%
School to avail condoms	**600**	
Yes	295	49%
No	305	51%

4.3.1. Demographic differences in sexual risk behaviour

Only statistically significant differences in items which presented demographic differences were reported and these items were "Availing condoms at school," "Ever having had sexual intercourse," "Condoms used at every sexual intercourse" and "Substance used before last sex." The results were presented for learners who wanted the school to avail condoms i.e. those respondents who responded "Yes" to wanting condoms available in their schools. The same process was applied to the other three items. For items "Condoms used at every sexual intercourse" and "Substance used before last sex," the variables were recoded into new variables removing the "I have never had sex" response category in order to run the Chi-square against the two remaining nominal responses i.e. "Yes" and "No." The percentages provided are the valid percentages out of the total number of learners who reported having had sexual intercourse (100%/N=145). The results are presented in Table 13 below and sections categorised by the items thereafter:

Ever had sex

There was a statistically significant *gender* difference in sexual activity in this study. As compared to females, more males reported ever having had sexual intercourse (29.6% vs. 18.7%), $[\chi2\ (1, N = 600) = 9.62, p = 0.002]$.

The learners in schools classified as *poverty quintile* three reported a statistically significantly higher level of sexual activity to schools classified as PQs two, four and five (46% versus 20%, 16.7% and 14% respectively) $[\chi2\ (3, N = 600) = 53.50, p < 0.001]$.

Having ever engaged in sexual intercourse increased by *age* with 13.2% of learners aged 13-15 years and 25.1% of learners aged 16 -17 years, versus learners 41.3% of learners' aged 18 years and older having engaged in sexual intercourse, $[\chi2\ (2, N = 600) = 18.0, p < 0.001]$.

Grade 11 learner's presented a higher number of those who ever had sexual intercourse than Grade 9s (31.0% vs. 17.1%), $[\chi2\ (1, N = 600) = 15.29, p < 0.001]$.

A higher frequency of ever having had sexual intercourse was statistically significant by *race*. This was indicated by Black African and Coloured learners (32.8% and 30.8% respectively) reporting a higher frequency of having had sexual intercourse as opposed to Indian and White learners (13.8% and 12.6% respectively), $[\chi2\ (3, N = 145) = 30.43, p < 0.001]$.

The higher the *number of adults in the household* the lower the rate of ever having had sexual intercourse (50% for living with no adults vs. 22.4% for living with three or more adults), [$\chi 2$ (3, N = 145) = 12.37, p < 0.05].

Table 13

Demographic differences in learners' sexual and other health risk behaviour

Demographic		School to avail condoms	Ever had sex	Condom used at every sexual intercourse	Substance used before last sex
Poverty Quintile	2 N (%)	77(51.3)	30(20.0)	26(17.9)	15 (10.3)
	3 N (%)	102(68.0)	69(46.0)	58(40.0)	20(13.8)
	4 N (%)	70(46.7)	25(16.7)	20(13.8)	9(6.2)
	5 N (%)	46(30.7)	21(14)	16(11.0)	2(1.4)
Chi-square (p-values)		<0.001	<0.001	0.76	<0.05
Gender	Male N (%)	170(56.5)	89(29.6)	73(50.3)	34(23.4)
	Female N (%)	125(41.8)	56(18.7)	47(32.4)	12(8.3)
Chi-square (p-values)		<0.001	0.002	<0.05	<0.05
Grade	9 N (%)	126(42.0)	52(17.3)	42(29.0%)	39(26.7%)
	11 N (%)	169(56.3)	93(31.0)	78(54.7%)	16(11.4%)
Chi-square (p-values)		<0.001	<0.001	<0.005	<0.005
Age	13-15 years N (%)	99(42.1)	31(13.2)	29(20.0)	7(4.8)
	16-17 years N (%)	107(47.1)	57(25.1)	41(28.3)	25(17.2)
	18 – over 20 years N (%)	89(64.5)	57(41.3)	50(34.5)	14(9.7)
Chi-square (p-values)		<0.001	<0.001	<0.05	<0.05
Race	White N (%)	42(29.4)	18(12.6)	14(9.7)	2(1.4)
	Black African N (%)	179(59.3)	99(32.8)	84(57.9)	35(24.1)
	Indian N (%)	51(44%)	16(13.8)	13(9.0)	5(3.4)
	Coloured N (%)	23(59%)	12(30.8)	9(6.2)	4(2.8)
Chi-square (p-values)		<0.001	<0.001	<0.05	<0.05
No. of adults living with	0 N (%)	10(50)	10(50)	8(5.5)	5(3.4)
	1 N (%)	54(46.2)	36(30.8)	26(17.9)	9(6.2)
	2 N (%)	93(44.5)	42(20.1)	40(27.6)	12(8.3)
	+3 N (%)	138(54.3)	57(22.4)	46(31.7)	20(13.8)
Chi-square (p-values)		0.17	0.006	<0.005	<0.05

Access to condoms at school

Significant *gender* differences were reported with more males than females indicating a preference for condoms to be available at their school (56.5% vs. 41.8%), [χ2 (1, N = 600) = 12.92, *p* < 0.001].

There was a somewhat negative correlational relationship which was statistically significant between p*overty quintile* and learners' affirmative preference for condoms to be available at their school. The higher the PQ, the lower the frequency of preference of availability of condoms in learners' schools with PQ two at 51.3%, PQ three at 68%, PQ four at 46.7% and PQ five at 30.7%, [χ2 (3, N = 600) = 42.49, p < 0.001].

There was an observed statistical significance between *Grade* 9 versus Grade 11 with respect to wanting condoms to be available at school with more Grade 11's wanting condoms available than Grade 9's (56.3% vs. 42.0%), [χ2 (1, N = 600) = 12.33, p < 0.001].

There were statistically significant differences in terms of *age*; specifically between learners over 18 years old, 16-17 year old and 13-15 year old learners in terms of preference for availability of condoms in schools (64.5% versus 47.1% and 42.1% respectively) i.e. the age group of learners who most wanted access to condoms at their school were over the age of 18 years (64.5%/N=89), followed by those aged 16-17 years (47.1%/N=107) and thereafter those aged 13-15 years (42.1%/N=99), [χ2 (2, N = 600) = 12.83, p < 0.001].

Regarding *race*, Black African and Coloured learners indicated a greater preference for condoms to be available at their schools with frequencies of learners at 59.3% and 59% respectively while a lesser proportion of Indian learners (44%) and White learners (29.4%) indicated the same, [χ2 (3, N = 600) = 37.52, p < 0.001].

Consistent condom use

Significant *gender* differences were reported with more male learners (50.3%) than female learners (32.4%) indicating consistent condom use, [χ2 (1, N = 145) = 8.86, p < 0.05].

There was an observed statistical significance between *Grade* 9 versus Grade 11 with respect to condoms used at every sexual intercourse with more Grade 11's reporting consistent condom use than Grade 9's (54.7.% vs. 29%), [$\chi2$ (1, N = 145) = 12.52, p < 0.005].

There were statistically significant differences with respect to *age*; between learners over 18 years old (14.7%), 16-17 year old (17.2%) and 13-15 year old (4.8%/N=7) learners in terms of consistent condom use [$\chi2$ (2, N = 145) = 8.19, p < 0.05].

Regarding *race*, a higher number of Black African learners (57.9%) indicated consistent condom use than White learners (9.7%), Indian learners (9%) and Coloured learners (6.2%), [$\chi2$ (3, N = 145) = 11.45, p < 0.05].

The higher the *number of adults in the household* the higher the rate of consistent condom use (31.7% for living with three or more adults vs. 5.5% for living with no adults), [$\chi2$ (3, N = 145) = 7.61, p < 0.05].

Substance use before last sex

More learners from lower *poverty quintile* schools reported substance use before their last sexual intercourse (PQ two at 10.3% and PQ three at 13.8%), than learners from higher PQ schools (PQ four at 6.2% and PQ five at 1.4%), [$\chi2$ (3, N = 145) = 9.85, p < 0.05].

There was an observed statistical significance between *Grade* 9 versus Grade 11 with respect to substance use before last sexual intercourse; with more Grade 9's reporting substance use before last sexual intercourse than Grade 11's (26.7% vs. 11.4%), [$\chi2$ (1, N = 145) = 7.79, p < 0.005].

There was an observed statistical significance between *gender,* with a higher number of male learners reporting substance use before last sexual intercourse (23.4%) than their female counterparts (8.3%), [$\chi2$ (1, N = 145) = 4.47, p < 0.05].

Statistically significant differences in terms of *age* were reported between learners over 18 years old (34.5%), 16-17 year old (28.3%) and 13-15 year old (20%) learners with regard to substance use before last sex [$\chi2$ (2, N = 145) = 6.42, p < 0.05].

Regarding *race*, a higher number of Black African learners (24.1%) indicated substance use before their last sexual intercourse than Indian learners (3.4%), Coloured learners (2.8) and White learners (1.4%), [χ2 (3, N = 145) = 4.15, p < 0.05].

The higher the *number of adults in the household* the higher the rate of substance use before last sex (3.4% for living with no adults vs. 13.8% for living with three or more adults), [χ2 (3, N = 145) = 5.78, p < 0.05].

4.4. Socio-demographic characteristic differences in learners' perception of whether the school environment and sexuality education messages have an influence on their personal lives

Socio-demographic differences in learners' perceptions of their ability to apply sexuality education messages in their personal lives and the school environment as being supportive to their perceived ability to implement sexuality education messages, are presented in Table 14 and the write-up below.

Table 14
Learners' Views Regarding Personal Influence of Sexuality Education

Demographic		Feel able to apply sexuality education messages in personal life	School environment supports application of sexuality education messages in personal life.
Poverty Quintile	2 N (%)	120(80.0)	75(50.0)
	3 N (%)	130(86.7)	84(56.0)
	4 N (%)	126(84.0)	89(59.3)
	5 N (%)	127(84.7)	106(70.7)
Chi-square (p-values)		0.458	0.003
Gender	Male N (%)	00	192(63.8)
	Female N (%)	00	162(54.2)
Chi-square (p-values)		0.542	0.017
Grade	9 N (%)	240(80.0)	00
	11 N (%)	263(87.7)	00
Chi-square (p-values)		0.011	0.69₁
Age	13-15 years N (%)	00	00
	16-17 years N (%)	00	00
	18 – over 20 years N (%)	00	00
Chi-square (p-values)		0.571	0.638
Race	White N (%)	00	100(70)
	Black African N (%)	00	161(53.3)
	Indian N (%)	00	73(62.9)
	Coloured N (%)	00	20(51.3)
Chi-square (p-values)		0.514	0.005
No. of adults living with	0 N (%)		7(14.0)
	1 N (%)	00	70(15.3)
	2 N (%)	00	123(16.5)
	+3 N (%)	00	154(54.2)
Chi-square (p-values)		0.521	0.172

4.4.1. Demographic differences in the school environment's influence on learners' ability to apply sexuality education messages in their personal lives

There are *gender* differences regarding learners' perceptions of the school environment having an influence on their personal lives. A higher number of male learners (63.8%) than female learners (54.2%), felt that their school environment made it easier to apply the messages they had learnt in sexuality education to their personal lives, [$\chi2$ (1, N = 600) = 5.72, p < 0.05]

A higher number of *Grade* 11's versus Grade 9's indicated positive perceptions of their ability to apply sexuality education messages in their personal lives (87.7% vs. 80.0%), [$\chi2$ (1, N = 600) = 6.51, p < 0.01].

Learners in the level five *poverty quintile* schools had a significantly higher level of agreement that their school environment enables the application of sexuality education messages in their personal lives with 70.7% of the learners consenting, compared to schools in quintile two, three, and four (50%, 56% and 59.3% respectively), [$\chi2$ (3, N = 600) = 14.03, p = 0.003].

There was a positive correlation with the *number of adults learners' lived with* and the school enabling learners to apply sexuality education messages to their personal lives, with the highest number of learners being those who lived with three or more adults (54.2%), followed by those who lived with two adults (16.5%), thereafter those who live with one adult (15.3%) and those living with no adults (14.0%), [$\chi2$ (3, N = 600) = 5.08, p < 0.5].

4.5. Learners' perceptions of sexuality education implementation in learners' personal lives, perceptions of the school environment and resultant influence on their sexual activity

In the section below, the statistically significant results pertaining to learners' perceptions of their ability to implement sexuality education messages in learners' personal lives and their perceptions of the school environment as well as the resultant influence on sexual activity has been presented. Table 15 indicates the results of t-tests on mean score differences in learners' perceptions of their ability to implement sexuality education messages in their lives by looking at the DV, the *Sexual Activity Scale*. T-tests are also presented for the school environment as being supportive to learners' perceptions of their ability to implement sexuality education messages in learners' personal lives or not, in relation to the *Sexual Activity Scale*.

The majority of the learners at 84% (N=503) indicated *their ability to implement sexuality education messages in their lives.* The reasons offered in the open-ended questions within the cross-sectional survey include: That sexuality education created awareness around the consequences of sex and helped in decision-making at 29% (N=172), it was well taught and learners' understood it in their context at 17% (N=104), it was taught on a personal level at 14% (N=85), it was practical to their lives at 14% (N=81) and it was useful for the future at 10% (N=61). Less than a quarter of the learners at 16% (N=97) indicated that they did not perceive that they were able to apply sexuality education messages in their personal lives. The reasons offered in the open-ended questions include: It is not currently necessary in their lives as they are not sexually active at 6% (N=36), that it is not adequately practical at 5% (N=32) and that the teaching is not personally suited to them at 5% (N=29). Please refer to Table 15 below.

Three hundred and fifty-four learners (59%) indicated that their school did provide a *supportive environment for their perceived ability to implement sexuality education messages in their lives.* These learners attributed their perceptions to reasons such as the value of sexuality education and educator support in the school at 17% (N=103), the discipline in the school at 16% (N=96), the physical school environment (for example, gender differentiated loos, school safety and school cleanliness) at 16% (N=95) and educator supervision at 10% (N=60). Almost half the learners at 41% (N=246) indicated that their school did not provide a supportive environment for their perceived ability to implement sexuality education messages in their personal lives. The reasons offered in the open-ended questions include: Many learners (29%) were sexually active which resulted in peer pressure being present in the school (N=176) and 12% reported that their perceived ability to apply sexuality education messages in their lives is a personal choice and dependent on themselves rather than the school environment (N=70). Please refer to Table 15 below.

Results indicate statistically significant differences in means scores on *learners' perceptions of their ability to implement sexuality education messages to their personal lives and its influence on sexual activity* (Refer to Table 15). Learners who perceived their sexuality education lessons as being relevant to their lives ($M = 12.16$, $SD = 5.50$) had lower mean scores of sexual activity than those who did not perceive their sexuality education lessons as being relevant to their lives ($M = 12.74$, $SD = 6.34$), [t(600) = -.85, $p < 0.05$, d = 0.15].

Results indicate statistically significant differences in mean scores of learners' perceptions on *school environment as being supportive to their ability to implement sexuality education messages in their personal lives* (M = 12.00, SD = 5.58), obtained lower mean scores on sexual activity than those learners who indicated not perceiving the school environment as being supportive to their perceived ability to apply sexuality education messages to their personal lives (M = 12.61, SD = 5.72), [t(600) = -1.30, $p < 0.05$, d = 0.11].

Table 15
Mean Group Differences on Sexual Activity Scale for those who find sexuality education message implementation and school environment supportive

Variables	Mean	SD	Mean	SD	$t-$value	95% CI		$d-$value
						LL	UL	
Item	**Learner's Perception of their Ability to Apply Sexuality Education Messages in their Lives (84%, N=503)**		**Learner's Perception of their Ability to Apply Sexuality Education Messages in their Lives (16%, N=97)**					
Sexual activity Scale	12.16	5.50	12.74	6.34	-.85*	-1.95	.78	0.15
	School Environment as being Supportive to Perceived Ability to Apply Sexuality Education Messages in Personal Life (N=354)		**School Environment as being Unsupportive to Perceived Ability to Apply Sexuality Education Messages in Personal Life (N=246)**					
Sexual Activity Scale	12.00	5.58	12.61	5.72	-1.30*	-1.53	.31	0.11

Note: 95% Confidence interval (CI) for the mean difference; Cohen d is the effect size for the t-test values; LL- lower limits and UL- Upper limit

*$p < .05$

4.6. Discussion

The results are discussed in the section below in relation to learners' sexual as well as other health risk behaviours. Demographic differences are also discussed.

4.6.1. Learners' sexual and other health risk behaviour

Higher frequencies of ever having had sexual intercourse were reported in lower PQ schools. In addition, learners reported a higher frequency of substance use before their last sexual intercourse than those learners in higher PQ schools. Lower PQ schools' learners also reported higher rates of wanting condoms available at their schools. Prior literature has established that the lower the socio-economic status of an adolescent, the higher the rates of risky sexual behaviour (Pick, 2007; Statistics South Africa, 2015; Shisana et al., 2014). However, according to Protogerou (2013), adolescents may be aware of the higher rates of risky sexual behaviour occurring in their schools and communities and are therefore more likely to request the availability of condoms as a protective factor for STI, HIV contraction and teenage pregnancy prevention.

Although older learners reported a higher rate of those who had engaged in sexual intercourse, they reported less engagement in risky sexual and other risky behaviours. Older learners reported a lower engagement in substance use before their last sexual intercourse as per a lower number of Grade 11's reporting substance use before last sexual intercourse than their Grade 9 counterparts. A higher number of older learners, specifically those in Grade 11, reported consistent condom use than their younger Grade 9 counterparts. This finding was consistent with age with a positive correlation existing in learners' age by their consistent condom use. The older the learners, the higher the rate of consistent condom use. A higher rate of younger adolescent learners engaging in risky sexual and other risky behaviours has also been established by prior studies (Medical Research Council, 2008; Protogerou, 2013; Shisana et al., 2014). Eriksons' Psychosocial Development stages, specifically the 'Identity versus Role Confusion' category of the theory (1984), indicates that learners of younger adolescent age are in the experimental phase in their lives and therefore may be more prone to engaging in higher risk behaviours than their older adolescent counterparts, whom have already established their identity or are closer to doing so.

In addition, more male learners than female learners reported substance use before their last sexual intercourse. However, more male than female learners reported consistent condom use in this study. This may be due to males being the providers of the condoms and the decision-makers on whether condoms are used or not at each sexual encounter (Protogerou, 2013; UNAIDS, 2009). Regarding race differences, a higher number of Black African learners reported substance use before their last sexual intercourse than learners of other race groups. The highest risk group for sexual and other risky behaviours, according to the study's results are therefore, younger male learners of Black African race, in lower PQ schools. A number of South African and Southern African studies indicate these demographics to be the highest risk group for sexual and other risky behaviours (Medical Research Council, 2008; Protogerou, 2013; Reddy et al., 2010; Shisana et al., 2014; Shisana et al., 2009).

A surprising finding was that the higher the number of adults the learners lives with in their households, the higher the number of learners who used substances before their last sexual intercourse. A possible reason for this may be the increased availability and access to substances such as alcohol or drugs with the increase in the number of adults in the household due to them being in the adults' possession however, adolescents may be using them with or without the adults' permission (Protogerou, 2013). Another possible reason may be the role-modelling by adults in the household of alcohol and substance use/abuse (Hutchinson, 2007). However, the number of adults in the household appeared to be a protective factor for practice of safer sex as the study's results indicated that the higher the number of adults in the household the higher the rate of consistent condom use. This is true across all PQ levels. This is consistent with findings in prior studies (Bell et al., 2008; Hutchinson, 2007).

4.6.2. Learners' perceptions of sexuality education's relevance for their personal lives and the school as a supportive environment for the application of sexuality education to their personal lives

Learners seemed to have high perceived ability to apply sexuality education messages in their personal lives, which may be important for the actual sexuality education message implementation in their personal lives. The study's results indicated that learners' perceptions of their ability to implement sexuality education messages in their personal lives positively influences learners' sexual activity. The study's findings further indicated that learners' who perceive their

school environment as being supportive to their perceived ability to implement sexuality education messages, indicated a lower score of sexual activity than learners' who did not perceive their school environment as being supportive to the influence of sexuality education messages in learners' lives. Both findings are supported by past research findings (Mukoma, 2009; Ward et al., 2008; Willan, 2013). Learners' indication that they were able to apply sexuality education messages in their lives were due to reasons such as it created awareness around the consequences of sex and helped in decision-making, it was well taught and learners' understood it in their context, it was taught on a personal level, it was practical to their lives and it was useful for the future. Past research establishes that it is integral that educators have the ability to perceive the correct level to pitch their teaching in order for it to be relevant to learners (Kirby et al., 2011). It has been documented that in South African schools, educators are prone to emphasising information on dangers of sexuality, provisions of an authoritarian list of do's and don'ts and the use of fear to motivate learners to adopt sexually safe behaviour (Mukoma, 2009Ward et al., 2008; Willan, 2013; Zdenek & Schochor, 2007). However, these approaches, which are characteristic of methods in a traditional school setting, fail in their relevance to learners' lives (Kirby, 2002; Kirby et al., 2011). Consequently, they do not share the potential of non-formal approaches to enter into discussions addressing the underlying cultural and subcultural determinants which motivate youth from within, more powerfully than anything the educator may propose externally (Verma, 2016). However, results from this study indicate a more successful outcome of sexuality education message implementation in learners' lives and therefore suggest a possibility of a more explanatory and participatory approach to teaching sexuality education.

A higher number of Grade 11's versus Grade 9's felt that they are able to apply sexuality education messages in their personal lives. The finding that older learners perceive sexuality education as being more relevant for their personal lives is in line with prior research (Shisana et al., 2014; Ward et al., 2008). Possible reasons to support this finding as provided by this and prior research were that the older the learners, the more likely they are to be involved in sexual activity as well as possess their own knowledge and experience which may render sexuality education messages as relevant information and a reinforcement of messages they are already well familiar with. However, despite having knowledge, older learners are required to practice safe sexual behaviours as intentioned by sexuality education and sexuality education should be used as a reminder in this regard. Given that the older the learner, the higher the engagement in sexual

behaviours (which is a finding by this study as well as prior studies), there is a need for reinforcement of safe sexual behaviour promotion in older learner age groups (Francis, 2010; Shisana et al., 2014; Ward et al., 2008).

The PQ five school had a statistically significantly higher rate of learners indicating that they perceived that their school environment enables the application of sexuality education messages to their personal lives, than other PQ schools. This finding was in congruence with prior research which indicates that the more resources a school has, the better and more supportive the school environment is for the purposes of sexual behaviour prevention messages as taught in sexuality education programmes (Appleton et al., 2008; Bradshaw et al., 2014; Strøm et al., 2013; Sulkowski et al., 2014). The school environment is defined as the school structure in terms of resources which include facilities, classrooms, school-based health support systems and disciplinary policies and practices (Bond et al., 2007; Ruzek et al., 2016). A positive school environment is a positive influential structure for external factors which affects learners (Ruzek et al., 2016). Positive school environments are characterised by possessing appropriate facilities, well-managed classrooms and available school-based health support systems (Sulkowski et al., 2014). They also possess clear and fair disciplinary policy (Appleton et al., 2008; Bradshaw et al., 2014). Schools' environments may be categorised by academic, disciplinary and physical environments (Strom et al.., 2013). Schools which are more highly resourced may therefore be at an advantage of providing a better school environment for learners' perceived ability to implement sexuality education messages in their personal lives. Hence the PQ5 school having a higher rate of learners' perceived school environment support to apply sexuality education messages in their personal lives.

4.7. Conclusion

This chapter focussed on the bio-socio demographics of the learners who participated in the learner cross-sectional survey. Learners' sexual and other risk behaviours, as well as their perceived influence of the school environment to apply sexuality education messages in their personal lives were also covered in this chapter. The next chapter, Chapter 5 covers the learners' perceptions of the components of the school environment and the perceived influence and practice of sexuality education messages in learners' personal lives.

CHAPTER 5

LEARNERS' PERSPECTIVES OF THEIR SCHOOL ENVIRONMENT

5.1. Introduction

Chapter 5 covers learners' perceptions of their school environment and the influence it has on learners' perceived ability to implement sexuality education messages and the resultant influence on their sexual activity. The following aspects are addressed: Whether and to what extent learners feel safe, cared for and respected by peers, educators and support staff within their school and whether learners have networks of social support they can access within their schools. The chapter also covers learners' perceptions of the physical school environment and the discipline and order within the school, as well as the school's values in terms of acceptance and tolerance. In addition, the chapter covers how learners feel about being able to apply what they have learnt in LO and whether the school environment plays an enabling role in learners' ability to implement these sexuality education messages in their personal lives.

The next component of the chapter investigates learners' perceptions of their LO educators' ability/expertise in teaching sexuality education messages and learners' perceived quality of the relationships with their LO educators and their views on educators as role models. In addition, the number of sexuality education lessons attended and its influence on learners' views about the relevance of these messages was examined. The chapter finally presents the results of learners' perceptions of caregiver involvement in their school and in their personal lives. It should be noted that corrections been applied for multiple testing and the Type 1 error. The influence of age and gender were examined in the relevant sections pertaining to the demographic breakdown of the results.

5.2. The Perceived School Environment

Firstly, the demographic differences on the physical school environment scale and thereafter the psycho-social school environment scales are presented. Thereafter, the school environments' influence on learners' perceived ability to implement sexuality education messages and its influence on learners' sexual activity are presented.

5.2.1. Demographic group differences pertaining to views on the mean score differences of the physical school environment

Tables 16-19 below presents the demographic differences on the mean scores of the *Safe & clean classroom clean and school environment scale.*

Results of the t-test indicate statistically significant differences in mean scores on grade differences on the physical school environment with *Grade* 9's reporting higher mean scores on the *Safe & clean classroom and school environment scale* ($M = 2.81$, $SD = .617$) than Grade 11's mean scores ($M = 2.61$, $SD = .626$), [$t(600) = 5.257$, $p < 0.01$, $d = 0.589$]. Statistically significant gender differences were also found with higher mean scores for females than males ($M = 2.65$, $SD = .723$) than males ($M = 2.59$, $SD = .772$), [$t(600) = -1.050$, $p < 0.01$, $d = 0.598$].

Table 16
Mean Differences on the Physical School Environment by Gender and Grade

Variables	Mean	SD	Mean	SD	t – value	95% CI LL	UL	d – value
		Gender						
Item	Male (N=301)		Female (N=299)					
Safe & clean classroom and school environment	2.59	.772	2.65	.723	-1.050**	-.184	.056	0.598
		Grade						
	Grade 9 (N=300)		Grade 11 (N=300)					
Safe & clean classroom and school environment	2.81	.617	2.61	.626	5.257**	.167	.366	0.594

Note: 95% Confidence interval (CI) for the mean difference; Cohen d is the effect size for the t-test values; LL- lower limits and UL-Upper limit

*p < .0.05; **p<0.01

The One-Way Between Groups ANOVAs results were used for PQ, age, race, religion and the number of adults in learners' household differences in the physical school environment and are presented in Tables 17-19 below:

Table 17
The physical school environment scales and age and religious differences

	Age						Post Hoc Comparisons Tukey
Variable	13-15 years (N=139) [1]		16-17 years (N=236) [2]		18 – over 20 years (N=225) [3]		
Physical School Environment	M	SD	M	SD	M	SD	
Safe & clean classroom and school environment scale	2.98	.545	2.83	.628	2.51	.620	[1>2]**, [1>3]**

	Religion						
Variable	Christian (N=421) [1]		Hindu (N=83) [2]		Black African Religious (N=96) [3]		
	M	SD	M	SD	M	SD	
Safe & clean classroom and school environment scale	2.76	.620	3.06	.612	2.43	.576	[2>1]***, [2>3]***

Table 18
The physical school environment scales and poverty quintile, race and number of adults living with in household

	Poverty Quintile								Post Hoc Comparisons Tukey
Variable	PQ2 (N=150) [1]		PQ3 (N=150) [2]		PQ4 (N=150) [3]		PQ5 (N=150) [4]		
Physical School Environment	M	SD	M	SD	M	SD	M	SD	
Safe & clean classroom and school environment scale	2.45	.756	2.51	.687	3.11	.636	2.51	.693	[3>1]***, [3>2]***, [3>4]***

	Race								
Variable	White (N=143) [1]		Black African (N=303) [2]		Indian (N=116) [3]		Coloured (N=39) [4]		
	M	SD	M	SD	M	SD	M	SD	
Safe & clean classroom and school environment scale	2.51	.701	2.43	.720	3.16	.641	2.92	.580	[3>1]***, [3>2]***, [3>4]*

	Number of Adults Living within Household								
Variable	0 adults (N=20) [1]		1 adult (N=117) [2]		2 adults (N=209) [3]		3 or more adults (N=254) [4]		
	M	SD	M	SD	M	SD	M	SD	
Safe & clean classroom and school environment scale	2.40	.681	2.76	.611	2.78	.612	2.74	.656	[2>1]**, [3>1]**[4>1]**

Note: *p < .05; **p < .01; ***p < .001

Table 19
One-Way Between Groups ANOVA Results for Physical School Environment and Demographics Differences

Source of Variance	Sum of Squares	Df	Mean Squares	F Values
Age				
Safe & clean classroom and school environment scale	21.781	2	10.890	29.591**
Religion				
Safe & clean classroom and school environment scale	25.622	2	12.811	24.692***
Poverty Quintile				
Safe & clean classroom and school environment scale	48.147	3	16.049	43.743***
Race				
Safe & clean classroom and school environment scale	49.752	3	16.584	34.607***
No. of Adults living with in household				
Safe & clean classroom and school environment scale	2.668	3	.889	5.409**

Note: *$p < .05$; **$p < .01$; ***$p < .001$

There are statistically significant differences in mean scores of overall perceptions on the *Safe & clean classroom and school environment scale* among the three *age* groups, [$F(2, 600) = 29.591, p < 0.01$]. Multiple comparisons, using Tukey HSD indicated that the mean scores for 13-15 year olds ($M = 2.98, SD = 5.45$) were significantly higher than for both 16-17 year olds ($M = 2.83, SD = 6.20$), $p < 0.01$, and 18-over 20 year olds ($M = 2.51, SD = 6.28$), $p < 0.01$. Further results are presented in Tables 17 and 19 above.

Results indicate statistically significant differences in mean scores on overall perceptions on the *Safe & clean classroom and school environment scale* among the three *religious* groups, [$F(2, 600) = 24.692, p < 0.001$]. Multiple comparisons, using Tukey HSD indicated that the mean scores for Hindus ($M = 3.06, SD = .612$) were significantly higher than Christians ($M = 2.76, SD = .620$), $p < 0.001$, and Black African religious groups ($M = 2.43, SD = .576$), $p < 0.001$. Further results are presented in Tables 17 and 19 above.

The results as presented in Tables 18 and 19 above, indicate that there is a statistically significant difference in mean scores of overall perceptions on *Safe & clean classroom and school environment scale* among the four *poverty quintile* groups, [$F(3, 600) = 43.743, p < 0.001$]. Multiple comparisons, using Tukey HSD indicated that the mean scores for PQ4 ($M = 3.11, SD = 6.36$) were significantly higher than PQ2 ($M = 2.45, SD = 7.56$), $p<0.001$, PQ3 ($M = 2.51, SD = 6.87$), $p<0.001$ and PQ5 ($M=2.51, SD= 6.93$) $p<0.001$.

There are statistically significant differences in mean scores of overall perceptions on the *Safe & clean classroom and school environment scale* among the four *race* groups, [$F(3, 600) = 34.607, p < 0.001$]. Multiple comparisons, using Tukey HSD indicated that Indian learners were statistically significantly more likely to have higher perceptions of the *Safe & clean classroom and school environment scale* mean scores ($M = 3.16, SD = 6.41$) than that of Black African learners ($M = 2.43, SD = .720$), $p < 0.001$, White learners ($M = 2.51, SD = 7.01$), $p < 0.001$ and Coloured learners ($M = 2.92, SD = 5.80$), $p < 0.05$. Further results are presented in Tables 18 and 19 above.

There are statistically significant differences in mean scores on overall perceptions on the *Safe & clean classroom and school environment scale* among the four *number of adults in household* groups, [$F(3, 600) = 5.409, p < 0.01$]. Multiple comparisons, using Tukey HSD indicated that the mean scores for learners living in households with no adults ($M = 2.40, SD =$

6.81) were significantly lower than learners living in households with one adult ($M = 2.76$, $SD = 6.11$), $p < 0.01$, learners living in households with two adults ($M = 2.78$, $SD = .612$), $p < 0.01$ and learners living in households with three or more adults ($M = 2.74$, $SD = .656$), $p < 0.01$. Further results are presented in Tables 18 and 19 above.

5.2.2. The psycho-social school environment (school climate)

Tables 20-23 presents the results of the psycho-social school environment scales which together contribute to the school climate (*Caring Environment, Psychological Sense of School Membership, Sense of Belonging, Comprehensive School Climate Inventory, School Discipline* and *School Engagement*) and the demographic differences in the learner sample. Please see section 3.6.4 "Data processing and statistical analysis" for the constructs included in the school environment component scales. Only statistically significant results are presented. Independent samples t-tests were used for gender and grade differences in the psycho-social school environment and are presented in Table 20 below. One-Way Between Groups ANOVAs were used for poverty quintile, age, race, religion and the number of adults in household differences in the psycho-social school environment and are presented in Tables 20-23 below.

Results indicate statistically significant differences in mean scores on *gender* differences on the psycho-social school environment with learners of male gender reporting higher mean scores on perceptions of the *School Engagement* ($M = 2.69$, $SD = .625$) than female learners' mean scores ($M = 2.64$, $SD = .467$), [t(600) = 1.287, p < 0.001, d = .588]. Males reported higher mean scores on *School Discipline* ($M = 2.11$, $SD = .584$) than female learners' mean scores ($M = 2.04$, $SD = .543$), [t(600) = 1.533, p < 0.01, d = .595].

Results indicate statistically significant differences in mean scores on *grade* differences on the psycho-social school environment with Grade 11's reporting higher mean scores on perceptions of the *Comprehensive School Climate* scale ($M = 2.13$, $SD = .499$) than Grade 9's mean scores ($M = 2.13$, $SD = .649$), [t(600) = -9.700, p < 0.001, d = .561]. Grade 9's also reported higher mean scores on the *Psychological Sense of School Membership* scale ($M = 2.89$, $SD = .739$) than Grade 11's mean score ($M = 2.64$, $SD = .678$), [t(600) = 4.375, p < 0.01, d = .593]. Further results are presented in Table 23 below.

Table 20
Means and Standard Deviations of Gender and Grade Differences on the Components of the School Environment

Variables	Mean	SD	Mean	SD	t – value	95% CI LL	UL	d – value
			Gender					
Item	Male (N=301)		Female (N=299)					
Caring Environment	2.88	.586	2.84	.621	.966*	-.049	.144	.597
School Discipline	2.11	.584	2.04	.543	1.533**	-.020	.161	.595
Sense of Belonging	2.67	.683	2.70	.789	-.475**	-.141	.085	.595
School Engagement	2.69	.625	2.64	.467	1.287***	.030	.146	.588
			Grade					
	Grade 9 (N=300)		Grade 11 (N=300)					
Caring Environment	2.91	.588	2.81	.616	1.898**	-.003	.190	.598
Psychological Sense of School Membership	2.89	.739	2.64	.678	4.375**	.140	.367	.593
Sense of Belonging	2.69	.760	2.50	.633	3.27**	-.094	.131	.578
Comprehensive School Climate	2.08	.649	2.13	.499	-9.70***	-.139	.047	.561
School Discipline	2.18	.595	2.07	.534	.024*	.092	-.090	.591

Note: 95% Confidence interval (CI) for the mean difference; Cohen d is the effect size for the t-test values; LL- lower limits and UL-Upper limit

*p < .0.05; **p<0.01; ***p<0.00

Table 21
Components of the school environment and age and religious differences

Variable	Age						Post Hoc Comparisons Tukey
	13-15 years (N=139) [1]		16-17 years (N=236) [2]		18 – over 20 years (N=225) [3]		
School Environment Components	M	SD	M	SD	M	SD	
Caring Environment	2.96	.612	2.89	.613	2.76	.577	[1>2]**, [1>3]**
Psychological Sense of School Membership	2.92	.743	2.76	.746	2.67	.661	[1>2]**, [1>3]**
Comprehensive School Climate	1.93	.577	2.13	.580	2.18	.570	[3>1]***, [2>1]***
School Discipline	1.93	.583	2.10	.544	2.13	.563	[3>1]**, [2>1]**

Variable	Religion						
	Christian (N=421) [1]		Hindu (N=83) [2]		Black African Religious (N=96) [3]		
School Environment Components	M	SD	M	SD	M	SD	
Caring Environment	2.89	.631	2.88	.479	2.71	.560	[1>3]*, [2>3]*

Note: *p < .05; **p < .01; ***p < .001

Table 22
Components of the school environment and poverty quintile, race and number of adults living within household differences

	Poverty Quintile								Post Hoc Comparisons Tukey
Variable	PQ2 (N=150) [1]		PQ3 (N=150) [2]		PQ4 (N=150) [3]		PQ5 (N=150) [4]		
School Environment Components	M	SD	M	SD	M	SD	M	SD	
Caring Environment	2.77	.511	2.65	.592	2.88	.578	3.15	.617	[4>1]***, [4>2]***, [4>3]***
Sense of Belonging	2.47	.684	2.67	.738	2.67	.691	2.58	.671	[2>1]*, [2>4]*, [3>1]* [3>4]*
School Discipline	2.13	.581	2.22	.545	2.04	.552	1.90	.536	[2>4]*, [1>4]*, [3>4]*
School Engagement	2.65	.571	2.78	.582	2.71	.600	2.52	.408	[2>1]**, [2>4]**

	Race								
Variable	White (N=143) [1]		Black African (N=303) [2]		Indian (N=116) [3]		Coloured (N=39) [4]		
School Environment Components	M	SD	M	SD	M	SD	M	SD	
Caring Environment	3.14	.612	2.79	.556	2.93	.506	2.85	.779	[1>2]***, [1>3]**, [1>4]**
Psychological Sense of School Membership	2.70	.805	2.79	.688	2.87	.692	2.49	.588	[3>4]**, [2>4]**, [1>4]*
Comprehensive School Climate	2.01	.577	2.13	.578	2.08	.587	2.28	.530	[4>1]**, [4>3]**, [4>2]*
School Discipline	1.88	.539	2.18	.568	2.00	.536	2.17	.512	[2>1]***, [4>1]**
School Engagement	2.54	.398	2.72	.579	2.66	.625	2.73	.533	[4>1]**, [2>1]**

	Number of Adults Living within Household								
Variable	0 adults (N=20) [1]		1 adult (N=117) [2]		2 adults (N=209) [3]		3 or more adults (N=254) [4]		
School Environment Components	M	SD	M	SD	M	SD	M	SD	
Comprehensive School Climate	2.62	.876	2.14	.600	2.06	.553	2.09	.543	[1>3]***, [1>4]***
School Discipline	2.44	.487	2.10	.550	1.98	.560	2.10	.555	[1>3]**, [1>2]*, [1>4]*

Note: *p < .05; **p < .01; ***p < .001

Table 23
One-Way Between Groups ANOVA Results for components of the school environment and
demographics differences

Source of Variance	Sum of Squares	*Df*	Mean Squares	*F* Values
Age				
Caring Environment	3.632	2	1.816	5.051**
Psychological Sense of School Membership	5.552	2	2.776	5.436**
Comprehensive School Climate	6.034	2	3.017	9.255***
School Discipline	4.061	2	2.030	6.477**
Religion				
Caring Environment	2.638	2	1.319	3.652*
Poverty Quintile				
Caring Environment	20.520	3	14.145	20.618***
Sense of Belonging	3.875	3	.755	1.558*
School Discipline	8.476	3	2.825	9.419*
School Engagement	5.120	3	1.707	5.207**
Race				
Caring Environment	19.333	3	6.444	19.310***
Psychological Sense of School Membership	5.082	3	1.694	3.307**
Comprehensive School Climate	2.821	3	.940	2.833**
School Discipline	9.896	3	3.299	10.843***
School Engagement	3.388	3	1.129	3.756**
No. of adults living with in household				
Comprehensive School Climate	5.983	3	1.994	6.105***
School Discipline	4.764	3	1.588	5.076**

Note: *$p < .05$; **$p < .01$; ***$p < .001$

There are statistically significant differences in mean scores on overall perceptions of the school climate according to the *Comprehensive School Climate* scale among the three *age* groups, [$F(2, 600) = 9.255$, $p < 0.001$]. Multiple comparisons, using Tukey HSD indicated that the mean scores for 18-over 20 year olds ($M = 2.18$, $SD = .570$) were significantly higher than 13-15 year olds ($M = 1.93$, $SD = .577$), $p < 0.001$. The mean scores for learners aged 16-17 years ($M = 2.13$, $SD = .580$), $p < 0.001$ were statistically significantly higher than mean scores for 13-15 year olds ($M = 1.93$, $SD = .577$), $p < 0.001$. Further results as presented in Tables 21 and 23 above.

There are statistically significant differences in mean scores on overall perceptions on the *Caring Environment* scale among the three *religious* groups, [$F(2, 600) = 3.652$, $p < 0.001$]. Multiple comparisons, using Tukey HSD indicated that the mean scores for Christians ($M = 2.89$, $SD = .631$) and Hindus ($M = 2.88$, $SD = .479$), were significantly higher than Black African Religious groups ($M = 2.71$, $SD = .560$), $p < 0.05$. Further results as presented in Tables 21 and 23 above.

The results as presented in Tables 22 and 23 above, show that there is a statistically significant difference in mean scores on overall perceptions on the *Caring Environment* scale among the four *poverty quintile* groups, [$F(3, 600) = 20.618$, $p < 0.001$]. Multiple comparisons, using Tukey HSD indicate that the mean scores for PQ5 ($M = 3.15$, $SD = .617$) were significantly higher than PQ2 ($M = 2.77$, $SD = 5.11$), $p<0.001$, PQ3 ($M = 2.65$, $SD = 5.92$), $p<0.001$ and PQ4 ($M=2.88$, $SD= 5.78$) p<0.001. Further results are presented in Table 22 and 23 above.

There are statistically significant differences in mean scores on overall perceptions on *School Discipline* among the four *race* groups, [$F(3, 600) = 10.843$, $p < 0.001$]. Multiple comparisons, using Tukey HSD indicated that Black African learners were statistically significantly more likely to have higher mean scores on overall perceptions of *School Discipline* ($M = 2.18$, $SD = .568$) than White learners ($M = 1.88$, $SD = .539$), $p < 0.001$ and Coloured learners ($M =2.17$, $SD = .512$), $p < 0.01$. Further results as presented in Tables 22 and 23 above.

There are statistically significant differences in mean scores on overall perceptions on the *Comprehensive School Climate* scale among the four *number of adults in household* groups, [$F(3, 600) = 6.105$, $p < 0.001$]. Multiple comparisons, using Tukey HSD indicated that the mean score for learners living in households with no adults ($M = 2.62$, $SD = .876$) were significantly higher than learners living in households with two adults ($M = 2.06$, $SD = .553$), $p < 0.001$ and learners living in households with three or more adults ($M = 2.09$, $SD = .543$), $p < 0.001$. Further results as presented in Tables 22 and 23 above.

5.2.3. The influence of the school environment on learner engagement in sexual activity

The school environments' influence is presented in the section which follows and covers the components of the school environment and their influence on learners' perceived ability to implement sexuality education messages and the resultant influence on sexual activity.

5.2.3.1. Components of the school environment and sexual activity

The Pearson-moment correlation coefficient (*r*) was used to examine the relationship between sexual activity, as measured by the *Sexual Activity Scale* and the components of a school environment (*Safe & Clean Classroom and School Environment*, *Caring Environment*,

Psychological Sense of School Membership, Sense of Belonging, Comprehensive School Climate Inventory, School Discipline, *School Engagement* and *Parent School Partnership*) scales.

The Pearson Correlation between the degree of sexual activity and perceived school environment is presented in Table 24. Significant correlations between the various elements of the school environment and sexual activity were observed. The results of the *Sexual Activity Scale* had a significant negative correlation with the results of the *School Discipline Scale* ($r = -.223$, $p < .01$), *Sense of Belonging* ($r = -.145$, $p < .01$) and *Comprehensive School Climate Inventory* ($r = -.223$, $p < .01$). The *Sexual Activity Scale* and *Caring Environment* scale were also negatively correlated ($r = -.104$, $p < .01$) as was the *Psychological Sense of School Membership* scale ($r = -.101$, $p < .01$). This suggests that high levels of sexual activity were associated with low levels of positive school environment components.

Table 24
Correlation Matrix between Sexual Activity and Components of the School Environment

	Sexual Activity Scale	School Discipline Scale	Caring Environment scale	Safe & Clean Classroom and School Environment	Psychological Sense of School Membership Scale	Sense of Belonging	Comprehensive School Climate inventory	School Engagement	Parent School Partnership Scale
Sexual Activity Scale	1	------	------	------	------	------	------	------	------
School Discipline Scale	-.223**	1	------	------	------	------	------	------	------
Caring Environment scale	-.104*	.051	1	------	------	------	------	------	------
Safe & Clean Classroom and School Environment	-.084	.092	.292**	1	------	------	------	------	------
Psychological Sense of School Membership Scale	-.101*	.091	.331**	.311**	1	------	------	------	------
Sense of Belonging	-.145**	.403**	.214**	.119**	.302**	1	------	------	------
Comprehensive School Climate inventory	-.223**	.405**	.233**	.143**	.315**	.463**	1	------	------
School Engagement	-.234**	.361**	.249**	.214**	.378**	.516**	.461**	1	------
Parent School Partnership Scale	-.192**	.032	.135**	.251**	.234**	.173**	.168**	.326**	1

$*p < .05$; $**p < 0.01$

A simultaneous multiple standard regression was conducted to examine the different components of the school environment as a protective factor for learners' engagement in sexual activity. The *Sexual Activity Scale* was used to measure sexual activity. The set of significant bivariate correlates to determine the outcome variable (sexual activity) in the regression analysis was used. The main school environment components' (i.e. *Safe and Clean School Environment*, *School discipline, Caring Environment, Psychological Sense of School Membership, Sense of Belonging, Comprehensive School Climate, School Engagement, Parent School Partnership*) scales were entered as predictors and sexual activity as the criterion variable, into the regression model. The results are presented in Table 25 below. The full regression model was significant (F = 4.74; $p < .001$) and accounted for 56.1% of the variance in engagement in sexual activity (Adjusted $R2 = .561$). School engagement as measured by the *School Engagement* scale was found to be strongest predictor of sexual activity ($ß = .834$; $t = 5.316$; $p < .001$). With every one standard deviation increase in school engagement, sexual activity was predicted to decrease with an estimated 4.43 standard deviation points. The results suggests that learners who reported high levels of school engagement tended to have lower levels of sexual activity.

Table 25
Best Predictors of the School Environment as a Protective Factor for Sexual Activity

Model	SE B	T	Sig	95% CI (B)	Tolerance
Safe and Clean School Environment	-.353	-2.788	.007**	-.425- - 0.070	.825
School Engagement	-.490	-5.316	.000***	-2.783- 6.080	.649
School Discipline	-.223	-2.452	.015*	-3.033- -325	.668
Parent School Partnership	-.190	-2.069	.040*	-.071- 3.156	.651
Caring Environment	-.158	-1.657	.100	-2.724- .241	603
Comprehensive School Climate inventory	-.144	-1.451	.149	-.439- 2.853	.561
Sense of Belonging	-.134	-1.531	.128	-.289- 2.268	.719
Psychological Sense of School Membership	-.036	-.380	.704	-1.339- 1.976	.619

Adjusted R^2	.561***
F	4.74

***p <.001; **p<0.01; *p<0.05

Adjusted R^2 = .561 explained 56.1% of the variance in sexual activity; F = 4.74; p < .001

5.2.3.2. Influence of the school environment and learners' perceptions of their ability to implement sexuality education messages in their personal lives

Table 26 below indicates the results of t-tests on learners' perceptions of the school environment and its influence on learners' perceptions of their ability to implement sexuality education messages in their personal lives. Mean score differences on each of the components of the school environmental measures were used. The question on learners' perceptions of the school environment and its influence on learners' perceptions of their ability to implement sexuality education messages in their personal lives involved, is a dichotomous variable and included a "Yes" or "No" response. Only those results which are statistically significant are presented below.

Table 26
Means and Standard Deviations of Learners' Perceptions of the School Environment and its Influence on Learners' Perceptions of their Ability to Implement Sexuality Education Messages in their Lives

	Mean	SD	Mean	SD	$t-$ value	95% CI		$d-$ value
Variables						LL	UL	
Item	**Learners' Perceptions of Ability to Implement Sex Education Messages in their Lives Yes (84%, N=503)**		**Learners' Perceptions of Ability to Implement Sex Education Messages in their Lives No (16%, N=97)**					
Psychological Sense of School Membership	2.80	.71	2.58	.78	2.62**	.05	.39	0.46
Sense of Belonging	2.54	.72	2.86	.89	-3.31**	.054	.039	0.60
Comprehensive School Climate	2.10	.61	2.35	.71	-3.215**	-.40	-.10	0.57
School Engagement	2.51	.65	2.73	.74	-2.68**	-.38	-.06	0.48

Note: 95% Confidence interval (CI) for the mean difference; Cohen d is the effect size for the t-test values; LL- lower limits and UL- Upper limit

$_*p < .0.05$; **p<0.01

Results indicate statistically significant differences in mean scores on the measures *Psychological Sense of School Membership*, *Sense of Belonging*, *Comprehensive School Climate inventory* and *School Engagement* and its influence on learners' perceptions of their ability to implement sexuality education messages in their personal lives (Refer to Table 26 above). Learners who indicated that sexuality education had relevance to their personal lives, had higher mean scores on the *Psychological Sense of School Membership* scale ($M = 2.80$, $SD = .71$) than those who did not believe so ($M = 2.58$, SD = .78), [$t(600) = 2.62$, $p < 0.01$, $d = 0.46$]. Learners who indicated that sexuality education had relevance to their personal lives indicated more positive perceptions of *Sense of Belonging* ($M = 2.54$, $SD = .72$) than those who did not believe so ($M = 2.86$, SD = .89), [$t(600) = -3.31$, $p < 0.01$, $d = 0.60$]. In addition, learners who indicated that sexuality education had relevance to their personal lives had more positive perceptions on the *Comprehensive School Climate inventory* ($M = 2.10$, $SD = .61$) than those who did not believe so ($M = 2.35$, $SD = .71$), [$t(600) = -3.21$, $p < 0.01$, $d = 0.57$]; and learners who indicated that sexuality education had relevance to their personal lives had more positive perceptions of *School Engagement* ($M = 2.51$, $SD = .65$) than those who did not believe so ($M = 2.73$, $SD = .74$), [$t(600) = -2.68$, $p < 0.01$, $d = 0.48$].

5.2.4. Learners' perceptions of educator support and its influence on learners' sexual activity

Learners' perceptions of their educators as being influential in implementing sexuality education messages in their personal lives are covered in the sections below. Firstly, socio-demographic differences of learners' perceptions of educator support are presented. Thereafter, the influence of learners' perceptions of learner-educator relationships, educators as role models and educator expertise on learners' sexual activity, are presented. The number of sexuality education lessons and the influence on learners' sexual activity are then presented. Finally, the overall statistically significant predictors on sexual activity are presented.

Socio-demographic differences

Table 27 presents the socio-demographic differences in learners' perceptions of their educators' support and differences in sexual activity by demographic characteristics of the sample. Only statistically significant results are presented.

Poverty quintile three reported statistically significantly higher rates of learner sexual activity than PQ two, PQ four and PQ five school's learners (46% versus 20%, 16.7% and 14% respectively) [χ2 (3, N = 600) = 53.50, *p* < 0.001]. PQ five had a statistically significantly lower *Learner-Educator Relationship* mean scores with 42% of the learners indicating an affirmative response versus 72.7% in PQ two, 83.3% in PQ three and 68% in PQ four, [χ2 (3, N = 600) = 62.21, *p* < 0.001]. More learners in PQ three and PQ four (92.7% and 92.7%) believed that their LO educator had a good knowledge of HIV and AIDS, teenage pregnancy, STIs and sexual issues versus PQ two and PQ three (78.7% and 82% respectively), [χ2 (3, N = 600) = 20.25, *p* < 0.001]. A statistically significant negative relationship was indicated by learners regarding considerations of their LO educator as a good role model for them with PQ two at 74.7%, PQ three at 76%, PQ four at 63.3% and PQ five at 53.3%, [χ2 (3, N = 600) = 23.0, *p* < 0.001] i.e. the higher the PQ, the lower the number of learners who perceived their LO educator is a good role model for themselves. PQ five had a statistically significantly higher rate of learners in agreement with the statement.

Gender differences were reported in terms of more males than females ever having had sexual intercourse (29.6% vs. 18.7%), [χ2 (1, N = 600) = 5.72, *p* < 0.01.

Grade 11 learners reported a higher number of learners who were sexually active than Grade 9's (31.0% vs. 17.1%), [χ2 (1, N = 600) = 15.29, *p* < 0.001]. Grade 9 learners indicated a statistically significantly higher affirmative response than Grade 11's on *Learner-Educator Relationship* (71.3% vs. 61.7%), [χ2 (1, N = 600) = 6.29, *p* < 0.05].

Age differences were reported with the regard to ever having engaged in sexual intercourse. Having ever engaged in sexual intercourse increased by age with 13.2% of learners aged 13-15 years and 25.1% of learners aged 16 -17 years, versus 41.3% of learners' aged 18 years and older, [χ2 (2, N = 600) = 18.0, *p* < 0.001]. Older learners aged 18 and above (75.4%) indicated educators to be role models for themselves more than learners aged 13-15 years (66.3%) and 16-17 years (61.7%), [χ2 (2, N = 600) = 7.26, *p* < 0.05].

Regarding racial differences, a higher frequency of ever having had sexual intercourse was indicated by Black African and Coloured learners (32.8% and 30.8% respectively) as opposed to Indian and White learners (13.8% and 12.6% respectively), [χ2 (3, N = 145) = 30.43, *p* < 0.001]. A statistically significantly higher number of Black African learners (75.5%) than White learners

(53.1%) indicated their LO educator as a role model for themselves with Coloured (64.1%) and Indian (62.1%) learners being in the middle of these statistics, [$\chi2$ (3, N = 600) = 23.63, $p < 0.001$].

Regarding *religious* differences, more African Religious learners had a positive learner-educator relationship with their LO educator (81.3%) versus 67.5% of Hindus and 62.5% of Christians, [$\chi2$ (2, N = 600) = 23.63, $p < 0.05$].

The *number of adults learners' lived with* was somewhat negatively correlated with sexual activity i.e. the higher the number of adults learners lived with, the lower the frequency of learners who had had sexual intercourse (22.4% for learners living with three or more adults versus 50% for those living with no adults), [$\chi2$ (3, N = 600) = 5.08, $p < 0.01$].

Table 27

Socio-Demographic Differences in Educator Support on their Influence on Learners' Sexual Activity

Demographic & Chi-square (p-value)	Learner-Educator Relationship	LO educator as a role model	Educator Expertise	Ever had sex
Poverty Quintile				
PQ2	109(27.3)	112(74.7)	118(78.7)	30(20.0)
PQ3	125(31.3)	114(76.0)	139(92.7)	69(46.0)
PQ4	102(25.6)	95(63.3)	139(92.7)	25(16.7)
PQ5	63(15.8)	80(53.3)	123(82.0)	21(14)
Chi-square (p-values)	<0.001	<0.001	<0.001	<0.001
Gender				
Male				89(29.6)
Female				56(18.7)
Chi-square (p-values)	.178	.574	.547	<.01
Grade				
9	214(53.6)			52(17.3)
11	185(46.4)			93(31.0)
Chi-square (p-values)	<0.05	.542	.573	<0.001
Age				
13-15 years		157(66.3)	208(88.5)	31(13.2)
16 -17 years		140(61.7)	199(87.7)	57(25.1)
18 years and over		104(75.4)	112(81.2)	57(41.3)
Chi-square (p-values)	.765	<0.05	<0.05	<0.001
Race				
White	60(42.0)	76(53.1)	118(82.5)	18(12.6)
Black African	234(77.5)	228(75.5)	259(85.8)	99(32.8)
Indian	80(69)	72(62.1)	108(93.1)	16(13.8)
Coloured	25(64.1)	25(64.1)	34(87.2)	12(30.8)
Chi-square (p-values)	<0.01	<0.001	<0.05	<0.001
Religion				
Christian	265(62.5)			
Hindu	56(67.5)			
Black African Religious	78(81.3)			
Chi-square (p-values)	<.05	.065	.262	.149
No. of adults living with				
0 adults				10(50)
1 adult				36(30.8)
2 adults				42(20.1)
3 and more adults				57(22.4)
Chi-square (p-values)	.055	.592	.518	<0.01

5.2.4.1. Quality of learner-educator relationship and influence on learners' sexual activity and substance use/abuse

Higher mean scores on the *Sexual Activity Scale* and *Substance Use/Abuse Scale*, indicated higher levels of sexual activity and higher levels of substance use/abuse. Results indicate statistically significant differences in mean scores on learners with perceptions of lower quality learner-educator relationships having higher mean scores on sexual activity (M = 3.29, SD = .95) than those who had better quality learner-educator relationships (M = 2.68, SD = .91), [t(600) = -3.19, p < 0.01, d = .97] and higher mean scores on substance use/abuse (M = 5.25, SD = .99) than those with better quality learner-educator relationships (M = 4.13, SD = .83), [t(600) = -2.93, p < 0.01, d = .84]. Further results are presented in Table 28 below.

5.2.4.2. The influence of learners' perception of educator's teaching expertise on learners' sexual activity and substance use/abuse

Results indicated statistically significant differences in perceived educator expertise and its influence on sexual activity (Refer to Table 28). Results indicated statistically significant differences in mean scores for learners who did not perceive their educators as good at teaching sexuality education, having higher mean scores on the *Sexual Activity Scale* (M = 1.72, SD = 1.49), than those who did perceive their educators as good at teaching sexuality education (M = 1.42, SD = 1.10), [t(600) = -2.72, p < 0.01, d = .24] and higher mean scores on the *Substance Use/Abuse Scale* than (M = 2.85, SD = 1.29) than those who did perceive their educators as good at teaching sexuality education (M = 2.50, SD = 1.19), [t(600) = -3.26, p < 0.01, d = .31]. The reasons offered in the open-ended questions for having a lower perception of educator expertise were: Their educators' reliance on the textbook during lessons (7%/N=41), not providing relevant information (6%/N=38) and a lack of provision of in-depth information of sexuality education (6%/N=36). The reasons offered in the open-ended questions for considering their LO educator as being an expert on sexuality education were that: Their LO educator had the ability to answer all their questions and explained clearly (25%/N=148), was not textbook reliant (19%/N=116), adapted the material to be relevant to learners' perspectives (19%/N=114) and because they possessed the relevant qualifications (18%/N=107).

Table 28

Means and Standard Deviations of Learner-Educator Relationships, Educator Expertise and Educator as a Role Model on Learners' Sexual Activity and Substance Use/Abuse

Variables Item	Mean	SD	Mean	SD	t – value	95% CI LL	UL	d – value
	Learner-Educator Relationship Yes (N=563)		**Learner-Educator Relationship No (N=37)**					
Sexual Activity Scale	2.68	.91	3.29	.95	-3.19**	-.22	-1.00	.97
Substance Use/Abuse Scale	4.13	.83	5.25	.99	-2.93**	-.27	-1.98	.84
	Educator as role model Yes (N=401)		**Educator as role model Yes (N=199)**					
Sexual Activity Scale	4.75	1.70	5.40	1.84	-2.12*	-.04	-1.27	.42
Substance Use/Abuse Scale	2.50	.66	2.63	.80	-2.16*	-.26	-.01	.20
	Educator Expertise Yes (N=519)		**Educator Expertise No (N=64)**					
Sexual Activity Scale	1.42	1.10	1.72	1.49	-2.72**	-.82	-.51	.24
Substance Use/Abuse Scale	2.50	1.19	2.85	1.29	-3.26**	-.55	-.14	.31

Note: 95% Confidence interval (CI) for the mean difference; Cohen d is the effect size for the t-test values; LL- lower limits and UL- Upper limit

*p < .05; **p < .01; ***p < .001

Table 29

Educator Influence on Learners' Perceptions of Ability to Apply Sexuality Education Messages to their Personal Lives & the School Environment as Enabling for Sexuality Education

Demographic & Chi-square (p-value)	Learner-Educator Relationship	LO educator as a role model	Educator Expertise
Sexuality Education Applicable to Personal Life			
Sexuality education applicable to personal life Yes	479(95.2)	349(69.4)	467(92.8)
Sexuality education applicable to personal life No	24(4.8)	154(30.6)	36(7.2)
Chi-square (p-values)	<0.01	<0.01	<0.001
School Environment Conducive to Sexual Education Application			
School environment conducive to sexuality education application	337(95.2)	248(70.1)	328(92.7)
School environment conducive to sexuality education application	17(4.8)	106(29.9)	26(7.3)
Chi-square (p-values)	.693	<.05	<0.01

*p < .05; **p < .01; ***p < .001

5.2.4.3. Educators as role models to learners and the influence on learners' sexual activity

Educators as role models to learners for influence on learners' sexual activity as measured by the *Sexual Activity Scale* was indicated by item 8e. "Educator as a role model." Results, as per Table 28, indicate statistically significant differences in mean scores with learners who did not perceive their educators as a role model to them, having higher mean scores on sexual activity (M = 5.40, SD = 1.84) than those who did perceive their educators as a role model to them (M = 4.75, SD = 1.70), [t(600) = -2.12, p < 0.05, d = .42] and higher mean scores on substance use/abuse than (M = 2.63, SD = .80) than those who did perceive their educators as a role model to them (M = 2.50, SD = .66), [t(600) = -2.16, p < 0.05, d = .20]. The reasons offered in the open-ended questions for considering LO educators as being roles models to learners were: Similarity between the learner and their LO educator in terms of demographic (race, age, gender, geographical home location) (25%/N=150), their LO educator possessed personality traits (values and morals) that they aspired to (17%/N=97), LO educators as being successful in life (15%/N=88) and LO educators as having interests/hobbies that were similar to theirs' (11%/N=66). Reasons provided for not considering LO educators as being role models were: Already having a role model (23%/N=137), not choosing the same career path as the LO educator (7%/N=39) and not being the appropriate age to identify with their LO educator (4%/N= 23).

5.2.4.4 Number of sexuality education lessons attended and the influence on learners' sexual activity

The Two Way Between Groups ANOVA was used to determine whether there were any differences between the five categories of number of sexuality education lessons and the two categories of *Learner-Educator Relationship* index. The results are presented in Table 30 and 31. There was a significant difference in mean scores on sexual activity [F(4, 600) = 3.01, p < 0.05] among the five "number of sexuality education lesson groups of respondents" in the study. Pairwise comparisons using Least Significant Difference (LSD) indicated that the mean score for learners who had one to three lessons (M=1.45, SD=.80), were significantly different from those learners who had had four to six lessons (M=1.36, SD=.71), p = 0.008 and seven to nine lessons (M=1.38, SD=.70), p = 0.006. There was a statistically significant difference in learners' substance use/abuse [F(4, 600) = 2.66, p < 0.05] among the five "number of sexuality education lesson groups of respondents" in the study. Pairwise comparisons using LSD indicated that the mean

score for learners who had had four to six lessons (*M*=1.50, *SD*=.81) was statistically significantly different from seven to nine lessons (*M*=2.79, *SD*=.62), *p* = 0.017 and more than nine lessons (*M*=2.60, *SD*=.74), *p* = 0.009. The interaction effect between number of sexuality education lessons and engagement in (risky) sexual activity was not significant.

Table 30
Number of sexuality education lessons had

Characteristics	N	N	%
Number of sexuality education lessons had	600		
None		35	5.8%
1-3 lessons		195	32.5%
4-6 lessons		165	27.5%
7-9 lessons		61	10.2%
More than 9 lesson		144	24.0%

Table 31

Youth (Risky) Sexual Behaviour and Differences in Number of Sexuality Education Lessons and Educator Relationship Item

Learner - Educator Relationship item:	Variable	None (N=37)			1-3 lessons (N=195)			4-6 lessons (N=165)			7-9 lessons (N=61)			+9 lessons (N=144)			Least Significant Difference (LSD) Post Hoc Comparisons Adjusted 95% CI
		M	SD	N	M	SD	N	M	SD	N	M	SD	n	M	SD	N	
Learner-Educator Relationship Yes (N=512)																	
	Sexual Activity Scale	1.50	0.65	26	1.45	0.80	168	1.36	0.71	139	1.38	0.70	48	1.36	0.74	131	[2<3]*, [3<4]*
	Substance use/abuse Scale	1.50	0.81	26	2.64	0.75	168	2.74	0.66	139	2.79	0.62	48	2.60	0.74	131	[4<3]*, [5<3]*
Learner-Educator Relationship No (N=88)																	
	Sexual Activity Scale	1.67	1.00	9	1.78	0.98	27	1.27	0.60	26	1.08	0.28	13	1.38	0.65	13	[2>3]*, [3>4]*
	Substance use/abuse Scale	1.67	0.88	9	2.56	0.85	27	2.85	0.47	26	2.85	0.56	13	2.31	0.86	13	[4>3]*, [5>3]*

Note: $R^2 = 0.22$, adj. $R^2 = 0.007$.

*$p < .05$; **$p < .01$; ***$p < .001$

Table 32

Two-Way Between Groups ANOVA Results for Number of Sexuality Education Lessons and Learner-Educator Relationship Item in Youth Risky Behaviour Engagement

Source of Variance	Sum of Squares	*Df*	Mean Squares	*F* Values
Sexual Activity Scale	6.85	4	1.71	3.01*
Substance Use/Abuse Scale	5.39	4	1.35	2.66*

Note: *p < .05; **p < .01; ***p < .001

5.2.4.5. The overall influence of LO educator support on learners' sexual activity

Table 33 below indicates the best predicting factors of educator support as protective factors for leaners' sexual activity. A simultaneous standard multiple regression was conducted to examine the items of educator support as a protective factor to sexual activity. The *Sexual Activity Scale* was used. Only variables that had significant relationships with sexual activity were used in the regression analysis: *Learner-Educator Relationship* index*, Educator as a role model, Educator Expertise* index and the *Number of sexuality education lessons had* were entered into the regression model. The full regression model was significant ($F = 1.841$; $p < .01$) and accounted for 54.1% of the variance in sexual activity (Adjusted $R2 = .541$). Learner-Educator Relationship was found to be the strongest predictor of sexual activity ($ß = 1.333$; $t = 5.966$; $p < .001$). With every one standard deviation increase in positive perceptions of Learner-Educator Relationship, sexual activity was predicted to decrease with an estimated 2.41 standard deviation points. The results suggests that learners who reported high levels of positive *Learner-Educator Relationship* tended to have lower levels of sexual activity.

Table 33
The Influence of LO Educator Support on Learners' Sexual Activity

Model		*SE B*	T	Sig	95% CI (B)	Tolerance
Learner-Educator Relationship		1.333	5.966	.000***	.894- 1.774	.818
LO educator as a role model		.047	-.619	.563	-.102- .195	.789
Educator Expertise		-.005	-.054	.957	-.203- .192	.847
Number of Sexuality Education Lessons		-.006	-.235	.814	-.056- .044	.962
Adjusted R^2	.541**					
F	1.841					

***p <.001; **p <.01 *p<0.05
Adjusted R^2 = .541 explained 54.1% of the variance in sexual activity; F = 1.841; p < .01

5.2.5. Perceived caregiver involvement in learners' lives

The perceived caregiver involvement in learners' lives at home and in the school are reported.

This section of the chapter focuses on learners' perceptions of caregiver involvement in learners' lives and their schooling. The scale used is the *Parent School Partnership (PSP)* survey which is a component of the *California School Climate Survey (CSCS)* (Hanson & Kim, 2007). The descriptives of the scale have been included in Chapter 3: Table 6: "Learner Cross-sectional Survey: Summary of Psychological Measures Used to Measure Constructs as per the Original Measures." The scale's items are specified in section 3.6.2.3. "Psycho-social School Environment." This section presents the reported frequencies of the scale and the demographic group differences on scale.

5.2.5.1. Learners' perceptions of caregiver involvement in their personal and schooling lives

Frequencies of learners' perceptions of caregiver involvement at home and at school are reported in Table 34 below. Most learners (67%) indicated that caregivers checked on whether their homework was completed (N=402). Almost half the learners at 40%, (N=241) indicated that they would not be caught by their caregivers if they drank alcohol. About half of the learners at 51%, (N=301) indicated that their caregivers were aware of what was taught to them in the LO curriculum.

Table 34

Frequencies of learners' perceptions of caregiver involvement in their lives

Perceptions	N	%
Parents ask if homework done	**600**	
No	198	33%
Yes	402	67%
Parents aware if learner not home on time	**600**	
No	172	28%
Yes	428	72%
Parent aware when learner not home	**600**	
No)	187	31%
Yes	413	69%
Family rules clear	**600**	
No	103	17%
Yes	497	83%
Family has clear rules on substance use	**600**	
No	110	18%
Yes	490	82%
Learner be caught by parent if drunk alcohol	**600**	
No	241	40%
Yes	359	60%
Learner be caught by parent if skipped school	**600**	
No	210	35%
Yes	390	65%
School tries to get parents involved	**600**	
No	35	53%
Yes	65	47%
School inform parents on substance use lesson	**600**	
No	318	53%
Yes	212	47%
School contact parents if there's a problem	**600**	
No	200	**33%**
Yes	400	**67%**
School welcomes parent involvement	**600**	
No	214	35%
Yes	386	65%
Parents are active partner in educating you	**600**	
No	215	36%
Yes	385	64%
Parents informed of school activities	**600**	
No	220	36%
Yes	380	64%
Parents informed on school progress	**600**	
No	214	35%
Yes	386	65%
Parents' prompt response when contact school	**600**	
No	241	40%
Yes	359	60%
School welcomes parents' contributions	**600**	
No	218	36%
Yes	382	64%
School gets parents involved in school activities	**600**	
No	264	44%
Yes	336	56%
Parents aware of what is taught in LO	**600**	
No	297	49%
Yes	303	51%
Parents aware of sexuality education taught	**600**	
No	249	42%
Yes	351	59%

5.2.5.2. Demographic differences in learners' perceptions of caregiver involvement in their lives

The *Parent School Partnership* composite score was obtained by summing the individual items of the *Parent School Partnership Scale* (Please refer to Table 34 above for individual items) and obtaining a mean score for each respondent. The *Parent School Partnership Scale* (as a composite scale) which was used in its scale form (i.e. with four response categories being: "Never", "Sometimes", "Almost always" and "Always") was cross-tabulated against demographic differences and only statistically significant results are presented in Table 35-39 below.

Results indicate statistically significant differences in mean scores on grade differences in caregiver involvement with *Grade* 9's reporting higher mean scores on the *Parent School Partnership Scale* ($M = 3.05$, *SD* = .690) than Grade 11's mean scores ($M = 2.85$, *SD* = .680), [$t(600) = 3.526$, $p < 0.01$, $d = 0.597$].

Table 35
Means and Standard Deviations of Grade Differences on the Parent School Partnership Scale

Variables	Mean	SD	Mean	SD	t – value	95% CI		d – value
	Grade					LL	UL	
Item	Grade 9 (N=301)		Grade 11 (N=299)					
Parent School Partnership Scale	3.05	.690	2.85	.680	3.526***	.087	.037	.597

Note: 95% Confidence interval (CI) for the mean difference; Cohen d is the effect size for the t-test values; LL- lower limits and UL- Upper limit

*p < .0.05; **p<0.01; ***p<0.001

Table 36
The Parent School Partnership Scale and poverty quintile differences

Variable	Poverty Quintile								Post Hoc Comparisons Tukey
	PQ2 (N=150) [1]		PQ3 (N=150) [2]		PQ4 (N=150) [3]		PQ5 (N=150) [4]		
	M	SD	M	SD	M	SD	M	SD	
Parent School Partnership Scale	2.90	.725	2.84	.712	2.93	.688	3.13	.609	[4>1]**, [4>2]**, [4>3]**

Note: *p < .05; **p < .01; ***p < .001

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Table 37
The Parent School Partnership Scale and age differences

Variable	Age						Post Hoc Comparisons Tukey
	13-15 years (N=139) [1]		16-17 years (N=236) [2]		18 – over 20 years (N=225) [3]		
	M	SD	M	SD	M	SD	
Parent School Partnership Scale	3.17	.054	2.94	.046	2.84	.045	[1>2]***, [1>3]***

Note: *p < .05; **p < .01; ***p < .001

Table 38
The Parent School Partnership Scale and race differences

Variable	Race								Post Hoc Comparisons Tukey
	White (N=143) [1]		Black African (N=303) [2]		Indian (N=116) [3]		Coloured (N=39) [4]		
	M	SD	M	SD	M	SD	M	SD	
Parent School Partnership Scale	3.14	.606	2.87	.718	2.97	.663	2.84	.743	[1>2]**, [1>4]**

Note: *p < .05; **p < .01; ***p < .001

Table 39
One-Way Between Groups ANOVA Results for the Parent School Partnership Scale and Demographics Differences

Source of Variance	Sum of Squares	Df	Mean Squares	F Values
Poverty Quintile				
Parent School Partnership Scale	6.868	3	2.289	4.787**
Age				
Parent School Partnership Scale	10.066	2	5.033	10.868***
Race				
Parent School Partnership Scale	7.821	3	2.607	5.575**

Note: *p < .05; **p < .01; ***p < .001

The One-Way Between groups ANOVA was used to determine whether there were statistically significant differences in mean scores between the four *poverty quintile* groups on learners' perceptions of caregiver involvement in their schooling and lives. The results as presented in Tables 36 and 39 above, indicate that there is a statistically significant difference in mean scores of overall perceptions of caregiver involvement among the four PQ groups, [$F(3, 600)$ = 4.878, $p < 0.01$]. Multiple comparisons, using Tukey HSD indicated that the mean scores for PQ5 (M = 3.13, SD = .609) were significantly higher than PQ2 (M = 2.90, SD = 7.25), $p<0.01$, PQ3 (M = 2.84, SD = .712), $p<0.01$ and PQ4 (M=2.93, SD= .688) $p<0.01$.

There are statistically significant differences in mean scores of overall perceptions of caregiver involvement among the three *age* groups, [$F(2, 600)$ = 10.868, $p < 0.001$]. Multiple comparisons, using Tukey HSD indicated that the mean scores for 13-15 year olds (M = 3.17, SD = .054) were significantly higher than both 16-17 year olds (M = 2.94, SD = .046), $p < 0.01$, and 18-over 20 year olds (M = 2.84, SD = .045), $p < 0.01$. Further results as presented in Tables 37 and 39 above.

There are statistically significant differences in mean scores of overall perceptions on caregiver involvement among the four *race* groups, [$F(3, 600)$ = 5.575, $p < 0.01$]. Multiple comparisons, using Tukey HSD indicated that White learners were statistically significantly more likely to have higher perceptions of caregiver involvement mean scores (M = 3.14, SD = .606) than that of Black African learners (M = 2.87, SD = .718), $p < 0.01$, Indian learners (M = 2.97, SD = .663), $p < 0.01$ and Coloured learners (M = 2.84, SD = .743), $p < 0.01$. Further results as presented in Tables 38 and 39 above.

5.2.6. The influence of the overall school environment on the learners' sexual activity

Table 40 below indicates the best predicting factors of the overall school environment as a protective factor for leaners' sexual activity. A simultaneous multiple standard regression was conducted to examine the components of the school environment as a protective factor to sexual activity. The *Sexual Activity Scale* was used. Only variables that had significant relationships with sexual activity were used in the regression analysis. The statistically significant scales/indexes are: *Safe and Clean School Environment, School Engagement scale, School Discipline* scale, *Parent School Partnership* scale, the *Learner-Educator Relationship* index, *Learner's Perception of their*

Ability to Apply Sexuality Education Messages in their Lives item and *School Environment as being Supportive to Perceived Ability to Apply Sexuality Education Messages in Personal Life* item were entered into the regression model. The full regression model was significant ($F = 4.214$; $p < .001$) and accounted for 75.0% of the variance in sexual activity (Adjusted $R2 = .750$). *Learner's Perception of their Ability to Apply Sexuality Education Messages in their Lives* was found to be the strongest predictor of sexual activity ($\beta = -.347$; $t = -3.327$; $p < .001$). With every one standard deviation increase in *Learner's Perception of their Ability to Apply Sexuality Education Messages in their Lives*, sexual activity was predicted to decrease with an estimated 1.12 standard deviation points. The results suggest that the more positive the *Learner's Perception of their Ability to Apply Sexuality Education Messages in their Lives,* the lower their levels of sexual activity.

Table 40
The Influence on the School Environment on Sexual Activity

Model	SE B	T	Sig	95% CI (B)	Tolerance
Safe and Clean School Environment	-.285	-2.717	.008**	-346- -.053	.933
School Engagement	-.062	.568	.004**	-.084- .151	.867
School Discipline	-.007	.066	.948	-.177- .189	1.070
Parent School Partnership	-.088	-.820	.415	-.205- .086	.888
Learner-Educator Relationship	-.269	-2.610	.01**	-.950- -.127	1.038
Learner's Perception of their Ability to Apply Sexuality Education Messages in their Lives	-.347	-3.327	.001***	-.708- -.177	1.063
School Environment as being Supportive to Perceived Ability to Apply Sexuality Education Messages in Personal Life	.070	.663	.509	-.133-.266	1.076
Adjusted R^2	.750**				
F	4.214				

***p <.001; **p <.01 *p<0.05
Adjusted R^2 = .750 explained 75.0% of the variance in sexual activity; F = 4.214; p < .001

5.3. Discussion

The discussion is presented in accordance with the results section and is composed of two sections: 1) Perceptions of the different components of the school environment among the different demographic groups and 2) Perceptions of the different components of the school environment and learners' perceptions of sexuality education messages' applicability to their lives and its resultant influence on sexual activity and other risky behaviours.

5.3.1. The components of the physical school environment and demographic differences

As age increased, the number of learners who indicated that their school was a positive environment decreased. This finding was synonymous with the statistically significant findings of this study i.e. that a higher number of Grade 9 learners perceived their school environment as being positive than Grade 11 learners. In addition, the study findings indicated that the older the learners, the fewer the number of learners who perceived their school as being a safe and hygienic environment. This may be due to learners becoming more aware and/or exposed to risky behaviour by other learners, the older they become in the school. There may be a possibility of higher risky behaviour engagement the older learners become. Prior literature supports this postulation and the

study's results indicated in Chapter four regarding risky sexual activity and other behaviours increasing in the older aged learners as opposed to younger learners in the same school (McGraw et al., 2008; Neser, 2007; Ward et al., 2008).

A higher number of PQ4 learners reported that their school was a positive environment than other PQ schools. Results regarding the physical aspects of the school, may play a role in these perceptions, as more PQ4 school learners indicated having a safe and hygienic school than other PQ school learners. Previous study's results provide support for the postulation that the safer and cleaner learners perceive their school to be, the more inclined they are to perceive their school environment in a positive manner (Gann, 2015; Holtmann, 2011; Waters et al., 2009). Furthermore, according to Waters et al. (2009) a safe, hygienic and positively perceived school environment creates a greater degree of school connectedness which in turn, improves the influence of learners' perceived ability to implement sexuality education messages in their personal lives.

The study's results indicated that more learners of Indian ethnicity reported perceiving their school as having a safer and more hygienic physical school environment than any other race group. Learners of Black African ethnicity reported the lowest scores of having a safe and hygienic school. Prior Southern African studies indicate the same findings with the reason for this phenomenon as being the similarity in racial composition of the schools in SA (Bell et al., 2008; Peltzer & Makusa, 2014; Svanemyr et al., 2015). Schools which were formally Black African schools under the apartheid regime continue to solely consist of learners of Black African race and this was observed in PQ two and three schools, which are the poorer schools in SA (Peltzer & Makusa, 2014). These schools were previously disadvantaged and continue to have a lower number of resources and therefore may be less safe and clean as compared to schools of other racial compositions (Shisana et al., 2009).

5.3.2. The psycho-social components of the school environment and demographic differences

Male learners reported higher scores on the school environment components including the *Caring Environment, School Discipline scale* and the *School Engagement* scales, than female learners. However, female learners reported higher levels of *Sense of Belonging* scores than male learners. Female learners may be more closely bonded to educators and school staff due to possibly

being more able to disclose their emotions and feelings than males (Buehler et al., 2006). This may be as a result of males being unwilling to disclose emotions on account of perceptions of masculinity and they therefore may feel safer disclosing personal issues amongst their peers than to educators/school staff (DoE, 2002). This may explain the higher scores on the *Caring Environment* scale than their female counterparts.

Learners living with no caregivers reported higher scores on their perceptions of the school climate and their school's discipline than learners living with one or more caregivers. This may possibly be due to learners who do not live with adults feeling more at home in school and perceiving the school as having a supportive role in their lives where there is a lack of familial support (Buehler et al., 2006; Finegood et al., 2017). In these cases, the school provides the support which learners lack at home and almost plays a caregiver role in these learners' lives (Finegood et al., 2017).

5.3.3. School environment's influence on learners' perceived ability to implement sexuality education messages in their lives

The study's results indicated that school connectedness (as measured by the *Psychological Sense of School Membership Scale*), *Sense of Belonging*, school climate as measured by the *Comprehensive School Climate* and *School Engagement* are statistically significant components of the school environment to learners' perceptions of their ability to apply sexuality education messages in their lives. This finding is supported by past research (Waters et al., 2009). Just over half the sample reported that they did not feel as though they fit into their school (51%/N=302). Prior research indicates that *Sense of Belonging* is influenced by similarity to others in the school; especially regarding having similarity in culture, morals and values as well as geographic location (Thapa et al., 2013). Schools where learners' indicate a higher connectedness are viewed as better conduits of care for learners (Waters et al., 2009). Evidence exists for schools which encourage school connectedness (as measured by the *Psychological Sense of School Membership Scale*) as being those schools which bring in external stakeholders, have systems in place which link with external stakeholders, allocate learners into peer education programmes as well as have learners being taught in a manner which enables them to make their own responsible choices (Eldredge et al., 2016; Rupp and Rosenthal, 2007; Sulkowski et al., 2014). Learners' perceptions of school connectedness (as measured by the *Psychological Sense of School Membership Scale*) includes

support, belonging and respect from fellow learners as well as educator and staff support (Neser, 2007). Peer to peer relations include acceptance, tolerance of each other's differences and lack of bullying and stealing (Ehrhardt, 2007; McGraw et al., 2008).

5.3.3.1. Learners' perceptions of the school environment and its influence on learners' sexual activity

According to the study's results, *Learner's Perception of their Ability to Apply Sexuality Education Messages in their Lives*, *Safe and Clean School Environment, School Engagement* were indicated to be strongly statistically significantly associated to sexual activity. *Parental School Partnership* and *School Discipline* were additional statistically significant protective factors for sexual activity, according to the study's results. These results are supported by past literature (Eldredge et al., 2016; Namisi et al., 2013; Rupp & Rosenthal, 2007; Sulkowski et al., 2014; Waters et al., 2009). The majority of the sample had indicated not being sexually active (76%/N=455). Prior research postulates that the school as a context also reinforces the positive behaviour change that has already occurred such as a late sexual debut and is a protective and supportive factor for learners' safe sexual behaviours (Furlong & Christenson, 2008).

5.3.3.2. Educator support and its influence on learners' perceived ability to implement sexuality education messages and influence on learners' sexual activity

The study findings indicate a statistically significant negative relationship between PQ and learners who considered their LO educator as a role model for themselves with PQ two at 74.7% (N=112), PQ three at 76% (N=114), PQ four at 63.3% (N=95) and PQ five at 53.3% (N=80), [$\chi 2$ (3, N = 600) = 23.0, $p < 0.001$]. According to the study's results, lower PQ schools had a higher level of sexual activity than higher PQ schools. Prior research postulates that the closeness of learner-educator relationship allows learners to more intimately identify with their LO educators and therefore learners may be more likely to listen to and mirror their LO educators' behaviours (Francis, 2010; Helleve et al., 2009; Matthews 2009). Furthermore, learners indicated that similarity in terms of demographic (race, age, gender, geographical home location) as well as similarity in terms of personality traits were substantial factors in determining whether an LO educator was a role model for themselves. In addition, results indicated that educators being role models to learners was a great influential and protective factor on learners' engagement in sexual

activity, with learners who indicated that their LO educator was a role model for themselves having lower levels of sexual activity, than those learners who did not identify their LO educator as a role model for themselves. The study's results also indicated that learners who did not perceive their LO educator as a role model for themselves' were more likely to engage in substance use/abuse. Research has established that educators who are perceived as role models by learners are more influential on learners and this is a protective factor for learners' engagement in risky sexual and other risky behaviours (Finegood et al., 2017; Rupp & Rosenthal, 2007; Shisana et al., 2009; Steffenson et al., 2011).

Grade 9 learners had a statistically significantly higher affirmative response than Grade 11's with regard to being more likely to approach their LO educators if they experienced a problem or were in need of help regarding a personal/sensitive issue. This finding is supported by prior research which indicates possible reasons being that the younger the learner, the more likely they are to trust in, approach and not fear possible lack of confidentiality; as well as that older learners may experience challenges of a more serious nature combined with the need for autonomy and independence in addressing issues on their own (Bond et al., 2007; Shisana et al., 2009). Older learners are more likely than younger learners to take responsibility for solving their own issues as they are more attuned to their own identity (Bond et al., 2007). Open-end response results for Grade 11 revealed that Grade 11 learners expressed that they would rather address issues on their own or with a close friend of their own age than with an adult. Some learners also expressed that they would not approach educators due to perceptions of educators' inadequate keeping of confidentiality. It is imperative that in order to build close and caring relationships which will influence on learners' engagement in risky sexual behaviour, educators are viewed as trustworthy (Bond et al., 2007; Idele et al., 2014). Given that this study's and prior studies' results indicate a vast increase in sexual activity from Grade 9 to Grade 11, it is a necessity for Grade 11 and older learners to remain accessible by the school in order to practice safe sexual behaviour (Shisana et al., 2009). Since the main deliverer of sexuality education through the LO curriculum is the LO educator, relationships which go beyond the realm of an academic educator is required; which includes adapting relationships with older learners and their change in identity. The study's results indicate that this may be occurring as a result of the higher frequency of older learners indicating that they found their LO educators to be supportive and respectful to them with 13-15 year olds indicating a lower rate of support and respect extended to them by LO educators than those aged

16-17 years and those over 18 years of age. Possible explanations may be that educators are more inclined to respect more mature learners as adults (Austin et al., 2011; Bond et al., 2007). This respect is reciprocated by older learners, aged 18 and over, who indicated being more inclined that other age-groups to identify their LO educator as a role model for themselves than 13-15 years and 16-17 years.

Racial demographic characteristics also played a role in whether learners felt that they could approach their LO educator to assist with their personal problems with more Black African learners at 78% (N=236) than White learners at 42% (N=60) indicating a positive response. Indian learners at 69% (N=80) and Coloured learners at 64% (N=25) learners indicated that they could approach their LO educator to assist with a personal problems to a lower degree than Black African learners but to a higher degree than White learners, [$\chi2$ (3, N = 600) = 55.43, p < 0.001]. Possible explanations were offered in the form of the open-end responses which indicated that more Black African learners than any other race-group felt that LO educators were more approachable due to the perceived demographic similarity between themselves (brought up in the same community, lived in similar socio-economic status and/or had similar personal challenges), through which a rapport was formed as a result of identification with their educators. The open-end responses also revealed that Black African learners either experienced a greater frequency/intensity of challenges or were more likely to report their challenges to personnel in their school than other race-groups. In addition, this study's results indicated that Black African learners engaged in higher rates of sexual activity than other race-groups. Past literature has indicated a direct correlation between multiple sexual partnerships and engaging in substance abuse as well as being in the ethnicity group of Black African descent (Kalichman et al., 2008). In addition, Black African learners in this study reported living with the lowest number of adults and thus have a poorer familial support system to address their personal challenges than learners of other racial groups in this study. LO educators may also be responsible for the increased rapport between learners and themselves. This may be due to the recognition of the challenges in the school and its external community as learners in lower PQ schools which had primarily Black African learners, indicated higher rates of educator support than those learners in higher PQ schools. Support for these reasons amongst lower privileged ethnic groups internationally as well as per a few South African studies have also been established through past literature (Francis, 2010; Idele et al., 2014; Shisana et al., 2009).

The study's results indicated that positive learner-educator relationships (liking their LO educator, perceiving that their LO educator respected them and that they were able to approach their LO educator for assistance with personal matters) was a protective factor for learners' engagement in sexual activity and substance use/abuse. They also had higher "school environment as enabling sexuality education application in learners' personal lives" scores than their peers who did not have positive and beneficial relationships with their LO educators. These findings are supported by prior research which establishes positive, open and close learner-educator relationships as being essential to the success of sexuality education programmes (Francis, 2010; Goodenow, 1993; Kirby et al., 2011; Shisana et al., 2009; van Uden et al., 2014). A South African study regarding an evaluation of the LO programme in Gauteng schools, revealed that a lack of openness and trust between educators and learners was a major obstacle to the implementation of the programme (Fonner et al., 2014). Research has also established that within the classroom environment, positive relationships and interactions between learners and educators promotes a climate of mutual respect and has been shown to enhance learners' motivation and engagement in sexuality education lessons (Ruzek et al., 2016).

Learners who did perceive their LO educators as sexuality education experts (having a good knowledge and perceived by learners as being good at teaching sexuality education) reported lower scores on sexual activity and substance use/abuse and higher scores on sexuality education as being applicable to their personal lives than their peers, who did not perceive their LO educators as being experts on sexuality education. This finding was supported by prior research which establishes the need for educators to be credible in terms of knowledge and skills promotion to assist learners in making safe choices around sexual and associated risk behaviours (Kirby et al., 2011; Shisana et al., 2009).

5.3.3.3. Number of sexuality education lesson and influence on learners' application of sexuality education messages

The study's results indicated that the higher the number of sexuality education lessons reported, the lower learners' engagement in sexual activity and substance use/abuse. This finding is in support of prior studies' findings which indicate that multiple lessons reinforce sexuality education messages and provide enough opportunity for learners to engage with and build skills to apply their knowledge and skills in their personal lives (Kirby et al., 2011; Shisana et al., 2009).

5.3.4. Caregiver involvement in learners' lives from learners' perspectives

The number of learners were almost divided in half with regard to their perceptions of their caregivers' awareness of LO lessons' curriculum and the sexuality education curriculum. Learners may or may not be aware of their caregivers' awareness of these topics due to the level of communication between caregivers and learners (Finegood et al., 2017; Hutchinson, 2007). The closer a caregiver-learner relationship, the more openness and communication exists between them and the more likely caregivers are to be aware of the curricula learners are engaged in (Buehler et al., 2006; Finegood et al., 2017).

PQ was reported as being positively correlated to the *Parent School Partnership Scale* i.e. the higher the PQ, the higher the perceived caregiver involvement in learners' lives. This is congruent with prior research which indicates the challenges experienced in poorer communities with regard to being available as an involved caregiver in their child's life as well as in their child's schooling life (Sulkowski et al., 2014). Caregivers and their children from lower socio-economic areas face a number of challenges which prevent them from being as present in their child's schooling life as caregivers from higher socio-economic areas (Eldredge et al., 2016).

White learners indicated a higher level of perceived caregiver involvement in their lives than learners of all other race groups. According to the historical context in SA, the previously more advantaged race-group in South Africa was the White race group (Amoateng, 2006; Bhana et al., 2005; Buehler et al., 2006; Namisi et al., 2013). The more advantaged the group, the higher the ability to invest in caregiver responsibilities (Baumrind, 1991; Finegood et al., 2017; Shefer et al., 2013). Conversely, the more disadvantaged a group is, the more challenging it is to monitor, supervise and be involved in learners' lives and their schooling lives (Koen, 2011; Rupp & Rosenthal, 2007). The higher PQ school also had a higher composition of White learners as compared to lower PQ schools. The same challenges would thus apply to non-White learners as those from lower PQ schools.

Younger adolescent age groups reported higher levels of caregiver involvement in their lives. This is in keeping with Erikson's theory of identity formation where younger adolescents are still accepting of caregivers' norms and values and require a higher degree of caregiver monitoring and supervision than older adolescents (Erikson, 1984). In addition, caregivers

gradually become more comfortable in relaxing their monitoring and supervising of their children's lives, the older they become, due to their children's pursued development into an independent adult (Buehler, et al., 2006; Finegood et al., 2017; Namisi et al., 2013).

5.4. Conclusion

The study indicates that the school environment is a protective factor for sexual activity, especially with regard to school engagement. Furthermore, the school environment is a promoting factor for sexuality education message applicability in learners' personal lives, especially with respect to school climate, fit, connectedness and engagement. In addition, learners' perceived ability to apply sexuality education messages in learner's personal lives, is a protective factor for sexual activity.

With respect to educator influence on learners' perceived ability to implement sexuality education messages, the study indicates that learners perceived educators' sexuality education teaching expertise as being very positive. Most learners, regardless of the various schools, indicated that their LO educator had an extensive knowledge of sexuality education. Learners also reported that their educators' pedagogy for sexuality education was optimal for learners' understanding and their perceived ability to apply sexuality education messages in their personal lives. In addition, most learners' indicated that they had a close relationships with their LO educators which were optimal to learners' perceived ability to implement sexuality education messages. Regarding caregiver involvement's influence on learners' sexual activity, learners in higher PQs and those living with a higher number of adults in their household and of a lower age category, reported higher levels of caregiver involvement in their lives and lower rates of having engaged in sexual intercourse. The next chapter, Chapter 6, covers educator support factors in schools and includes the challenges and enabling factors in KZN schools.

CHAPTER 6

RESULTS

EDUCATOR SUPPORT: CHALLENGES AND ENABLING FACTORS

6.1. Introduction

Chapter six focuses on the LO educators' perspectives on the aspects that encumber or enable them to deliver on their mandate, as outlined in the LO programme, with a specific focus on enhancing knowledge and life skills, as well as to offer the best form of care to learners. Care offered by the LO curriculum includes offering personal attention to learners, provision of information which is relevant to learners' lives and referral to other key stakeholders. The findings are presented in terms of the identified themes which focus on the challenges educators face in the classroom and in the school. The socio-demographics of educators in the sample will first be presented, followed by the qualitative in-depth interview with educators' findings which are presented according to the identified themes, namely, *Resources*, *Pedagogy* and *Status of LO in School.* Within these broad themes, subthemes were identified as outlined in Figure 5 below. It should be noted that, although themes have been separately presented, they are inter-related. Thereafter, the researcher's observations in line with components of the school environment which impact on educators' delivery of sexuality education will be presented. The chapter will conclude with a discussion and conclusion.

6.2. Findings

First, the socio-demographic characteristics of the sample and, secondly, the educator perceptions and researcher's observations of the challenges and enabling factors in the school as a context for sexuality education teaching, are presented.

6.2.1. Socio-demographic characteristics of the sample

Participants in the study were within the ages of 25-55 years, with a mean age of 25 years. Of this, four were males and two were females (n=6). Five educators were responsible for LO in their respective schools and one was the head of LO in their school. Most of the participants (n = 5) have a tertiary undergraduate qualification in Education and one has a Ph.D. in Education.

Regarding religion, most participants (n=5) considered themselves to be Christian and one participant was a Hindu. Three educators spoke isiZulu, one spoke Afrikaans and two spoke English as their home language and five of the six educators teach in English. Furthermore, most educators have been in the teaching profession for a period of four years and had an average of four years' experience in teaching LO. All six educators taught LO to both Grade nine and Grade 11 learners. All educators had been at their respective schools for over one year. Summarised demographics of the participants are presented in Table 41 below.

Table 41

Socio-demographic information of the participants

Characteristics	Number	Percentage (%)
Gender		
Male	4	67%
Female	2	33%
Ages groups (Mean age =25)		
20-30	3	50%
30-40	1	17%
40-50	1	17%
50+	1	17%
Race		
White	1	17%
Black	3	50%
Indian	2	33%
Home language		
English	2	33%
Afrikaans	1	17%
Zulu	3	50%
Religious affiliation		
Christian	5	83%
Hindu	1	17%
Highest level of education		
Bachelor's Degree	5	83%
PhD	1	17%
Language used LO		
English	5	83%
Afrikaans	1	17%
Number of years teaching		
3 years	1	16%
4 years	3	50%
30 years	1	17%
40 years	1	17%
Number of years teaching LO		
3 years	2	33%
4 years	4	67%

Number of years worked, in any position, at this school		
1-2 years	1	17%
3-5 years	3	50%
+ 10 years	2	33%
Number of years worked at their school in current position		
1 to 2 years	2	33%
3 to 5 years	2	34%
+10 years	2	33%

6.2.2. Educator perceptions and researcher's observations of the challenges/enabling factors in the school as a context for sexuality education teaching

The main themes of 'Resources, 'Pedagogy' and 'Status of LO in the School' and related subthemes are summarised in Figure 7 below. For each thematic section the educators' perceptions will first be presented. Thereafter, the researcher's observations of the school will be provided.

Figure 7: Flow-chart of themes and subthemes of educator challenges/enabling factors in teaching sexuality education
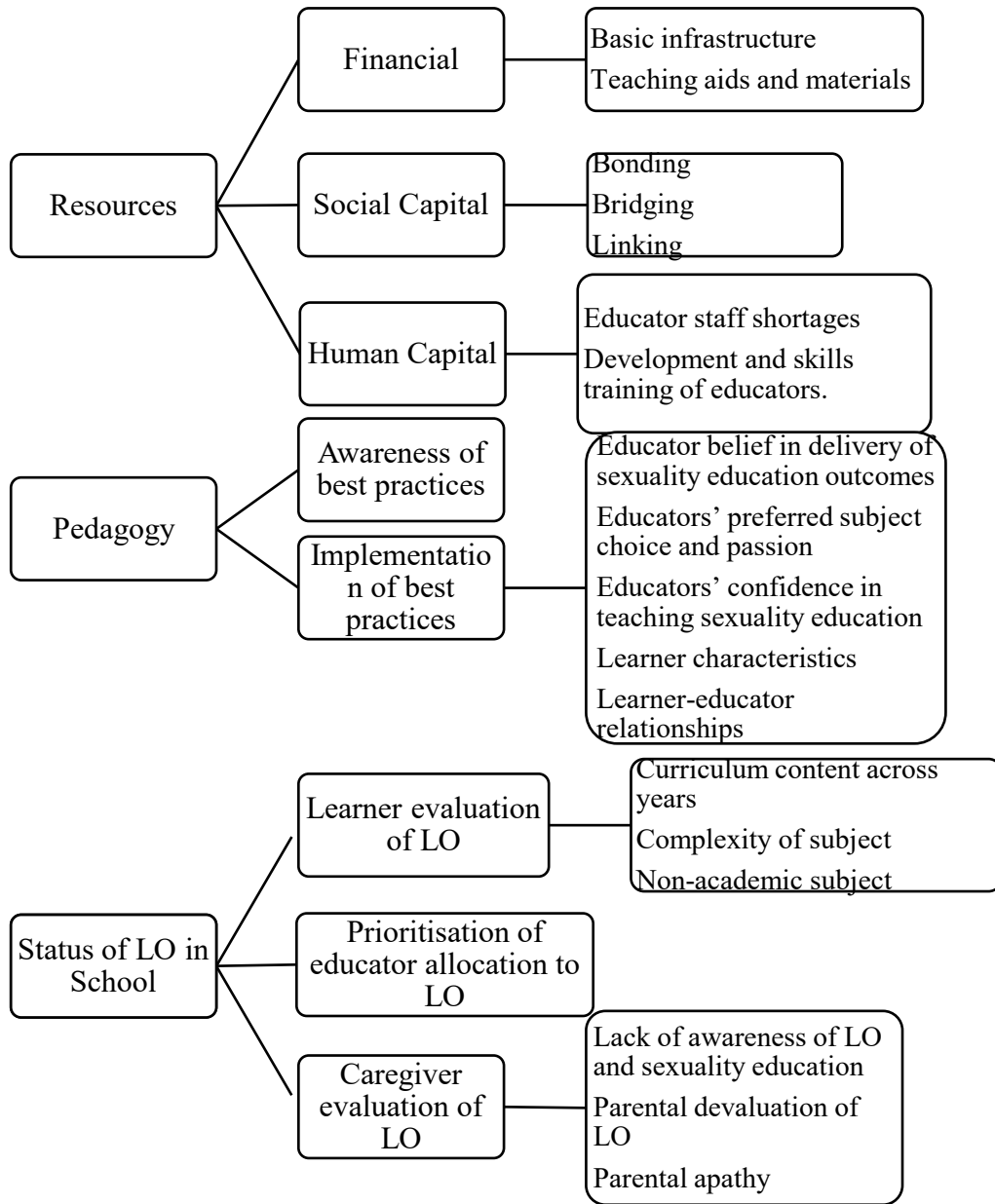
6.2.2.1. Resources

Resources are discussed in terms of financial resources, social capital i.e. bonding, bridging and linking and available human resources.

Financial resources

The *basic infrastructure* refers to the physical classroom environment in which teaching takes place. Educators in lower PQ schools indicated that they experience inadequate classroom quality and hygiene as well as having poor communication infrastructure i.e. limited access to a working telephone and the internet. However, the higher PQ schools seemed to have a more conducive teaching environment. Educators related the following in this regard:

> *It's not like some better schools coz (because) we have sometimes (sometimes have) twice the amount of the kids in one class. Like, there are 60 kids for us to teach and our classrooms are small, so the kids… they feel very hot and tired. (Participant 4)*

> *I think the school needs more equipment for us to do our jobs properly. At the moment, drug test equipment would be good to have available. If this could be bought by the school, it would make my job easier. Maybe if we suspect that the learner is on drugs, then we can test them and we have proof for their parents as well. Also, for their parents, it's hard coz (because) we don't have enough telephones and there is not (no) internet here so we cannot send an email or message to the parents as some better schools (do). We send letters and that gets lost in the kids' (school) bags. (Participant 5)*

All six educators expressed the need for more *teaching aids and materials* to enable enhanced delivery of the teaching of sexuality education in LO, such as the provision of posters from the Department of Education and the ability to attend conferences on sexuality education with the learners. Lower PQ schools had the least physical resources to work with and lack basic resources which created challenges to teaching LO. The provision of resources for video streaming/presentation and internet access was also suggested and educators listed internet access at the school and projectors in this regard. Educators expressed their desire for more current and relevant resources in their statements below:

I think that you (the LO educator) need Wi-Fi facilities to show them videos and have videos as a resource… and then you obviously need a projector and a screen to project it on, so that would be good to have. (Participant 5)

We do not have the resources like the internet and proper rooms that we can use to teach the subject as I would like it to be taught. Right now I'm teaching out of my woodwork classroom and the place doesn't always have space to put up the posters and there's a lot of dust from the woodwork around, so it's not ideal to teach LO. (Participant 6)

Social Capital: The quality of interpersonal relationships and networks

Participants indicated the presence of strong interpersonal relationships with strong bonds between the educators in their school, which were described as being close and supportive. Bridging between caregivers and social workers, clinic staff and other members of the community was reported by educators. In addition, educators indicated that they received support from governmental organisations and NGOs which showed the linking with key stakeholders outside of the school context.

Regarding *Bonding*, it was encouraging to learn that some educators felt supported by their fellow educators in their schools, conveying that guidance was sought from other educators in areas where they felt uncertain. However, the positive feedback from their colleagues about the positive impact sexuality education had on learners' attitudes toward their academic subjects was experienced as acknowledgment of their efforts in LO. Other non-LO educators also referred learners with personal problems to the LO educators. This is an indication that LO educators were viewed as credible by their peers and that they had a good relationship with each other. This demonstrated bonding between educators within the school. This is conveyed in the words of two LO educators below:

They (non-LO educators) support me very well because for them they do not have the… I would say the time we have, to impact the kids because if they are teaching maths they have to focus on teaching their curriculum… and they don't have so much time to pick up on life issues. So they know that we are playing that part for them as well, because the kids get to be more focussed in those academic subjects and get to do well in those subjects. They see the ripple effect of that impact in their subjects, so they are really supportive. Inasmuch as

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they may like and want to teach kids about life-skills, they can't because of the time limits. They have these other subjects that they need to teach the kids whereas (for) us, as LO teachers, it is our job to teach them life-skills. They are supportive and helpful if we need them to be. Like sometimes, we can say to them, "There's something important we need to teach the kids on and can we please take your session?" and they are happy to do this. We have a good relationship and understanding between LO teachers and other teachers here. (Participant 4)

Yes, we do support each other because even when I'm teaching, in certain issues where I'm less knowledgeable, I can go to those teachers and then ask, then they give me their views, then I can teach that lesson in a more constructive way. The relationship… it's very good. (Participant 2).

However, some educators indicated that communication and co-operation within the school had an impact on efficiency in the school. They reported that communication and co-operation were not always apparent in their schools in terms of bonding between LO educators and other educators or between all staff members in the school. The educator, below, indicates that there is inadequate communication as the school does not inform the LO educator of issues pertaining to learners that could have assisted them and the learners to address the issues. This varied according to PQ i.e. the higher the quintile the greater the bonding and therefore, the co-operation. This was echoed in the words of the PQ 3 school's educator below:

I don't like to say it, but I think that all the teachers in this school could work better if we worked … like … more with each other. Now, it is such that we just do our own subjects and (while) they do talk about things, sometimes we don't get messages we were supposed to or a parent comes and we have been referred to that case by another teacher, but that person has not filled us in. So now we are hearing that story for the first time. Sometimes you wonder if it would be easier if we could talk to each other more so, so we can be more organised. We are already very busy but it will help us to save time. (Participant 3)

Educators conveyed that there is team work when there is a need to work towards common goals. The key role that school leadership plays in effective team work and accomplishment of goals was highlighted. Educators reported that the schools' leadership placed trust in the decision-

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making of the LO educators and that they received leadership support. Three educators from the various PQ schools narrated the following with respect to the bonding experienced at their schools and its impact on their job satisfaction and also on the academic outcomes of learners:

I think you've got your cliques. Firstly like certain people get along very well, but if there is something big that needs to be done as a team, we get in and the whole team does it. So yes, we've got our small little groups in the beginning, but if something needs to be done and we need to pull it through, then we do it. So there's this cooperation that comes through when something needs to be accomplished, but that also comes from good leadership from our principal that's (who is) setting your timetable and setting time management (who says) "That's what we need to do, that's how it will be done."(Participant 5)

He (the school principal) supports me in whatever I do… he doesn't obstruct me, (be it) if I send a learner to counselling. Whatever action I take he is behind me. He knows that whatever action I take, I follow the rules, I've got the procedure and we move together like that. So we are quite successful in whatever we do. (Participant 4)

However, an educator reported that her role in the school was somewhat undefined as important issues are not always brought to her attention. She indicates that this may possibly be due to inadequate insight and awareness of what her role and function as a LO educator is.

I don't think educators support me all the time, coz (because) some others, they forget that I'm even here. I just hear that there is a problem, but I didn't hear them refer(ring) the child and I say (to myself,) "Why didn't they refer the child"… I don't know if they all know the role of why I am here at school… I need the teachers to refer learners to me coz (because) some of them… they forget that I'm even here or what I am here for. The problems they know, they (are) just talking (about) in the staff room and (they also) talk about the learner… something which will not help people here, instead of referring the learner to me so we can talk privately. (Participant 1)

There are *Bridging and Linking* networks of key stakeholders who assist in supporting LO educators and are available should these educators require learners to be referred. All LO educators described the vast social networks their respective schools have with the community and the positive manner in which these impacted on their role as informant, caregiver, counsellor and

friend. Educators pointed out the various stakeholders with whom the school networks; including social workers, caregivers, clinics and their community's NGOs as quoted below. The manner in which their schools network with the local community stakeholders' social networks, was described as beneficial to their role as an LO educator and is demonstrated by the LO educators below:

Anything, I put it there on the notices, you must have seen it… even if it's a suicide attempt… I put notices there (saying), "Please come and speak to me" (LO educator to learners who are experiencing problems and would like someone to talk to) and they do come and we call their parents and refer them to the social worker, child-welfare, police… whatever it is. (Participant 4)

When we have children taking drugs it is serious so we call in the parents to come to school … maybe we give them the warning and if it continues then they suspend him (the learner) or they refer him/her (the learner) to me and I refer them to the social worker coz (because) they can help; as drug abuse is a serious problem and I refer (them) to KwaDebeka clinic to give them some pills and rehabilitation. (Participant 1)

There was a learner who got pregnant and she was supported. After the baby she then came back to school, so there was a whole support system offered to her and her mother in (through) the counselling and the NGO that (who) always works with our school supported her with stuff for the baby. Also, they were not from a rich family (so) there was lots and lots of support. (Participant 5)

Human resources

All educators said that their schools had *educator-staff shortages* and that this affected the quality of their teaching since they teach other subjects in conjunction with LO and are not able to focus fully on LO as a subject. They, therefore, have a need to prioritise other more academic subjects over LO and sexuality education. Educators also reported that the subject-load, including LO, combined with all the other subjects they taught, placed constraints on their personal time. Educators articulated the following in this regard:

It happened as a result of losing four staff members last year because the PPN (personnel, provision numbers) according to the Department of Education, was cut last year. So we had to fill three of the four posts internally, so we all have a hectic timetable this year as we've all taken on more classes. It is affecting our time we can spend at home with our families. I'm always working after class, like marking… but even on weekends… its rugby or soccer or some extra-curricular activity that goes right into the evenings on weeknights. (Participant 6)

We do not have enough teachers to teach the subject. So now educators who are really busy with other subjects are having to teach LO and (its) the same with me. It takes away your own time to do other things (impacts on the educator's ability to live their personal life). (Participant 4)

I would think that in most schools, especially the state schools and the Afrikaans schools in KZN, we are under-staffed at the moment - so for LO it's not a designated teacher that does all (the) LO (teaching). I think that it will be the ideal thing if there are one or two teachers allocated in the school purely to do LO from eight to 12 o' clock coz (because) then you set a trend at the school that you want (to set). At the moment, we're understaffed so it's passed on as an extra/add on subject and that is sad coz (because) there's actually lots and lots of life-skills to be learnt and I don't think in Natal we've got the resources to say "Ok, this is the teacher that teaches LO" coz (because) I think you need someone who can do the practical (content) and be a teacher or maybe have two (one doing practical and one teaching). (Participant 5)

It was reassuring to note that all six educators mentioned that schools do invest in the *development and skill-training of LO educators* for LO purposes in that they are encouraged to attend conferences/trainings/meetings and especially those conducted by the DoE. Two educators' statements represent this below:

Yes, they (the school) always send(s) the teachers on trainings which the Department offers, as well for this topic (sexuality education). (Participant 1)

They (the school) are (is) very helpful and supportive that way. They (the school) sends us for whatever workshops are offered. (Participant 6)

6.2.2.2. Pedagogy

All educators demonstrated *awareness of the best practices for teaching sexuality education* which are optimal to teaching sexuality education to learners. This involves the use of participatory methods rather than following a didactic approach and the use of multiple pedagogical approaches adapting topics to be relevant to learners' personal lives. This was reported to be achieved by asking learners to initiate areas of importance to them under the banner of the prescribed topics. This is recounted by the educator's statements below:

> *The methods I usually use are that I raise a topic and then I leave it open to the class for discussion… so those who want to voice their views, they raise up their hands in an orderly manner, we participate in class…and then during classroom activities, they then work in pairs to complete the activity so that they have something in writing. But I also talk to them about new information first before we go onto our discussion. (Participant 2)*

Different types of pedagogy were recommended by educators as being better for sexuality education as reflected below:

> *I think especially with technology… that's the kind of way kids are going… It's videos. It's (what is) trending and streaming and articles that you've seen on Carte Blanche and stuff. You need to download the YouTube videos, so we need Wi-Fi… That's the most important one and then obviously posters that need to be sent to the school by the government. They are very valuable, those posters. (Participant 5)*

The *implementation of best teaching practices in LO* seems to be influenced by learner characteristics (English language competency, general knowledge, interest in reading for general knowledge, listening and co-operation in class, participation during LO lesson), educators' beliefs in delivery of sexuality education outcomes, their preferred subject choice and passion for teaching LO and sexuality education, educators' confidence in teaching sexuality education and learner-educator relationships. The section below describes the factors which have an impact on the educators' implementation of the best practices to deliver sexuality education and which will enhance the influence and practice of sexuality education messages in learners' lives.

Despite the rules and regulations which are in place to manage learner behaviour, the disruptive behaviour of learners in the classroom presented a challenge to sexuality education. Educators reported various degrees of disruptive behaviour by learners in sexuality education classes regardless of the PQ rating of the school. The schools' rules were clearly set out and communicated to caregivers and learners to make them fully aware of the rules and also the consequences should learners not adhere to them. Although the rules are clear, there seems to be difficulty in maintaining a standard manner in which the rules were followed due to the subjective interpretation of them by different educators. This presents a challenge for the educator when attempting to cope with learner disruptions. This is illustrated by the following educators' views:

It should be standardised… that's what we are trying to achieve with having all teachers hand out the equal points for violation of school rules but people are different. I for instance, I think I'm a lenient teacher and I don't just hand our demerits for every time a child looks sideways, because it stays with them for a year and there is a merit system. (They) also get points for good behaviour. So if they do get merit points, but they have demerit points then they won't be able to collect their rewards like wearing civvies (personal clothes and not uniforms) on a civvies day. So I try to resolve issues in a different way, but then, other teachers will hand out the marks more easily... but that's actually not a good thing. The rules should be enforced in a standardised way so every time they do the same thing wrong, they will get the same demerits regardless of who the teacher is. So it's actually subject dependent, but learners know where they can take a chance or not. (Participant 5)

The one thing I told them (other educators) is that they (other educators) must stop saying things that are contradictory to what I say. Sometimes when a parent is waiting outside because I called them for a meeting, then the teacher must not interview that parent if they were not the teacher who sent for that parent. Let the teacher who sent for that parent deal with that parent. If I sent for that parent, let me deal with that parent (and) then if I need you (the educator involved) to say something as the teacher, then I will call you (other educators). There is a great possibility if you (other educators) talk to the parent before I do, that we will contradict each other. So in that way, the teachers keep away and when the need arises, I will call them to say something. Ten out of ten times, they (other

educators) are saying the exact same things about the child as I had said. Maybe they (learners) are scared that we will take action if something is wrong. So for example, if they say they are pregnant then … our tendency is to shout first. Then you realise you're shouting and you think, "Rather refer them to some agency or counsellor or social worker." Sometimes they don't tell us the full story so I tell their parents, "Take them to the counsellor and maybe they will open up with the counsellor rather than us." (Participant 4)

Language as a barrier and learners' lack of basic content knowledge which, in turn, impacts on their contribution in class on a LO topic. These were cited as reasons which impacted negatively on educators' ability to implement participatory approaches during sexuality education lessons. Poor English language proficiency was also cited as a deterrent to learner engagement and participation in the lessons. As a result, more didactic pedagogies are being implemented. Educators also seem to be aware that participatory learning is optimal for sexuality education lessons and have emphasised reading for general knowledge. This helps, not only because it increases the learners' ability to participate in and contribute to lessons appropriately, but also enables them to make the desired behaviour changes. An LO educator emphasised the following:

It's not just the language barrier… even those who can speak English, (and it's) because they are so limited in their general knowledge. It totally restricts communication. So now you (the educator) have to start from scratch with them and this is why they can't contribute anything to the lesson… because they are so limited in their general knowledge. So it becomes a one-way means of communication. (Participant 4)

This particular educator believes that some general knowledge about life in general is required in order for there to be successful participation in sexuality education classes and, therefore, this educator encourages broader reading among the learners. He indicates that his method is to provide background information first and, then to conduct group activities. During this process, he asks the group questions. However, he experiences the learners' reluctance to participate:

The methods I usually use are… sometimes I raise a topic and then I leave it open to the class for discussion. So those who want to voice their views, they raise up their hands in

and orderly manner, we participate in class…and then during classroom activities, they then work in pairs to complete the activity so that they have something in writing. But, I also talk to them about new information first before we go onto our discussion. But it's also hard sometimes coz (because) not all the kids want to participate and if you ask (them) something, then they don't know. So it's sometimes difficult to build on that. I told them to go read in the library so that they can learn more in the way of general knowledge and about life. We have a small library here at school. (Participant 2)

Educators' belief in the value of sexuality education outcomes on learners' lives impact positively on their sexuality education delivery. This was evident in all the qualitative in-depth interviews with the educators and was communicated in the words of a few educators below:

LO was put in this curriculum because of the playing fields not being level in this country. So LO was put in for us to ensure that children have a good perspective and grounding of everything that is currently happening in education. You've got to create a learning environment as the playing fields are not level. (Participant 6)

So, we are teaching them to build character. So only then you can give them information about HIV and AIDS and see how does it work (it works). So that is personally how I teach and what I believe in… even though it is called a (an) HIV prevention programme, we actually need to teach life-skills. Our goal is to build character in kids for them to make wise decisions. HIV is happening, not because we do not have information on HIV…we do have that information freely available… but the thing is, we are not taught the issues of character; so that is why we will continue to have HIV or any other things (other STIs) so HIV for me is not a problem; it's just a result of the questions of "how am I built and what is my character?" (Participant 3)

Yes, it (teaching sexuality education) is very important because if you look at the community the school is located in, you will find that any (of the) kids are orphans because of HIV and AIDS, so it is very important that we teach them about those subjects (Participant 2)

LO as an *educator's preferred subject choice,* impacted positively on their passion for the topic. However, where LO was not the preferred choice, this posed pedagogical challenges. Two

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out of the six educators interviewed indicated that LO was not their preferred subject to teach. This seems to impact on their interest to teach LO. The two educators, whose preferred subject choice was not LO, stated the following:

> *This year I had to teach LO and it makes teaching it a bit more difficult than someone who may be better qualified and has the classroom for it (LO educator's classroom is a woodwork room). I have no space to put anything up for LO and haven't been trained for it. I just use the textbook to help me. (Participant 6)*

> *I am not particularly happy to teach LO as my subjects are Maths and Science, but I do it… Maybe not as well as someone who is trained for it and wants to teach it. I understand the importance of it but you know… it's not my subject. I'd rather (be) concentrating in (on) Maths and Science. (Participant 5)*

Educators' *confidence in teaching sexuality education* impacts positively on their ability to teach sexuality education. All educators felt fairly confident that they could teach sexuality education, but not as confident in teaching learners when they had to teach messages which contradicted their personal value system, such as teaching learners to use condoms and contraceptives rather than to abstain, or when having to deliver gender-specific teachings or when having to use graphic images. This is evident in the words of three educators below:

> *I don't always feel happy about teaching about condoms when I would personally like to tell them to abstain, but it is children from all different backgrounds. I try to sound convincing, but I'm not sure if I am. (Participant 5)*

> *I (male LO educator) talk to the male learners but the female learners… I send them to Mrs. Ismael (female educator in the same school). She's not an LO teacher but it's better for her to talk to the girls. All the pregnant cases, I send to her. (Participant 4)*

> *You know the one year, it was so awkward… There were graphic pictures in the (LO) textbook and we actually tore them out because it was so embarrassing. (Participant 3)*

Although four out of the six educators have been trained as LO educators, there still remains a reliance and trust in didactic teaching methods. Reasons provided for the reluctance to use the participatory methods were that there could be a possible loss of classroom control and

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lack of satisfactory learner participation during lessons. The following two educators' statements reveal fears related to the use of participatory methods of teaching LO:

I would rather use the textbook and talk to them because you know you are teaching what needs to be taught which will instil discipline in learners and your class won't get out of hand. Sometimes when we try to have a discussion, children say silly things and joke around instead of taking it seriously. (Participant 3)

I do use group work but sometimes they get out of hand, so I try to keep it to a minimum and I try to have class discussions. It is difficult though. (Participant 2)

Learner-educator relationships are an additional contributory factor to educators' ability to implement best pedagogical practices. Whether or not educators represent warm and supportive role models to their learners is vital for optimising the outcomes of sexuality education. All educators indicated that they had a warm, friendly and open relationship with learners, but they also had to set boundaries in their relationships in order to maintain respect. The following educators indicated the importance of compassion in building quality learner-educator relationships which build open and trusting discussions:

I always want to maintain my relationship with them, because I have a daughter who is 25 years old and I believe that what was good for her will be good for them. You cannot change that and they listen. While I'm being very assertive, at the same time I'm being compassionate. I think that is key. (Participant 6)

For us in LO, they are very open and trusting because we are not just teaching subjects like Maths and Science… We are just teaching them life-skills, so we are basically dealing with their lives, so they tend to be very open and relaxed coz (because) the issues that we are speaking about are the issues that they are dealing with and they see around them, so they will trust us. They see cases happening around them and its some things that they cannot tell their parents about, but they are able to come to the LO teacher and tell them about it. (Participant 3)

Learner characteristics and behaviours in terms of self-discipline could be closely linked to learner-educator relationships and were reported by educators to be impacted positively or

negatively by the quality of learner-caregiver relationships. Educators stated that learners with lower academic performance and who displayed more disruptive behaviour in class stemmed from homes with poor caregiver relationships. Educators indicated that in cases where caregivers are caring and involved, learners were more likely to show respect toward the educator and their peers. Furthermore, educators, regardless of the school's PQ level, reported that the lower the academic-grade point average of the class, the more likely learners were to be disrespectful and disruptive in class. Two educators shared the following:

There are two different classes… an A and a B class. In your A class (academically higher class), there's a lot of respect but they lack respect in the B class (academically lower class). In your B class, their parents are not involved and they (the learners) are just floating around (Participant 4). So in your A class you've got your academically inclined learners, so the boys wait for the girls to go out and you've got my class that's more the lower group of the two groups. So it depends on which class you're talking about… the one has a lot of respect and the others not so much. They lack respect in the B class … but that's again with the parent (al) involvement in their lives. Where you've got your students and you can see that the kids and the parents are in a close relationship and the kids are happy kids and the parents are involved in the school. And in my class (academically lower "B" class), we've got the scattered kids who are just floating around. (Participant 4)

There are the ones who come from disadvantaged families and they are the ones who come to me… because there are those who come from rich families and those who come from very, very disadvantaged families… so there is that stigma. The kids from poor families … most of those (these) kids don't have parents living there with them and they sometimes struggle with school work and I help them to concentrate and keep on track in class. They are the ones that are maybe not listening in class because they feel that (the) stigma. (Participant 1)

Factors which facilitated the identification of learners with educators included the educators being of a younger age and coming from the same community. Learners were viewed to identify easier with younger educators who were under 35 years. This is reflected in the educators' statements below:

I would like to think I'm a more modern teacher and more suitable for some of the new generation. As I look to my colleagues, I can see that they are quite a bit older than me and also a bit fixed in their ways and I've got a younger sister, so I think the language that I use is much more appropriate to their age. So we have more like a trust and friendship (based) relationship than a teacher-student relationship. (Participant 5)

Educators should be able to inspire learners to identify with them and LO educators should act as role models for learners. This type of educator feels that they are, therefore, in touch with current youth. Learners' feel that these educators are able to identify with them because they keep up to date with current youth interests. Role modelling also appeared to be influenced by character. The educator below stated the following in this regard:

Year in and year out children emulate the way I speak and what I do. My relationship with them impacts (on) the way I teach. I always have a good relationship with them. (Participant 6)

They (learners) can relate to me as a good role model because me (I) myself, I grew up in Molweni, I am from this community. I myself come from a poor background… just like them. I went into township schools, just like them, but I was able to make it in life… so with all of that, that makes me a very good role model to them. (Participant 2)

To say you're a good role model depends on where you are standing ay… what do you think that is a role model (what you think a role model is). I would like to think that I am, but as any person, I did some things that I am not proud of, or not right but wrong and I think teaching them from the place of where I did something wrong and that's the lesson that I learnt, I can say with confidence and say "Yes I did stupid things and this is what I did and this is what the consequences of what I did were." I hope that they can learn from it. So I would like to think that I'm a good role model for them. (Participant, 5)

6.2.2.3. Status of LO within school

Learner evaluation of LO is impacted by the complexity and non-academic nature of the subject including the repetitive *curriculum content across the years.* The repetitive curriculum content across the secondary school years and the **c**omplexity of LO as a subject relative to other

subjects, and its non-academic nature, are important challenges. Most educators felt that learners do not perceive LO as a subject that they have to take seriously. This attitude subsequently contributes to them devaluing the subject and they are therefore, less motivated during sexuality education and LO than they are in other (academic) subjects. A further reason provided by educators for the resultant learner devaluation of LO was because it is a mandatory subject, which did not add value to any application for tertiary education. These sentiments have been cited by a few educators in the statements below:

Always… every time when you enter in class, I stress the importance of the topics, but still there are learners who don't take it seriously because it is an easy subject and they learn the same information over the years, so they know it, but they don't realise that it is supposed to have an impact on their behaviour and change the way they live their lives. (Participant 2)

Yes, so they maybe want to make jokes about that thing (sexuality education) and maybe laugh about it… you know such things. They don't take it seriously because of a lack of self-discipline, self-respect… such things… and some of them, they just don't take all subjects seriously. They don't see the importance of getting an education, but especially in LO, that is where they think they can relax, make jokes about that thing and laugh about it. (Participant 1)

So it's not the six subjects like we (educators) did. But still even though they have seven subjects, they can only choose three and they feel the other four are being forced upon them and they feel that LO is a useless subject. They take it because they have to and it doesn't count for university. So even though they may get a distinction in it, it's useless to them as far as getting a qualification or a certificate course goes because it's not being brought into consideration for application. (Participant 5)

A further reason provided was the complexity of LO in terms of repetition of the syllabus throughout the secondary grades and the resultant boredom of the learners. Although educators believe that offering sexuality education is important because it impacts on their personal behaviour and their lives, all of them mentioned that the repetition of the core sexuality education content, especially regarding HIV and AIDS, as well as teenage pregnancies, across the secondary

school grades' curriculum, posed a challenge. Educators associated the repetition of the syllabus with class disruption. The PQ, or grade-level status did not have the same impact as did the repetition of the syllabus. This repetition seemed to result in disinterest in the curriculum and a devaluation of the content by learners. Two educators stated the following in this regard:

Two educators state this, below:

I think it's a mix ay (hey) coz (because) some of them (learners) feel it's like a repeat of stuff so I think they get itchy and think why do I have to learn this subject coz (because) LO is like a repeated subject. (Participant 5)

They also feel the syllabus repeats and repeats and repeats. From Grade 4 and by the time they get to Grade 11, they were bored out of their wits (minds) and they said, "Miss, please we have listened to AIDS, peer pressure and drug abuse and whatever from Grade 4 and it's the same syllabus which gets repeated every year." (Participant 4)

Some of them (learners) feel it's like a repeat of stuff so I think they get itchy and think "Why do I have to learn this subject?" as LO is like a repeated subject. (Participant 4)

The prioritisation of educator allocation to LO in the school system is an additional challenge to the implementation of best practices for sexuality education. There is an element of de-prioritisation of LO education in the school due to it being a non-academic subject. Although the school recognises the importance of the LO curriculum and endeavours to fulfil its outcomes, LO is being de-prioritised in favour of more academic subjects. This affects educator allocation to LO. In almost all schools, at least one educator has been allocated to teach LO, who is not a qualified or trained LO educator. The fact that schools are under-staffed, leads to higher educator workloads, which, in turn, affects allocation to LO and to the use of unqualified educators. Two of the six LO educators were not professionally trained LO educators and had no prior experience. Educators expressed the following in this regard:

I do think that the school sees it as important, but not important enough, and also we do not have the resources to teach the subject as I would like it to be taught. So now educators who are really busy with other subjects are having to teach LO and the same with me. (Participant 6)

The de-prioritisation of LO as a subject in the school and its effects on the ability of the educators to adequately implement the best practices for sexuality education is reflected in this educator's statement:

This is the case now again, where I am telling you that I don't think that there's a designated teacher for this subject and it gets passed off as a side subject, so if there is one teacher that has time to put up a nice presentation and is a LO teacher that does all the work for LO since that's your main subject... I think that will be much more interesting and fun as right now I've got four subjects I'm teaching and LO is the last one on the list, so it's not as much of a priority as the other subjects as it's not an academic subject as much as the others. But, it needs attention and it's not getting the attention that it requires so we need primarily LO teachers because I'm not teaching LO only. (Participant 4)

Caregiver evaluation of LO was an additional challenge to the implementation of sexuality education messages in learners' lives. Educators reported that caregivers do not value LO as a formal school subject of value likely linked to a lack of knowledge about the aims, objectives and curriculum content of the subject, suggests that this attitude may stem from caregiver lack of awareness of the nature of LO. Caregivers have also been cited by educators as having a lack of awareness of sexuality education:

Most of these kids, they don't live with their parents. They live with grandparents, aunty, mummy's dead or mummy's living somewhere and they do not know their dad. (Participant, 3)

Parents come to speak to me about the other more academic subjects I teach (Afrikaans and Maths), but no-one has ever asked me about LO. (Participant 4)

Some parents don't know what LO is, that it's being taught to their children and that sexuality education is being taught as part of it. Most children in this school don't even live with their parents so they (their parents) don't know what is going on. (Participant 3)

I don't think they do because the text book is a problem. They don't get the text book to take home. We have one set which we use in class and then we collect after class. So the parents don't even know what's in the text book and what's in the syllabus. Maybe one or

two parents do talk about it but generally the mother is in the farm, the father is in Joburg (Johannesburg) and the boy is living in Umlazi with his granny, so nobody does the work and knows what is happening. (Participant 3)

Educators reported that caregiver *devaluation of LO* and, *apathy towards LO/sexuality education* occurred as a result of prioritisation of academic subjects. In addition, caregiver reliance on the school as a source of sexuality education allows for educator freedom in their choice of pedagogy for sexuality education. Two educators related this in the following statements:

There's always apathy amongst parents. Nine out of 10 times they will just palm everything onto the school. They don't talk about anything to their child. When I do meet the boys and I talk to them they do tell me, "My father told me not to do this and not to make girls pregnant." To girls I don't ask all these types of questions. Mrs. Ismael (other non-LO educator at the school), she will talk with the girls about that. (Participant 4)

Parents prefer the LO teacher to teach about those things (sexuality) because they are not schooled in this matters, they have only seen it in themselves and they have not developed their own definition of, "Ok so if this happens in my body, it means this…" So these are some of the things that we LO teachers are teaching. (Participant 3)

6.3. Researcher's Observations of the Schools

This section serves as a support and comparison to the educators' perspectives on topics relating to the physical and social characteristics of the schools. The researcher's observations were of the schools' physical and social environments with a focus on the manner in which they may have impacted on educators' ability to deliver the sexuality education messages to learners successfully for the purposes of the influence and practice in their personal lives.

The researcher's observations of the schools' classrooms demonstrated that, in lower PQ schools, physical classroom conditions were not conducive to optimal learning, being smaller, more cramped, darker, hotter, not properly ventilated and less sanitary than classrooms in higher PQ schools. Classrooms in lower quintile schools on average accommodated 60 learners compared to an average of 40 learners in higher quintile schools. The researcher was also warned about the safety of school staff's personal possessions in lower PQ schools due to previous occurrences of

theft in the schools. Apart from inadequate classroom safety and hygiene in lower PQ schools, communication networks such as the availability of a school telephone and internet access were limited as compared to higher PQ schools.

The researcher's observations of the PQ three school suggested a lower degree of communication between the school's principal, deputy principal and LO educators than that observed in other schools. This seemed to be correlated with the educators' lack of effort and lower work satisfaction which was also stated by the school's educator. This was experienced by the researcher upon negotiation regarding access and during data collection at the school. The researcher's messages were not delivered to the relevant educators via the various liaisons. In addition, educators were noticed to leave school early, not be punctual for their classes and not be aware of lesson timetables.

The researchers' observations also revealed contact detail documents of the key stakeholders in school offices including the local police, ambulance, DoE contacts, the student governing body, caregivers, NGOs, role models from the community and peer education programmes in all schools. In accordance with the educators' perspectives and subthemes on financial resources, lower PQ schools had lower access to communication methods such as the telephone, fax and internet. However, all schools had some means of contacting their key stakeholders i.e. there was an e-mail database of caregivers and usage of an internet communication website in the PQ five school, whereas in the lower PQ schools, there was one office telephone. Regardless of the resources available, all schools demonstrated stakeholder networking.

During the observation in PQ2 and 3 schools, it was noticed that learners were served the feeding scheme and that only those learners who did not have their own lunches and/or tuckshop money (money to buy lunch from the school shop) partook in the lunch. A few learners who had their own home-made/tuckshop lunches were observed throwing the feeding scheme food on the ground and to each other before those who were about to partake in it went to get their food. The learners throwing the food seemed to be doing this in jest as there was laughter by themselves and others who had their own home-made/tuckshop lunch, while throwing the feeding scheme food around.

6.4. Discussion

The aim of this chapter was to gain insight into the challenges and enabling factors that impact on educators' ability to deliver sexuality education, a component of the LO curriculum, which, in turn, is viewed to impact on LO educators' ability to implement these practices, in terms of a supportive school environment. More specifically, the study reviewed the extent to which best practices for optimal learning of the messages, as taught by the sexuality education component of the LO curriculum, are being practised by educators as well as the enabling/disabling factors. In this study educators revealed that a variety of factors contributed to their ability to implement best practices during LO lessons and especially during sexuality education lessons. Best practices for teaching sexuality education to secondary school learners include: Delivery of content which is relevant to learners, segmentation of content-delivery by gender and age, the inclusion of key stakeholders for supportive social networks and a focus on behaviour-change rather than sexuality education being limited to the impartation of knowledge (Kirby et al., 2011; Mertler, 2017; Mathews et al., 2006. Pedagogical best practices include practical and varied methodologies of imparting information. These include: Worksheets, textbooks, group-work, oral presentations, homework assignments and role play (Adams-Tucker et al., 2016; Shisana et al., 2005). Participatory approaches such as group-work and peer education are additional pedagogical best practices for sexuality education programmes (Kirby et al., 2011; Shisana et al., 2005).

Educators conveyed that their individual ability was not sufficient to meeting the outcomes of sexuality education lessons in preventing HIV, teenage pregnancy, STIs and risky sexual behaviour. Most educators were able to provide learners with: confidentiality, trust, and participatory approaches to learning. They made use of different types of material when teaching, had referral networks, made an effort to be a role model to learners, possessed and exuded confidence when teaching sexuality education and have a passion for their role. However, it was apparent that schools are required to provide support in terms of reducing the workload of educators and prioritising the appointment of LO educators in LO teaching roles. There is a need for provision of sufficient human resources to share the workload, especially regarding the reduction of high learner-to-educator-ratios, particularly in lower PQ schools. Furthermore, the study revealed that, although caregiver reliance on the school as a source of sexuality education allows for educator freedom in pedagogy choice for sexuality education, there is a need for greater caregiver prioritisation, awareness, acknowledgment and support for LO educators. This is

especially with regard to sexuality education, in order to further establish the messages taught in sexuality education to their children, which should assist them in their personal lives.

6.4.1. Resources

The results of the study indicated that educators required a number of different types of resources to enable them to increase their ability to provide optimum pedagogy for the promotion of sexuality education messages to learners. LO educators are the primary deliverers of the LO programme and all of the educators in this study recognised the importance of LO lessons for learners and the responsibility of schools to educate learners about sex, sexuality and HIV and AIDS (Bhana et al., 2005; Panday et al., 2009; Shisana et al., 2014). Despite this, their role in providing HIV education and prevention knowledge to learners is often undermined by a lack of resources and support including inadequate pre-service and in-service training (Helleve, et al., 2009; Helleve et al., 2011; Mathews, 2009). The lack of resources reported in lower PQ schools also seemed to be linked to further restricting educator efforts in the study. Uncomfortable classrooms and schools make for environments not conducive to teaching as they affect learner concentration levels as well as limit educator efforts (Shisana et al., 2005). In addition to being uncomfortable, a higher learner-educator ratio reduces learner individual attention (Monahan et al., 2010). Furthermore, educator understaffing in schools, as reported by the educators in this study, impacted on their ability to optimally implement best practices in LO, especially where LO was not their primary teaching subject. Educators also conveyed that understaffing had a limiting impact on educators' personal time and may impact negatively on their overall health and wellbeing, which, in turn, may have an effect on educator attendance during school hours (Helleve, et al., 2009). According to (Kirby et al., 2002), a work-life balance is necessary for optimal teaching during school hours.

Research has also established that a positive school environment is a positive influential structure as far as the external factors which affect learners are concerned. Positive school environments are characterised by possessing appropriate facilities, well-managed classrooms and available school-based health support systems (Sulkowski, Demaray & Lazarus, 2014). Social capital resources, categorised by the study of bonding, bridging and linking, are major factors which enable or challenge the ability of the educator to implement best practices which, in turn, support optimum sexuality education message influence and practice in learners' personal lives

(Helleve, et al., 2009). Bonding between staff at the school, such as the bonding and support from colleagues, bridging between external stakeholders, such as between the school and caregivers, student governing bodies, social workers, local South African police station, counsellors, clinic staff, as well as linking, such as between the school and the Department of Education and NGOs, are indicative of the social capital which educators can draw on from the greater environment to assist them in their work (Mertler, 2017). Social capital is important because it has implications for the availability of referral networks which function to assist learners in the optimal promotion of sexuality education messages and the influence they have on their practical lives. Research has also shown that the same messages, being repeated by different sources, reinforce learners' beliefs and practicing of the sexuality education messages (Ahmed, 2009; Anderson et al., 2007). Communication, rapport and good relationships between school staff members as well as networks of social support outside of the school, as reported by most educators, are essential to creating an enabling environment for learning (Mertler, 2017). This is in line with the Department of Education's (2011c) Strategic Outcome Five, in the *Integrated Strategy on HIV, STIs and TB 2012 – 2016*, where the development of relationships/associations between schools and the surrounding community, such as the local police service, governing body members, school transportation services, local NGOs, caregivers of children in the schools, social workers, community health workers and child-welfare, is crucial to meeting the sexual and reproductive health needs of learners and educators. The importance of social capital in learners' development for positive sexual behaviour practice, has been found to promote referral networks for learners in order for them to be able to access better care (Bradshaw et al., 2014; Gupta et al., 2008). It also has a positive impact on the reinforcement of sexuality education messages they are taught by their LO educator as many sources stating the same messages reinforce these messages in learners' lives, thereby enhancing the practice of them (Anderson et al., 2007).

Schools which work as a team demonstrated greater educator work satisfaction, greater involvement of staff and staff investing additional effort, in keeping with outcomes of a positive school climate (Thapa et al., 2013). Good team work was also reported amongst educators in this study. It is also beneficial for schools to have defined roles and functions for LO educators and to ensure that other educators are aware of these in order to promote an understanding of the role of LO educators for the purposes of learner referral. An organised school, which functions as a team, increases learner connectedness to the school (Bond et al., 2007; Schafer & Sweeney, 2012). In

addition, Water's et al., (2009) theoretical framework establish in their Phase Four: 'Health Outcomes,' that possessing a high level of connection to the school has become associated with health, academic and social outcomes for young people. This phase is characterised by a level of safety, care and structure. The higher the levels of these constructs, the more likely learners are to be connected to the school and experience positive academic, health and social outcomes which include lower rates of risky sexual behaviour. Therefore, the scarcer the resources, whether financial, human or social capital, the lower the school connectedness. This, in turn reduces the extent to which educator efforts can go in attempting to promote safe sexual behaviour to learners. Therefore, educators at lower PQ schools experience greater challenges when attempting to implement best practices for sexuality education teaching to learners, than their higher PQ counterparts.

School leadership seemed to have an impact on the development and skills training of LO educators. This was an area which was reported by all educators as being highly supported in all schools. The DoE encourages LO training in order for LO educators to keep abreast of the current developments in sexuality education teaching as per the *Integrated Strategy on HIV, STIs and TB 2012 – 2016* which states that "Sexual and reproductive health education including HIV is a mandatory, timetabled and assessed subject delivered in all South African schools" (DoE, 2011c, p.49). Principals, therefore viewed sexuality education as an important learning area as it encourages educators' promotion of skill-development in this area. It can, therefore, be inferred that they believe in the importance of sexuality education's impact on learners' lives.

6.4.2. Pedagogy

The study's results illustrated that, although educators are aware of and would like to implement the best practices for optimum outcomes of sexuality education, a plethora of factors impede their ability to do so. The pedagogy used seems to be linked to educators' basic training and knowledge of different pedagogies to apply in LO, as well as to personal aspects and contextual and learner constraints. Educators expressed how mixed approaches are used. i.e. with the use of a combination of participatory approaches such as the raising of questions, answering of questions and the use of didactic approaches, the aim of which is to provide basic knowledge as a foundation for learners' participation. Although educators are aware of the best practices as being important for LO message learning and are aware that the rationale behind LO is to enable

learners to make informed positive life choices which will affect their future positively, and would like to implement these best practices, certain factors, listed below, limit their implementation:

Learner characteristics included learners' disruption in the classroom, for which educators provided various reasons. These included strained caregiver-learner relationships and repetitiveness of the sexuality education syllabus throughout the secondary school grades. Furthermore, educators, regardless of school PQ level, indicated that the lower the academic grade-point average of the class, the more likely learners were to be disrespectful and disruptive in class. Educators explained that the disruptive and disrespectful behaviour of leaders stems from their home environments and included caregiver support and involvement in their lives, which impacted on learners' learning in the schools, including that of LO and sexuality education. Prior research has indicated that the more disadvantaged the socio-economic status of the learners' homes, the more inclined they were to be unsupported by caregivers and, as a result, the more likely they are to show disrespectful behaviours at school (Buehler et al., 2006; Koen, 2011).

An additional challenge was that, although results do indicate that all schools do have disciplinary policies, despite the rules and regulations in schools, the inconsistent ways in which these are implemented seem to indicate the presence of subjectivity in the manner in which the discipline was implemented from educator to educator. Positive school environments are required to possess a clear and fair disciplinary policy which is standardised across learners and staff (Appleton et al., 2008; Bradshaw et al., 2014). This is helpful in creating a respectful school environment and will assist with combating classroom disruption (Bond et al., 2007).

Educators personal beliefs in sexuality education is an additional contributory factor to their pedagogy in terms of the delivery of sexuality education with respect to LO educators believing that the sexuality education curriculum does have a positive impact on learners' sexual behaviour and believing in the messages which are delivered through the sexuality education curriculum. Most of the educators did believe in the ability of sexuality education to create behaviour-change in terms of sexuality behaviour and attitudes in learner's personal lives and viewed sexuality education as very important in this regard. This seems to inspire LO educators to deliver on their mandate. It would appear that this was meaningful in their work and effort (Buehler, 2006). According to Bell et al., (2008) and Pillay (2012), regarding sexuality education, educators were motivated by the impact that the subject potentially has on learners' lives and,

therefore, felt that it was a meaningful teaching area for them. Pillay (2012) reported that LO educators are determined by their ability to deal with challenges, including HIV and AIDS, within their school communities. Therefore, these educators demonstrated a vested interest and passion for teaching this subject content in order to encourage possible change in their school communities.

From the discussions, it was clear that educators who are passionate about LO and for whom the preferred teaching subject is LO, are more confident in implementing participatory teaching methods, which is the pedagogy preferred for teaching LO. The study's results also revealed that, for a few educators, LO was not their preferred subject choice to teach. This attitude towards the subject impacts negatively on passion and interest in the subject, as reported by these educators in this study as well as according to past literature (Eldredge et al., 2016). An educator untrained in LO, is less likely to invest the time and effort required in lesson preparation and may find it challenging to adhere to the very different methods used for LO as compared to the more academic subjects they prefer to teach (Adams-Tucker et al., 2016; Kirby et al., 2011). They may also be more likely to prioritise their subject of choice over teaching LO, when teaching LO along with a number of other subjects. This was also reported by an educator for whom LO was not a preferred subject choice in this study. Literature indicates the importance of the extended role of the LO educator as opposed to the more delineated role of an academic subject educator, required to teach LO as compared to academic subjects. In addition to provision of information, LO educators have to be prepared to be caregivers, friends, role models, almost a caregiver and invest in open and trusting emotional relationships with their learners (DoE, 2011).

The study findings also revealed that educators found it increasingly challenging to teach messages which contradicted their personal value system. Educators are required to believe in the messages which they teach in order to be credible, which in turn builds the open and trusting relationships required for the influence and practice of sexuality education messages by learners (Kirby et al., 2011). This is challenging as LO educators may not possess the same values covered by all aspects of sexuality education (Gaurdiano & Fullerton, 2010). In order to build confidence in teaching values which may contradict their own, it is important for educators to build trust by being honest with learners in relating their own personal beliefs. However, they should also acknowledge that they are teaching learners from a variety of belief systems. Therefore, educators

enable learners to take ownership of informed decision-making with regard to their own sexual attitudes, beliefs and behaviours (Kirby et al., 2011).

A further contributory factor to pedagogy is the learner-educator relationships which is the foundation for implementation of best practice pedagogies. Educators in this study included the nature of relationships, age of the educator and implied role modelling as components of building the trusting and open relationships required to best impart sexuality education messages to learners. Learner-educator relationships are best suited to the influence of sexuality education messages when they are personal, but have boundaries for respect between the educator and learner. The challenges were learners' attitudes towards LO educators and their background in dealing with authority figures, which impacted on their respect for LO educators. Learners are more likely to listen to and internalise sexuality education messages they learn from an LO educator if they have a personal and trusting relationship with them (Ahmed, 2009; Monahan et al., 2010; Shisana et al., 2005).

6.4.3. *Status of LO in school*

The results illustrate that learner de-prioritisation of sexuality education within the LO curriculum occurs as a result of repetition of the syllabus throughout a number of years, resulting in the syllabus being experienced by learners as mundane and commonplace. The low complexity of LO as a subject is an additional factor established by prior studies as impacting on learner devaluation. These findings are in correspondence with prior studies results which indicated that LO was perceived by learners as being of low complexity and not requiring much effort to produce a pass or good results in the subject as compared to other subjects (Matshoba & Rooth, 2014). This study's findings parallel with findings of previous studies for LO devaluation as being a result of a subject which is experienced by learners as being forced upon them, but holds no real academic value for tertiary application (Bhana et al., 2005; Francis, 2010; Matshoba & Rooth, 2014). De-prioritisation of LO and, thereby, de-prioritisation of sexuality education, have been presented by this study's results as well as prior literature, to be linked to not taking the subject as seriously as other more academic subjects and as a contributory factor to classroom disruption (Bhana et al., 2005; Francis, 2010; Matshoba & Rooth, 2014).

Furthermore, the results represent what prior studies concerning the LO curriculum have presented, regarding the de-prioritisation of sexuality education and LO in schools, with educators expressing the view that LO was the last subject to be allocated amongst educator staff members during subject allocation for the year. The results illustrated that educators, who may not be trained in LO, may not consider it their preferred subject choice to teach were allocated the subject. Educators also indicated that they prioritised other more academic subjects over LO if working with a variety of subjects per year, even if they were qualified LO educators and were aware of the value of the subject and passionate about teaching LO. Given that the subject requires a set of skills that are more demanding and extends the educator role to that of beyond an educator as opposed to other academic subjects, this would negatively impact on optimum influence and practice of sexuality education messages (Shochet & Smith, 2014). In addition, the example set by the school in not taking the subject seriously, contributes to an overall learner influence of not taking the subject seriously as noticed in theories on school connectedness (Waters et al., 2009). Waters et al. (2009), indicate that in order for learners to value the subject of sexuality education and LO, it is necessary to have positive school-connectedness amongst learners. This can be created by learners experiencing the school as a positive school climate. Learners will, therefore, be more willing to listen to and be influenced by the teachings and sexuality education messages promoted.

The study's results demonstrated that from educators' perspectives that caregivers were either apathetic towards sexuality education with their children or were not aware of LO as a subject, nor aware that sexuality education was being included in the LO curriculum. If caregivers were aware, they then prioritised other more academic subjects over LO. The above factors contributed to a reliance on the educators as the sole deliverers of positive and standardised sexuality education to learners. The lack of caregiver involvement was attributed to a number of factors: Caregiver physical absence in the lives of their children, work commitments and non-communicative relationships with their children. This varied by socio-economic status, where higher PQ schools related higher caregiver involvement in learners' lives than lower PQ schools. Prior research on the school environment indicates that the best results for sexuality education are achieved by the provision of messages by a number of positive sources depicting the same message. Furthermore, the importance of the role of caregivers as sources of sexuality education has been highlighted by prior research (Jimmyns & Roche, 2010). If caregivers are not supportive

of the messages and not delivering the messages to their children, it reduces the impact that the sexuality education messages have in the lives of their children to a great extent.

6.5. Conclusion

Educators face a number of challenges which impact on their ability to implement best practices for teaching sexuality education within the sexuality education programme in the LO curriculum. Areas of schools' success in educator support currently are in the promotion of educator training, positive learner-educator relationship, rapport between educators within the school and networks of support. However, improvements in KZN schools are necessary in the areas of prioritisation of the sexuality education programme in terms of attaching learner, caregiver, educator and school value and provisions of resources to the programme. The next chapter, Chapter 7 is qualitative in methodology and focuses on the caregiver support and involvement in the school and caregiver support for sexuality education for risky sexual behaviour prevention among their children.

CHAPTER 7

CAREGIVER SUPPORT FOR AND INVOLVEMENT IN THE SCHOOL AND SUPPORT FOR SEXUALITY EDUCATION FOR RISKY SEXUAL-BEHAVIOUR PREVENTION IN THEIR CHILDREN

7.1. Introduction

Chapter Seven is the fourth and last findings chapter of the study and focusses on the findings and discussion points on caregiver support and involvement in the school, as well as caregiver support for messages on risky sexual-behaviour prevention as taught within the LO curriculum. The chapter aims to explore the extent of caregivers' school connectedness, in terms of perceptions and experiences of the school environment with regard to being conducive to LO's sexuality and overall health and well-being aims for their children.

Caregiver involvement has been indicated to be an impacting factor on youths' health and wellbeing, as well as adolescents' ability to make informed and responsible choices for their health and wellbeing. This study specifically focuses on their sexual wellbeing. The positive relationship between caregiver involvement in the lives of their children and in their education, has been established in numerous studies (Bond et al., 2007; Buehler et al., 2006; Koen, 2011; Sulkowski et al., 2014). The greater the caregiver involvement, the higher the level of morality and values instilled in youth with a resultant improvement in the ability to make responsible choices regarding their sexual behaviours (Buehler et al., 2006; Finegood et al., 2017; Khaleque, 2013). In addition, increased caregiver involvement has been correlated with children being better able to be monitored, disciplined, cared for and supported and therefore, has been established as a protective factor against adolescent risky sexual engagement (Finegood et al., 2017; Namisi et al., 2013). Please refer to section 2.7. *"Caregiver Involvement in Learners' Lives and Support for School Connectedness"* for further literature on caregiver involvement in learners' lives and their academic careers.

Qualitative focus group discussions were conducted with caregivers of learners in Grade nine and 11 from four schools of Poverty Quintile two to five in KwaZulu-Natal, South Africa. Data was collected after school hours for 45 minutes at each of the schools after access had been

negotiated with the schools' principals. Please refer to section 3.6.2.3. "Psycho-social School Environment" for further information regarding the methodology on caregiver focus group discussions.

7.2. Findings

The section below presents the findings of the caregiver support and involvement in the school as well as caregiver support for sexuality education for risky sexual-behaviour prevention in their children. The first section presents the socio-demographic characteristics of the sample. This section is followed by the findings categorised by themes.

7.2.1. Socio-demographic characteristics of the sample

There were 15 caregiver participants in attendance at the focus group discussions, all of whom were female, despite invitations being sent to both genders of caregivers and timing arrangements being flexible to accommodate working caregivers. All caregivers had either one or more learners in Grade nine and/or 11 in the school. All caregivers were between the ages of 30 and 50 years old with 67% being within the age range of 30-40 years and 33% being within the age range of 41-50 years old. Almost half the participants (46%) spoke isiZulu as a home language. Equal numbers of learners in the sample (27%) spoke either English or Afrikaans as a home language. All participants did have a matriculation level of study and out of those, 47% had furthered their tertiary studies. The total number of children caregivers had in the school were 18 with a 50% split between Grade nine and 11 learners and a gender split of 67% of girls versus 33% of boys. Summarised demographics of the participants are presented in Table 42 below:

Table 42

Socio-demographic information of the participants

Characteristics	Number	Percentage (%)
Gender		
Female (only)	15	100%
Ages groups (Mean age =39)		
30-40	10	67%
41-50	5	33%
Race		
White	4	27%
Black African	7	47%
Indian	3	20%
Coloured	1	6%
Home language		
English	4	27%
Afrikaans	4	27%
Zulu	7	46%
Religious affiliation		
Christian	12	80%
Hindu	3	20%
Highest level of education		
Matriculation	8	53%
Bachelor's Degree	7	47%
Grade of Child(ren)		
Grade 9	9	50%
Grade 11	9	50%
Gender of Child(ren)		
Male	6	33%
Female	12	67%

7.2.2. Caregiver support and involvement in the school and support for sexuality education for risky sexual-behaviour prevention in their children

Figure 8 below presents the findings categorised by the themes for caregiver support and involvement in their children's schools as well as caregivers' support for sexuality education for risky sexual-behaviour prevention in their children.

Figure 8: Flowchart of themes and subthemes of caregiver support and involvement in the school and support for sexuality education for risky sexual-behaviour prevention in their children
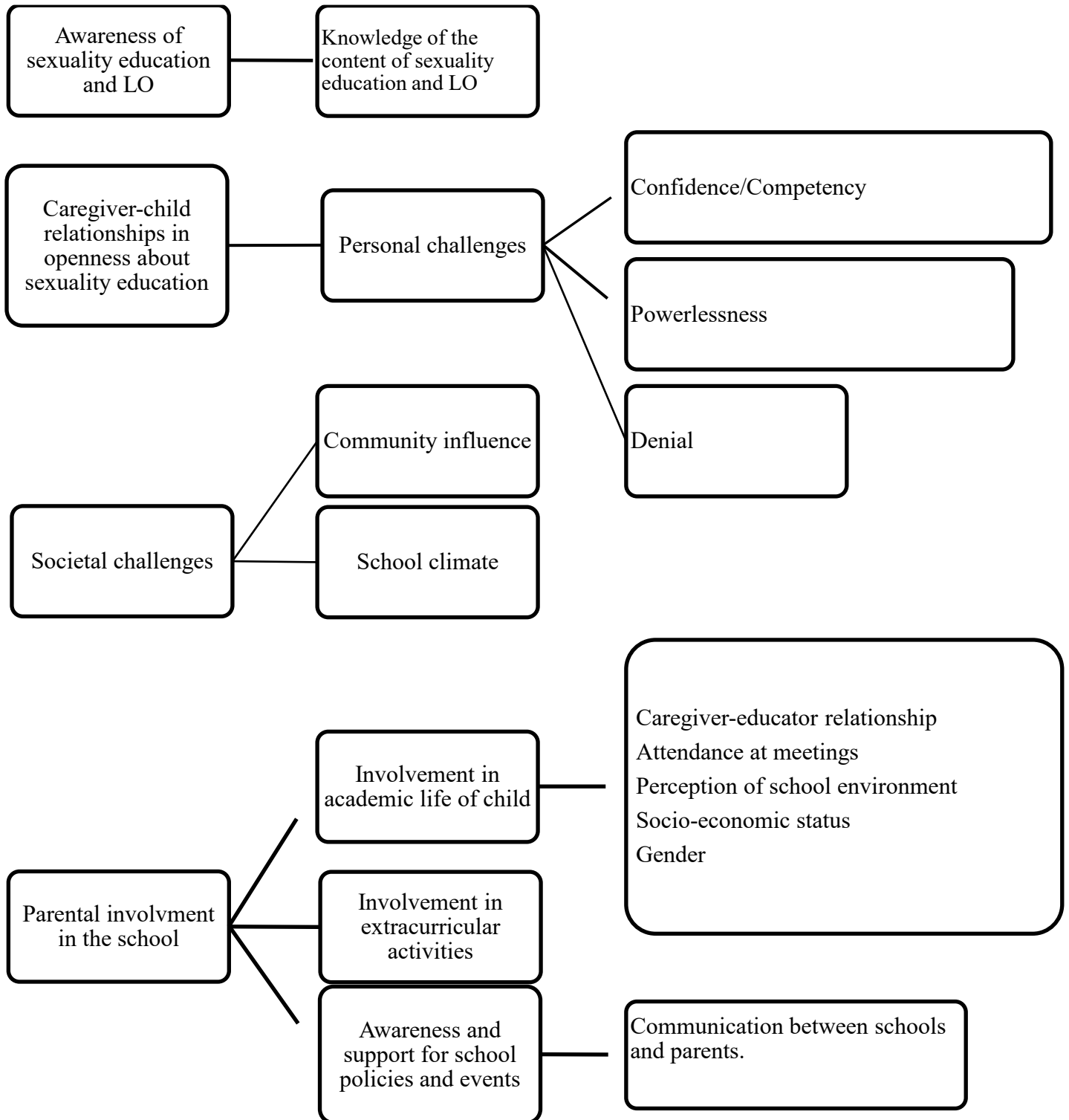
7.2.2.1. Awareness of sexuality education and LO in schools

Almost all of the caregivers interviewed were not aware that sexuality education is a component of LO in their child's schooling curriculum i.e. Awareness of LO by caregivers is limited merely to the knowledge that the subject exists. Most caregivers seemed to lack information about the content of the subject's curriculum and were not aware of sexuality education being taught by the LO curriculum. These views are illustrated by the words of various caregivers from different PQ schools:

No, I know (that) there is a subject called LO, but I don't know what it's (LO) about and I don't know what it is or means. My daughter didn't tell me what is in LO (Participant 11).

No, I'm just saying that if she is doing (having) sex, then it's not like the school has (an) input in what she's doing. The school doesn't teach them about that. (Participant 4).

Yes, I know about LO, but I'm not too sure what it is about exactly. (Participant 12).

I know (that) there is LO, but I don't know what is in that (the) subject (Participant 3).

This lack of awareness or limited *knowledge of the content* of LO and sexuality education may be attributed to caregivers de-prioritisation of LO as a subject as being of little or no value. This seems to be the current status that is attached to sexuality education and LO. Caregivers, regardless of the school quintile their child(ren) attended, perceived LO as being less valuable, in comparison to more academic subjects. Caregivers from various PQ schools reported the following:

She (participant's daughter) needs help in other subjects. She is doing good (well) in LO so I'm not worried about that (Participant 8).

LO is not a subject she (participant's daughter) needs in university so to me it's not that (as) important as her other subjects (Participant 3).

I only know that it is not as important as other subjects. My son tells me how easy it is and then he doesn't do the homework or study for it, but I see his grade in the report and he does well. I asked him what it is about and he said (that it is) something about life skills and how to live your life in the real world. So to me it sounds like that (the) counselling

lesson we had in school… So when we go for the parent meeting, we don't talk to the LO
teacher as we can rather spend that time on his other subjects (Participant 12).

Caregivers' support for sexuality education and LO is affected by their awareness of the subject and curriculum. Although most caregivers are not aware of the content of the curriculum as the source through which sexuality education is taught in schools, some caregivers are aware of the school providing sexuality education and related guidance to their children. There is a somewhat indifferent attitude towards the sexuality education the school provides and its impact on their children. Despite not being aware of the medium through which sexuality education was being delivered by the schools, none of the caregivers had any objections to sexuality education being taught to their children and were completely comfortable with, and happy with the manner in which sexuality education was being delivered to their children. Almost all caregivers who were aware that sexuality education was taught in school expressed a relief that the school is taking partial responsibility for sharing of this information on their behalf. This is exemplified in the words of two caregivers below:

I was not sure what this (the subject) LO was, but then I asked my daughter about it and it
seems like something good to have for the kids, especially at this age. I think it also helps
me as I don't have to tell my child everything about sex from scratch. It takes that initial
awkwardness away (Participant 12).

Yes coz (because) I am not talking (have not spoken) to my child about that (sex), I am
happy (that) they are teaching (them) about sex because they can learn how they can get
pregnant or HIV and the school teaches them to use the condoms and be safe. Or they must
not do sex at all (Participant 11).

7.2.2.2. Caregiver-child relationships in openness about sexuality education

Within this section, the findings of the theme regarding the nature of the caregiver-child relationship and its impact on sexuality education for the prevention of risky sexual behaviour will be presented in accordance with the subthemes which emerged. The subthemes were related to caregivers' personal reasons for not having 'the talk' with their child and not having openness in communication regarding sexuality education messages with their child. These subthemes were: Confidence/competency, powerlessness and denial.

Most caregivers indicated that they do not openly communicate with their children about sexual matters. Only four out of the 15 caregivers reported that they had had 'the talk' about sex and sexuality with their children. These four caregivers did explain how challenging it was but stated that they viewed it as a necessity for their children's protection. All four caregivers who had had 'the talk' with their child were caregivers of learners from lower PQ schools. The remaining 11 caregivers did recognise that there was a need to talk to their children about sex, but refrained from doing so for a number of reasons. Five caregivers had postponed 'the talk' for a later stage and the rest were reluctant to have 'the talk' at all. The reasons offered are addressed below.

Caregivers expressed that they experienced feelings of inadequacy with regard to their own *confidence and competency* in having 'the talk' and having open communication with their children regarding sexuality education. Caregivers have expressed a reliance on the school for sexuality education due to feelings of discomfort associated with talking about sexuality with their children. Four caregivers indicated that they felt too old, two caregivers that they were the unsuitable gender and five caregivers expressed concerns regarding their open communication about sexuality as potentially encouraging increased sexual activity in their children.

> *You know, it is very conservative in our homes and we don't talk to our children about things like that… it's very awkward (Participant 15).*

> *Like iThembalethu (NGO)… they are telling them about all that… sex and HIV and teenage pregnancy. My daughter is not telling (does not tell) me anything, but I heard them talking with other children when they came home and they said, "We had a talk about sexuality and all that…" but I am not talking to her about that… It's too hard" (Participant 11).*

> *He has a girlfriend, but he's not doing those things (sex). I don't know if the school is helping him. I'm not talking (don't speak) to him about sex because he's a boy. His father is not here, but I trust him because he won't make that (a) girl pregnant. I know (that) there is Maude (the nurse) and she comes to speak to the girls about getting pregnant and does VCT (voluntary counselling and testing) tests for them, but no-one is speaking to the boys (Participant 10).*

Thus, there is a reliance on the school by caregivers for the provision of sexuality education to their children due to the lack of caregiver input on sexuality education as delivered by the school.

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Two caregivers from quintile three and four schools respectively, narrated the following in this regard:

> *You know that (sex) is very awkward to talk about, but I think the school does talk to them about it. I haven't spoken to my son about it (Participant 14).*

> *I didn't speak to my child about that (sex). I think that in the school, if they listen to what the school is saying about not doing (having) sex, then that can help them when they are tempted (Participant 9).*

Most caregivers expressed *feelings of powerlessness* in trying to influence their children via the use of sexuality education messages. Some caregivers indicated an awareness that their children may be engaging in sexual behaviours, but were reluctant to address it with their children directly, due to feeling helpless that despite their efforts, their children will not listen to them. Caregivers also expressed that they may make an effort to speak to and guide their children on matters of sexuality, however, expressed that these efforts may be in vain as children would rather learn from their own experience or from another preferred source of sexuality education. This was due to caregivers perceiving that youth are unable to identify with them in the current era. This feeling of helplessness/powerlessness is demonstrated in the words of caregivers below:

> *My daughter is not doing those things (sex). I am scared to talk to her because she will not listen to me about that (sex), but I think she knows (Participant 9).*

> *I think the school tries to teach about sex and not getting pregnant and not getting AIDS, but it's just that these kids... If they don't listen to their parents how are they going to listen to other advisers? So that's the point: They just don't listen…They just think, "I know what I'm doing," but they don't actually know what they're doing. Even the teachers themselves… they do talk to them about this thing (sex). Even when I was a student here, they used to talk to us. They used to tell us "you mustn't do this, you mustn't touch the fire coz (because) you will get burned." But we would want to test how bad it is, so we get burned. But I think they (the school) are doing their best (Participant 8).*

> *They (learners) talk back to us (parents) and the teachers and don't listen (Participant 9).*

Although some (N=4) caregivers were talking to their children, it was more of a warning approach rather than an explanatory discussion. This was illustrated in the words of three caregivers from the lower Poverty Quintile schools:

I told her that she must not do (have) sex because she knows what will happen if I find out (Participant 11).

I told my son as well that he mustn't get a girl pregnant because who is going to pay for that (the) child and the girl. It will make a lot of trouble for us (Participant 6).

As for my child, I raised her the way I want her to be raised and I raised her to be good. I told her, "If you are found doing that thing (having sex), you know what is going to happen to you." I told her not do something bad (and that) whenever she sees someone doing something bad, she mustn't do that… I told her. But I'm not always there to see what my kids are doing because I don't live with them… you know it's hard with work. I just know I told them (Participant 8).

I am telling (I told) her that she must not do (have) sex because she can get HIV, pregnant, sickness (and) can die (Participant 10).

More than half the number of caregivers are of the opinion that their children would never engage in sexual activity at the age that their children are currently at. *Denial* was therefore an additional reason provided for not communicating with their children about sex. Caregivers were of the opinion that their children did not engage in sexual activity and therefore admitted not engaging in preventative sexuality education discussions with their children. This was especially apparent amongst higher PQ schools' caregivers. Caregivers of learners in higher PQ schools, expressed the conviction that their children were not involved in sexual activity and also indicated a higher level of monitoring, supervision and closer relationships with their children.

So I think in this school, like we said before, there are two groups of kids and in this (regarding) sexual behaviour, we also have the two groups of kids. I personally think my kids are very conservative, but you do get those free kids who do know and behave like adults. I know where my daughters are most of the time. They will either be at school or at

home mostly. If they go out, I always make a point of knowing who it is with and they have their curfew (Participant 2).

I think most kids in this school are innocent. My daughter has got friends here and I don't think they are doing anything bad as well... they either will come (will either come) to our house after school or they are at the other girls' houses, but I know their parents. My daughter is very conservative and quiet (Participant 3).

I know my daughter has a boyfriend, but I don't think she is doing these things (sexual activity). We always keep an eye on them and he comes here or she goes to his parents' house, but that's it (that is all the children are allowed in terms of being together) (Participant 2).

We don't have that problem with our kids. They are very innocent and conservative, so it's a subject that is out of touch for them. If they do teach it, I don't think it's needed. I know there are kids who maybe need it in the school though, because like I said, there are kids from all different backgrounds here (Participant 4).

You know that (it) is very awkward to talk about, but I think (that) the school does talk to them about it, but I don't think he needs it. I know my son doesn't do that (be sexually active). He's still very innocent and he's a good boy. I haven't actually talked to him about that, but I don't think I need to (Participant 12).

7.2.2.3. Societal challenges

Caregiver-child relationships in communication about sex and sexuality education were also impacted by *community influence*. Almost all caregivers indicated that the communities they lived in and that their children went to school in, were very close knit, resulting in increased transparency of the personal experiences of families. There was thus a resultant augmented possibility of stigma/discrimination experienced by learners. Caregivers expressed the view that this hampered communication between themselves and their children in general and specifically with regard to openness in communication about sex and sexuality education. Therefore, there was a resultant reluctance from both parties to disclose personal experiences due to fear of community stigma and discrimination. In other words, there was an indication of stigma experienced by being

a part of a close-community with learners being teased by their peers, since peers are more likely to be aware of familial problems as a result of living in these close-knit communities:

> *Being such a small school, based in such a small community, it has the opposite effect. It almost feels like there's too much time for nitty gritty nonsense. Being such a small community, knowing everybody's business, it's almost like they take advantage of that. In bigger schools, it's a hush-hush busy scenario because everyone is from different communities, but here it's private and small and we are all from the same community… So the children are exposed. So if it's something like a red-haired child, like my daughter, then they stick out like a sore thumb… It's so obvious and they've got the time to tease her. That counts against them (Participant 4).*

> *It's hard because we are all from the same community and everybody knows our stories so sometimes our kids… they don't want to talk to us about some problems. They are scared of being teased if maybe other children find out about their problems (Participant 6).*

However, the influence of the community has also been represented as a positive factor in promoting relationships between caregivers and children, especially in reinforcing the sexuality education messages provided by caregivers and the school as a caution against learner engagement in risky sexual behaviour. Caregivers from higher and lower Poverty Quintile schools respectively narrated the following:

> *I think our saving grace is that we are such a small school and we are all from the same community with very similar customs… Where everyone knows everyone and people split on each other regarding drugs, sex, smoking and that sort of thing…they will get caught out very quickly (Participant 2).*

> *I don't think our kids from our community need that (sexuality education). On their own, they are very good and I think that comes from the homes they are brought up in and the community they are brought up in (Participant 12).*

Another contributory factor is the geographic area surrounding the school. This contributes to caregivers' feelings of helplessness in being able to protect their children from risky/unwanted

sexual behaviour. Caregivers from the Poverty Quintile two and four schools respectively articulated the following:

> *The problem I worry for (about) is them walking home. You don't know what can (may) happen in that time. There are so many trees and bushes all around and the roads here are quieter than other roads. I don't know what can (could) happen. It's a worry for me about my daughter. Especially if you have a girl... it's a big problem (Participant 5).*

> *I tried to warn her about being safe on the road like (telling her that) she must walk with her friends and don't walk with a boy alone when she comes home. It's good that everyone from the school lives around here so she can always walk with her friends. Even if she is kept late(r) than her friends ... they will wait for her and then they walk together. That is helpful (Participant 9).*

Most caregivers' believe that their child's *school climate* is supportive in conveying the cautionary messages regarding risky sexual behaviour. This seemed to be the case in all schools. The positive impact of health-supporting school environments is highlighted in the following statements by caregivers. These statements demonstrate that the school environment is perceived as supportive because of the positive impact of sexuality education in learners' lives. The school environment is therefore perceived as a protective factor for risky behaviour engagement since learners and staff members know everyone and because of this, deviant behaviour will be noted and talked about. The positive impact of good school environments is highlighted in the following caregivers' statements:

> *I also think that the school is a good place for my kids because I think the kids here are more innocent than in other schools. We hardly have teenage pregnancy in this school ... it is very foreign to us. We are also a very close-knit school, so everyone knows everything and I think that helps to prevent risky things from happening (Participant 1).*

> *Being such a small school, where everyone knows everyone, people will tell on each other (laughs) regarding drugs and that sort of thing. They will get caught out very quickly (Participant 2).*

Yes, he (her son) did go to get circumcised and he wants to go for tests. It's because of what he learnt in this school. I didn't tell him that he must go (Participant 10).

Although caregivers across all schools believe that the school is supportive of the protective messages around risky sexual behaviours, not all believe the school environment to be health-enhancing. Conversely, a negatively impacting school environment was illustrated through the following caregivers' statement:

There is too much smoking, using drugs and lots of girls getting pregnant in this school. I don't think my child is safe there. I know she is not doing those things (drug abuse, smoking and unprotected sex), but I worry about what (can) the other children (the other children can) do to her (Participant 4).

The children in this school are very naughty. Look at how they are running around now when the bell has gone and they still (are) not in the classrooms, but they are standing around making a noise. They (are) always doing this. So now I worry about my child doing the same things (that) these children are doing (Participant 9).

There are learners who do take drugs in this school, but the teachers don't (does not) know this and even if they (teachers) know there are kids taking drugs, they (teachers) don't know who they are (learners) because they (learners) hide it. They just go to the toilet and that's where they have it… like if they are having cocaine or something, they will wipe their nose then they will come out there (outside the toilet) like nothing happened so the teachers won't notice anything (Participant 8).

Peer pressure is a problem everywhere and unfortunately, it is the children who have more difficult circumstances at home who are the ones who do fall prey to peer pressure. My child is having problems with friends who are from difficult homes who are trying to derail him into cigarettes and things. It's hard because everyone wants to feel like they belong and accepted by the group. I think with the parents here as well, we can also see when our children get withdrawn or sad and they go into their room, that obviously something happened at school (Participant 3).

7.2.2.4. Caregiver involvement in the school

This section presents the findings of caregiver involvement in their child's schooling and academic lives. It also covers the resultant impact caregiver involvement has on the influence and practice of sexuality education messages. The first subtheme covered is the 'Involvement in the academic lives of their children.' This was reflected in the caregiver-educator relationship, attendance at meetings, perception of school environment, socio-economic status and gender. The subthemes of 'Involvement in extracurricular activities' and 'Awareness and support for school policies and events' in terms of communication between schools and caregivers are also covered.

The *caregiver-educator relationship* was regarded as valuable and adequate to support and care for their children. Caregivers also indicated having good rapport with educators on their children's behaviour/academic performance at school. They also expressed the view that educators were a valuable resource in their children's lives. Four mothers from various Poverty Quintile schools commented as follows:

As for my child, I told them (educators) that if they see something wrong then they must please tell me so I can know, because he has something ... he's not that good in school (doesn't do well academically), but they told me that they're trying their best. I don't know about the others (other parents and their children at the school). I saw the other teachers… they are taking good care of the other children (Participant 8).

They take good care of my child and if there are any problems, they let you know (Participant 14).

Yes, she tells me everything about my child… when he's not submitting the work and if he's not listening in the class to the teacher, then the teacher, she tell(s) me, but my child he's a bit naughty and sometimes he doesn't listen (Participant 10).

The teachers know what is happening. I think they take good care of my child. In the parent teacher meetings, you can tell that they know your child, not only academically, but also as a person (Participant 3).

Caregivers also hold their children's educators in high esteem and most were satisfied with educators as being good role models of morality for their children. Caregivers viewed educators

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as alternate caregivers for their children. This sentiment was presented in the words of two mothers of learners from two different schools below:

> *Well it is hard to be a teacher. I know I am happy with how they present themselves at school. I don't know them at their homes, but I can't say anything about them outside the school, but I know I can talk about them (educators) when they are in the school and I can say that they are very good role models. A lot of the teachers are from this community so the kids... they can look up to them (Participant 7).*

> *It is a lot of hard work to be a teacher and you must be serious with life to do that. You can't be doing other things when you are studying to be a teacher and even when you are the teacher, there's lots of work to do. So then they (teachers) show(s) the kids that if you work hard, you can be somebody and earn more money. You can be successful at life (Participant 5).*

> *I think the teachers here are very good. This school is renowned for having good quality teachers who are also very highly qualified (Participant 13).*

Caregivers' attendance at school meetings is also a factor which played a role in caregiver involvement in their children's lives. Caregivers also admitted that although they saw themselves as attaching value to and attending the necessary meetings, that the same could not be said for other caregivers in their children's schools. Caregivers in attendance of the focus group discussions also based the need for attendance at meetings on their perceived behaviour of their child i.e. the better behaved their child was, the less involved they were in their child's school life. The extent of caregiver involvement in school meetings therefore depended on the behaviour of the child. This is exemplified in the words of two mothers below:

> *It's hard because I am very busy, but I try to come to the meetings they have. If my child has a problem then I come here (to the school) to speak to the teacher... But she is a good child so I don't have to come to school so much (Participant 9).*

> *I haven't had to come to the school for extra meetings. My son never warranted me to come for meetings other than the parent's one, just to meet his teachers and check on this progress. He does very well (Participant 2).*

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In terms of *caregivers' perceptions of the school environment,* all caregiver indicated that schools were warm and welcoming to them especially upon initial contact. Two caregivers from the Poverty Quintile three and five school respectively narrated the following:

The school tells me that I can always come to the school to speak to any teacher about my child's results (school) (Participant 11).

The two ladies in the front office are so wonderful and warm. They make us and our kids feel at home (Participant 2).

However, most caregivers expressed the view that attempts to resolve issues from the schools' side were somewhat delayed. They reported that the more important the issue, the higher the status of the staff-member they required to see. If a caregiver with a serious issue requested to see the principal, the waiting period was longer than for a caregiver with a less important issue who needed to see their child's educator. This was expressed by three caregiver s from various poverty quintile schools below:

Yes, we have been sitting here for two hours now even though we have made an appointment to see the principal. They say she is busy (Participant 7).

If I had to ask for a meeting, they take a bit longer to get back and sometimes I have to ask again. I think they are very busy (Participant 9).

I battled to get an appointment with the headmistress and it took me three weeks just to speak to her. I was not happy about that, but I think she is probably very busy. It's not always easy to make an appointment to come and see someone (a staff member at the school) and if you are persistent and patient, you will eventually get to see them. Obviously if it's about your child, you will push until you get to speak to someone who can help you (Participant 2).

Caregiver involvement in the school does not appear to be influenced by *socio-economic status*, as in all schools, the level of caregiver involvement was similarly low and perceived by caregivers as being inadequate overall. However, caregivers from lower PQ schools reported a lower degree of caregiver involvement in their child's school than caregivers from higher PQ

schools. The reasons provided for lower caregiver involvement cited by caregivers were a lack of time and resources. Two caregivers from lower Poverty Quintile schools narrated the following:

> *It's hard for us already, so I don't think that we can do more with our time and money than what we are already doing (Participant 7).*

> *It's hard because I am very busy, but I try to come to the meetings they have (Participant 9).*

The *gender* of the caregivers was a noticeable factor in the attendance of the caregivers at the focus group discussions. All caregivers who were in attendance of the focus group discussions were mothers. The researcher also noted that the only responses to the focus group discussions received, were from females. Furthermore, participants highlighted the non-expectation of fathers to be involved in their child's schooling and all participants highly regarded their children's schooling involvement as the mother's responsibility. Mothers in attendance also revealed that fathers did not play an integral role in their children's education, indicating that their children's school involvement responsibilities were not shared despite most of the mothers being in full-time employment. This is reflected by the words of three mothers below:

> *It's hard when you work and then you need to do things at the school. I try wherever I can, but often I'd rather do a donation because honestly it's just so difficult with time. I do gate duty sometimes or transport… but his father… no, he doesn't do anything. He's working a lot and I don't know… it's just not normal for fathers to come and participate in the school activities (Participant 4).*

> *Every Thursday there are these women, I am one of them, who come here and pray for this school so they are Christians (Participant 6).*

> *You know, I'm a teacher myself (at another school), but at the junior primary. It's difficult to get time to do anything else. I think if you are working and trying to raise a child or children you already have more than two hands full, especially if you are the mother (Participant 13).*

All caregivers recognised that their *involvement in their children's extracurricular activities* were an important component of their children's lives. All caregivers also expressed a

desire and willingness to be involved in extra-curricular activities. They did, however, indicate that this was an additional challenge to their already restricted time and financial constraints. As with caregiver involvement in learners' academic time, all caregivers indicated that the demands placed on them to be further involved with extra-curricular activities were too time-consuming. Caregivers indicated that their existing demands left them with little time for involvement in the extra-curricular activities and therefore prefer to give donations rather than participate in the school activities. Caregivers, irrespective of the poverty quintile school in which their child is enrolled indicated the challenge that involvement in these activities presented, with lower Poverty Quintile schools' caregivers stating the following:

> *We are doing our best with what we have… we don't have much. Where I can, I give him the money for that (the) excursion, but its hard (Participant 7).*

> *It is hard to do those things (help with extra-curricular activities), coz (because) I am busy, but I go to the meetings. I want them to send messages to me if my child is sick or absent and also if they give talks, I want to know. They do call if she is sick so I can fetch her (Participant 11).*

A similar sentiment was echoed in the words of two higher Poverty Quintile school's caregivers:

> *I know I try to do whatever I can, be it transport or gate duty. I'm here for the meetings. I always come to the rugby. It's hard when you work and then you need to do things at the school. I try wherever I can but I'd rather do a donation because it's too difficult to find time (Participant 4).*

> *I also try (to be involved in extracurricular activities), but it's hard with work (Participant 1).*

Communication between schools and caregivers is essential to promote awareness and support for school policies and school events. All caregivers acknowledged that they were made aware of the school's policies upon registration of their child at the school. More specifically, all caregivers indicated that this was conveyed in a signed document containing the school code of conduct and policies. Regarding school events, caregivers in higher Poverty Quintile schools

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expressed a greater awareness of these events than their counterparts in lower Poverty Quintile schools. The reasons suggested for reduced awareness in lower Poverty Quintile schools were lack of communication, communication with a short notice period by the school or a breach in communication between caregiver and school due to a reliance on learners' delivery of messages. Caregiver-school communication challenges and enabling factors are illustrated by the words of caregivers from various poverty quintile schools:

> *They send a letter, but if they see that the parent didn't come then maybe they think that the child didn't give the parent the letter because you know that if the child is in trouble then she may not give her mother the letter. The thing is if the child is given the letter they say "You mustn't come to school until your parent comes" and as a parent I must say, "You didn't go to school today… why didn't you go to school?" And then she will have to say that "I had trouble in school and I was given a letter and now you have to come to the school" (Participant 7).*

> *First they send the letter with the child. They do phone if they see the parent is not coming (to the school when called by the school). Then they take a phone and phone you (Participant 8).*

> *Sometimes they give us notice on Thursday if there is something happening on Saturday. Two days' notice before something happens… and that doesn't give us enough time to plan for that meeting, so I think that's not right. I am happy with how they tell us about the meetings, but maybe they can tell us a bit earlier and also give us the reminder when we are close to that date (Participant 9).*

> *I know the school has got a detailed code of conduct in place which I know about and I think most parents would. We get it in the emailed newsletter and there are reminders as well. So also when we first come to the school with our child, then there is a code of conduct book that we have to sign with our child so whenever they do something wrong, they can just pull out the book and say this is the code of conduct where it's stated that you are wrong (Participant 4).*

7.3. Discussion

The discussion follows in accordance with the thematic categories as per the findings section. There are four sections which are 'Awareness of sexuality education and LO,' 'Caregiver-child relationships in openness about sexuality education,' 'Societal challenges' and 'Caregiver involvement in the school.'

7.3.1. Awareness of sexuality education and LO

The findings of the study indicate that although most caregivers were aware and somewhat reliant on the sexuality education messages that their children's schools provided, they lacked awareness of the sources (LO) of sexuality education in the actual school curriculum and this reduced their ability to have an input in the delivery and content of the messages. Since caregivers do not know what the content is, they cannot support the same messages that the school provides in sexual and reproductive health issues and in particular, regarding the prevention of sexually risky behaviour. Caregiver lack of awareness of the sexuality education curriculum is supported by international studies (Bell & Murenha, 2009; Bundick & Tirri, 2014; Coetzee et al., 2014). The importance of caregiver awareness of sexuality education and how it is delivered is critical for their involvement in the process and contribution to message content (Kirby et al., 2011; Buehler et al., 2006). According to Kirby (2011), the first step for caregiver support is through creating awareness in caregivers of the means through which sexuality education is delivered. Caregivers are thereby enabled to make informed suggestions for sexuality education messages delivered to their children, based on their norms and values, and to reinforce these messages with their children at home. Consistency between the messages promoted by the school and those provided by the caregiver creates reinforcement of the messages in learners' lives at the school and in their personal lives (Bond et al., 2007; Shisana et al., 2009). It therefore reduces the responsibility of the school as the sole prescribed source of sexuality education to learners. This has the resultant impact of enhancing the influence and practice of sexuality education messages for adolescent risky sexual behaviour prevention (Bundick & Tirri, 2014; Coetzee et al., 2014).

The study revealed a somewhat indifferent and uncritical attitude by caregivers towards the sexuality education which the school provides and its impact on their children. This may be regarded as a positive outcome as sexuality education can be taught with no objections however,

caregivers' indifference provides no guidance for adjusting the relevance of sexuality education to their children. The study findings also demonstrated a reliance on the school as a source of sexuality education to their children and sexuality education was perceived as relieving caregivers of their role as a source of sexuality education. While it is a positive outcome that caregivers do support the sexuality education messages in terms of the notions about prevention of HIV and unwanted pregnancy, it would appear that caregivers lack the detailed messages to enable them to affirm and reinforce these particular messages at home. This would impact negatively on the required affirmation and re-iteration of the messages required to support and promote these notions in the home and in the personal lives of their children when learners are outside of school as well as in the school (Buehler et al., 2006; Kirby et al., 2011). Even if caregivers possessed comprehensive details regarding sexuality education, it is uncertain as to whether they would be able to communicate these messages because of the many barriers mentioned earlier. A concerning challenge is that in cases where caregivers attempted to talk to their children about the LO and sexuality education, they seemed to receive a paucity of feedback on the topic from their children. Caregivers were given the responses that LO is not an examination subject, it is perceived as academically non-challenging and obtaining high marks is not a problem. Additional information received is that the status of LO as compared to other subjects is low and therefore no effort seems warranted for caregivers to learn more about LO. Therefore, caregivers also do not see educators for LO during caregiver meetings.

7.3.2. Caregiver-child relationships in openness about sexuality education

According to the study's results it would appear that caregivers are not fully aware of exactly what is being taught during sexuality education and the manner in which it is taught. However, they seem to have a general idea that sexuality education entails prevention of HIV and pregnancy which they perceive as beneficial to their children's lives. They expressed relief that the school shouldered this responsible as they prefer not to engage in communication regarding sex with their children. This is due to being uncomfortable to talk about sex to their daughters and not finding it appropriate to discuss it with their sons (the fact that the sample consisted purely of females should be born in mind here). In addition, they do not deem it necessary to raise these issues as their children were perceived to be innocent and not engaging in sexually risky behaviour, even with regard to those with children who are in romantic relationships. This is concerning as

these caregivers perceive that it will only be necessary to communicate about sexuality education once their children are actually sexually active. Therefore there is no preventative thinking about the possible consequences of sexual activity. This phenomenon may also be due to denial of their own children's sexuality.

Most caregivers indicated not having had 'the talk' or openness in communication regarding sexuality education or sexuality education with their child due to caregivers' personal challenges which included feelings of incompetence, powerlessness and denial. Many caregivers cited reasons for not having the talk with their child as being the awkwardness experienced and feelings of being an irrelevant or inadequate source, or the inappropriate gender to talk to their children about sex. Caregivers seemed to be unable to identify with their children being adolescent-aged in the current era. Caregivers felt 'out of date' to have an impact on their children's sexual choices. Studies have established the importance of caregivers in engaging in open discussions around sex and sexuality with their children, as positively impacting on their children's behaviour (Finegood et al., 2017; iKamvayouth, 2016; Verma, 2016). Research has also established that adolescents preferred to have caregivers as a source of sexuality education to them i.e. that learners actually wanted their caregivers to provide them with sex education (Kirby, 2002; Jimmyns & Roche, 2010; Verma, 2016). Previous literature has also indicated that if caregivers were open with their children regarding sex and sexuality, there is a greater possibility of having an impact on their children's sexual choices (Finegood et al., 2017; Verma, 2016).

Caregivers who did have 'the talk' with their children used a warning approach rather than explanatory discussions directed at facilitating informed decisions about sex and insight into the prevention of risky sexual behaviour. The aim of the proposed discussions is to lead the child to the realisation of the possible consequences of their risky behaviour (Kirby et al., 2011). These few caregivers, who were all from the lower poverty quintile schools, who did talk to their children about sex, only seemed to warn their children of the negative consequences such as pregnancy, death if they get HIV, or payment for damages if a girl becomes pregnant or general threats about consequences while providing ambiguous/vague messages about sex as being taboo. Lower PQ schools' caregivers indicated feelings of powerlessness, believing that their children were out of their control and no longer listened to them as a source of sexuality education. Caregivers presented the challenges they face regarding learners' preferring to learn by experience as opposed to

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listening to and internalising caregivers' messages/advice. Caregivers expressed these feelings of powerlessness to protect their children against risky health-related behaviour including sexual behaviour, as children rebel against discipline and do not 'listen' to their caregivers. The study's findings also revealed caregivers' fears and feelings of helplessness towards potential risky sexual behaviour and substance abuse by their children, thus preventing them from having open discussions with their children about sex. Caregivers in the study therefore seemed to be authoritarian as they felt that if they warned their children to abstain, that their children should listen. They also believed in warnings for the purposes of prohibition of sexual behaviour and in not engaging in open discussions with their children. According to Baumrind (1991, p.890):

> The authoritarian caregiver attempts to shape, control, and evaluate the behaviour and attitudes of the child in accordance with a set standard of conduct, usually an absolute standard, theologically motivated and formulated by a higher authority. She [the caregiver] values obedience as a virtue and favours punitive, forceful measures to curb self-will at points where the child's actions or beliefs conflict with what she thinks is right conduct. She regards the preservation of order and traditional structure as a highly valued end in itself. She does not encourage verbal give and take, believing that the child should accept her word for what is right.

This authoritarian approach to sexuality education deprives children of the ability to make informed decisions and form their own attitudes regarding their sexual behaviour (Kirby, 2002; Verma, 2016). This has therefore been established as being an unsuccessful approach to changing attitudes and behaviour in learners, especially regarding risky sexual and other behaviour (Baumrind, 1991; Kirby et al., 2011). This is due to the prohibition of risky behaviour elevating its appeal (Monahan et al., 2010; Ybarra et al., 2014).

In addition, caregivers felt that their children are aware of their rights and therefore do not obey caregivers, but want to learn from their own mistakes and experience. The potential for risky sexual engagement is exacerbated by adolescent-stage sensation-seeking behaviour; as per prior studies which have established that the early teenage years are a time for sexual exploration and experimentation (Verma, 2016; Bowe et al., 2017). Evidence exists that supports the premise for taking risks, experimenting and pushing boundaries; as being important components of normative

development into an adult (Francis, 2010; Gupta et al., 2008; Johnson et al., 2008; Martin & Rabie, 2011).

In contrast, higher PQ schools' caregivers expressed feelings of denial of the possibility that their children were engaging in sexual activity and therefore did not feel the need to talk to them about sex. Furthermore, they did not feel that sexuality education was relevant and important for their children. Therefore, they were not prepared to engage in preventative measures with their children for risky sexual and other behaviours. As a result, communication between caregivers and their children on prevention of risky sexual activity and other risky behaviour was not seen as a priority. This finding that more affluent caregivers are less likely to talk to their children regarding sexual matters than less affluent caregivers has been supported by studies by Buehler et al., (2006), Finegood et al., (2017) and Jimmyns and Roche (2010).

Kirby (2002), indicates that the best internalisation of sexuality education messages occurs when youth have a change of attitude and thereby an internal locus of control which assists them in non-engagement in risky sexual behaviour. In addition, Kirby (2002), also provides evidence that best practices for sexuality education message internalisation in learners involves open communication between caregivers and their adolescent children regarding sex and sexuality to reduce the sensation-seeking behaviour associated with adolescent identity-seeking. As can be seen in the study' results, children may therefore not receive the information about sexual matters from their caregivers who have been found to be the preferred source of information regarding sexual matters among KZN youth.

7.3.3. Societal challenges

Caregiver-child relationships were also impacted either positively or negatively by the influence of the community in which they lived and the community their children schooled in. Almost all caregivers indicated that these communities were very close-knit, with the resultant transparency being regarded as both an advantage; as it decreased the likelihood of engagement in risky behaviour, and a disadvantage; due to the possible increase of stigma and discrimination amongst learners. This therefore reduced a potentially advantageous openness in communication between caregivers and their children for risky sexual and other behaviour prevention (Buehler et al., 2006; Finegood et al., 2017; Kirby et al., 2011). Caregivers expressed the view that this phenomenon sometimes hampered communication between them and their children, with a

reluctance from both parties to engage in open communication in general and specifically regarding sex and sexuality education. However, relationships between caregivers and children also improved as a result of a being a part of a close-knit community with similar values which in turn was a protective factor preventing learner engagement in risky sexual behaviour.

Furthermore, the physical safety of the geographic community was reported to be a contributory factor to risky sexual engagement amongst learners and some caregivers. Caregivers from lower Poverty Quintile schools expressed fears around their children's physical safety more than those from higher PQ schools. Prior literature supports the premise that the community is an essential component of an holistic and health-promoting school (Health Promotion Clearinghouse, 2009). Evidence exists that communities are both a protective and a risk factor for engagement in risky sexual behaviour (Brown, 2013; Health Promotion Clearinghouse, 2009). Schools may also be able to adapt their sexuality education lessons according to the communities' challenges. According to Frederickson et al. (2009), best practices include keeping generalised records of the level of sexual activity in adolescents of the communities which attend the school and behaviour which may be viewed as a determinant for youthful risky sexual behaviour. Communities face their own challenges with HIV/STIs such as infected staff and educators and of possibly being HIV/STI infested or encouraging the transmission of HIV/STIs (Health Promotion Clearinghouse, 2009). Furthermore, the involvement of caregivers and the community in sexuality education is essential in addressing compromising social and cultural norms in order to reduce risky sexual behaviour (Brown, 2013).

The school climate was perceived as a protective factor against risky behaviour since learners and staff members knew everyone and because of this, there was a perception that deviant behaviour would be noted and exposed. The positive impact of good school environments was perceived as protecting children from risky sexual and other undesirable behaviour. Although caregivers across all schools believe that the school is supportive of the protective messages regarding risky sexual behaviours, not all believe the school climate to be health-enhancing. A negatively impacting school environment consisted of learners participating in risky sexual and other behaviours and fears from caregivers regarding peer pressure. Caregivers also reported that peer pressure was a major contributory factor to the quality of the school environment. Peer pressure was cited as a challenge or benefit across all poverty quintile schools. In the higher PQ

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schools, peer pressure to conform to more conservative behaviour was cited and this contributed to a more positive school environment and as a protective factor against sexual and other risky behaviour. However, the converse was reported as occurring in the lower PQ schools, with more learners practicing risky behaviour and engaging in risky sexual behaviour.

7.3.4. *Caregiver involvement in the school*

Caregiver-educator relationships were seen as an important component of caregivers being involved in the school. Caregivers perceived their child's educator as being a good role model for their child and as a credible source of sexuality education for their child. Caregivers indicated that they felt that educators shared responsibility in caring for their child and they were relieved that the educator shared the responsibility of providing sexuality education for their children. A significant body of literature supports the role of the educator and caregiver relationship as being a valuable and influential factor in learners' own sexual practices (Bond et al., 2007; Finegood et al., 2017; Hutchinson, 2007; iKamvayouth, 2016).

A further factor explored in relation to caregiver involvement in the school was the experience of the school's climate by the caregivers themselves. Although participants did express the initial warm and welcoming nature of the school as being encouraging in building their relationship with the school, all participants indicated that this was not maintained throughout the process. Caregivers reported waiting for appointments and believing this to be on account of educators being very busy and they regarded this as being disrespectful. This was due to caregivers coming in to their child's school and not being seen for hours, despite making an appointment. Caregivers also stated that the waiting periods increased with access to higher-level staff members in the school's hierarchy. Caregivers therefore indicated access to higher-level staff (principals, vice principals and heads of department) as presenting more of a challenge than access to lower-level staff (educators). Caregivers reported waiting for long periods of times for meetings with educators/principals and having to repeat requests in order for them to be considered. This fosters a somewhat discouraging relationship with the school as little to no communication/delivery of the promised outcomes conveys a message of indifference to caregivers for addressing the issues they are facing with their children and an inconsideration for their already limited time. It may also be perceived by caregivers as a de-prioritisation of the issue which is the reason for their request and this can be interpreted as a lack of respect by the school for caregivers who have their own

time constraints. Appointments made for set times should be honoured by all concerned. Experiences of low prioritisation of caregivers' requests discourages future caregiver involvement which in turn reduces school connectedness for learners (Bond et al., 2007; Monahan et al., 2010). Caregivers are thus also less likely to be supportive of the school in its other endeavours such as the involvement in extracurricular activities and are less likely to be supportive of interventions which include sexuality education messages.

Caregiver involvement in the school was further impacted either positively or negatively by the communication between themselves and the school. All caregivers expressed the view that they were made aware of the school policies at the time of registration and of school events. This was accomplished through notices via their children. Some caregivers also stated that they sometimes do not receive the information. The school's socio-economic status appears to have an impact on the level to which it can encourage caregiver involvement as different platforms can be used if schools and caregivers have more resources. For example higher Poverty Quintile schools possessed computers to send emails and have an email database of caregivers and electronic applications to keep caregivers informed of daily activities, homework, examinations, timetables and extra-curricular activities in the school's programme. In turn, caregivers from higher quintile schools also possessed the necessary electronic devices in order to receive this form of communication from the school for example, a smartphone, personal computer, laptop or tablet. Lower resourced schools are reliant on letters being hand-delivered by learners and returning the responses via letters to the school. This decreases the chances of caregivers receiving information sent by the school, thereby decreasing the caregiver awareness and involvement in the school. Communication between lower quintile schools and their caregivers is impacted negatively by the unreliability of the letter delivery process since the onus is on the learner to deliver and return letters. In addition, caregiver involvement in the school was assessed by attendance at meetings and extra-curricular activities. Attendance at meetings tended to be based on the perceived behaviour of their children. The better behaved the child was, the less likely caregivers were to attend caregiver meetings. In addition, some caregivers were unable to attend due to socio-economic factors. The study's findings indicated that socio-economic status played a major role in the quality of caregiver-child relationships, where learners from more disadvantaged and broken homes were more likely to experience a lack of familial support, including attendance at caregiver meetings and extra-curricular events. Previous studies have explored the connection between lack

of family support and respect for the school, and in this study in particular, for sexuality education (Buehler et al., 2006; Finegood et al., 2017; Rupp & Rosenthal, 2007). Caregiver support and closer caregiver-child relationships are associated with the avoidance of risky behaviour and with the making of informed and responsible decisions around safe sexual behaviours by learners for themselves and their partners (Sulkowski et al., 2014). A study found that matriculation performance based on socio-economic status inequality was significantly greater in South Africa as compared to Russia, Morocco, and the USA (Equal Education, 2015). It is more challenging for a South African learner in a low quality school to overcome the poor quality of their school environment in order to achieve an above average matriculation score than in some other countries (Equal Education, 2015). In addition, SA learners had a lower quality of health and well-being (including sexual behaviour and other risky engagement) than their counterparts in other countries (Equal Education, 2015).

In terms of demographic breakdown for caregiver involvement in the school, the study's findings indicted that all caregivers believed that mothers bear the sole responsibility for the liaison and involvement in their children's school and schooling i.e. that mothers are solely responsible for learner care at home and school. This was also indicated by only mothers responding to and attending the focus groups. Expectations and reality of the gendered-role responsibility were congruent as participants highlighted the non-expectation of fathers to be involved in their child's schooling and all mothers in attendance revealed that fathers did not play an integral role in their children's education and that from their perspective this would appear to be a norm. Involvement in learners' schooling lives is an integral component of caregiving (Bond et al., 2007). Research has established evidence for paternal effects on female youth sexual behaviour; correlating the absence of paternal involvement in female learners' lives with earlier sexual involvement and a higher likelihood of engagement in sexual risk-taking behaviour in both genders of learners, but more especially in female learners (Bond et al., 2007; Buehler et al., 2006). Theories posited for the phenomenon include female adolescents' needs to secure a male figure as early in their lives as possible (Bond et al., 2007; Koen, 2011; Peltzer & Makusa, 2014). This may be prompted due to fear of the paternal figures leaving, as modelled by female adolescents' own fathers (Koen, 2011; Bond et al., 2007; Peltzer & Makusa, 2014). Other reasons have been proposed including that it may be due to the biological theory of pheromones being given off by the father which present a need to secure the presence of a male figure (Bond et al., 2007; Koen, 2011; Peltzer &

Makusa, 2014). In addition, prior studies have established that for male learners, paternal figures were viewed as role models for sexual behaviour (Namisi et al., 2013). Therefore, paternal involvement in the school is likely to increase male learners' school connectedness. As established by prior literature, increased school connectedness thereby increases the likelihood of listening to the LO educators and internalising sexuality education messages and these are more likely to be implemented in their personal lives (Bond et al., 2007; Buehler et al., 2006; Namisi et al., 2013).

7.4. Conclusion

The need for caregiver involvement in the lives of learners and in the promotion of learner school connectedness has been established by prior research as having a positive impact on the prevention of HIV/STIs and teenage pregnancy in the lives of adolescents. The findings of this study are in support of these past findings (Buehler et al., 2006; Kirby et al., 2011). More specifically, caregivers in KwaZulu-Natal are recommended to be aware of sexuality education and the LO curriculum and have more openness regarding discussions around sex education with their children. In addition, caregivers are recommended to develop and maintain a close relationship with their children's school in a bid to support the impact that schools are already having on the prevention of risky sexual behaviour in youth. The next chapter, Chapter 8, is a consolidation chapter which outlines the recommendations based on the findings of the study presented in Chapters four to seven.

CHAPTER 8

INTERGRATIVE DISCUSSION AND CONCLUSION

8.1. Introduction

In Chapter 8, a comprehensive summary and integrated discussion is presented of the study as a whole. It is a consolidation chapter which is aimed at amalgamating the individual aspects of the study to reach conclusions and make recommendations for schools as holistic organisations. The unique contribution of this study stems from its multi-level approach in understanding sexuality education in schools across different poverty quintiles with consideration of the physical environment and the psycho-social school climate. The views of learners, educators and caregivers across the different PQ schools are looked at. The study used a mixed method design where a cross sectional survey was conducted among learners, qualitative in-depth interviews were conducted with educators, focus group discussions were held with caregivers and school observations were conducted by the researcher.

8.2. Summary

According to the summarised learner results of the study as indicated by Table 43 below, to learners in all schools, sexuality education was viewed as important and influential in learners' own sexual practices. Learners of higher/more affluent PQ schools (PQ4 and PQ5) reported lower levels of engagement in risky sexual and other risk behaviours than learners in lower PQ schools (PQ2 and PQ3). It seems that the main challenges that learners face in higher PQ schools were poorer learner-educator relationships than other learners, perceived lack of discipline in their school and the fact that their LO educators are not perceived as role models. Higher PQ learners reported that they did not feel as close to their LO educator as their lower PQ counterparts. Although all PQ learners indicated liking their LO educator, more of the lower PQ learners indicated that they would go to their LO educator for a personal matter than their higher PQ counterparts. This may also be the reason for more, lower-PQ learners indicating that they viewed their LO educator as a role model for them than their higher PQ counterparts. Lower PQ learners reported identifying with the qualities and character of their LO educator as opposed to the more literal responses of the higher PQ learners who reported reasons for not viewing their LO educator as a role model as being due to having a different career choice. Learners did not identify with

being an educator as they preferred other careers to being an educator. Lower PQ learners were able to view their LO educator as a person whose character, values and personality traits they were familiar with, and would like to emulate. They viewed their LO educator as more than just an educator and as someone they could aspire to. The study's findings suggest that educators were more likely to be indicated as role models by learners in lower PQ schools, if they grew up in the same community as the learners they were teaching. It is inspirational for learners to see that these educators could be deemed as successful in life and making a difference in their communities because they grew up in the same resource–limited communities (Ahmed, 2009; Helleve et al., 2009; Mathews et al., 2006). Learners are therefore able to see that there is life beyond their current circumstances (Mertler, 2017). Educators can thus show learners that it is possible to escape the cycle of poverty while still empowering other members of the community to do the same (De Palma & Francis, 2014).

On the other hand, the main challenges for learners in lower PQ schools were higher levels of risky sexual activity behaviours, engagement in substance abuse and views that the school is not a caring environment. This may possibly be linked to their negative views of the physical school environment as they reported having good relationships with their LO educators. Learners' views of their physical school environment and the association between substance use and abuse is provided by the correlation in the results of the learner cross-sectional surveys where the lower the PQ, the lower the perceived quality of the school's physical environment and the higher the engagement in substance use and abuse. In addition, in lower PQ schools, caregivers were perceived to have lower involvement in the school and in learners' personal lives.

Table 43
Overview of PQ by Uniqueness and Challenges

Uniqueness & Challenges	PQ2	PQ3	PQ4	PQ5
Sexual risk behaviour	***	****	**	*
Substance use	***	****	**	*
Physical school environment	**	***	****	***
School Engagement	*	****	***	**
School Discipline	***	****	**	*
Parent School Partnership	**	*	****	***
Caring School Environment	**	*	***	****
Comprehensive School Climate inventory	***	***	***	***
Sense of Belonging	*	***	***	**
Psychological Sense of School Membership	***	***	***	***
Learner-Educator Relationship	***	****	**	*
LO educator as a role model	***	****	**	*
Educator Expertise	**	****	****	***

*****= Highest score; ***= Average score; **= Low score; *= Lowest score*

8.3. Discussion

8.3.1. Physical infrastructure

The study's findings from school observations, learners' perceptions of the physical school environment and educators' reports during their in-depth interviews indicate that the physical school environment in lower PQ schools negatively impact learning. Lower PQ schools have poor infrastructure, resources and equipment overall, which negatively impacts on the hygiene and sanitation within the school and ultimately on learner and educators' health (Health Promoting Clearinghouse, 2009; Holland & Rendall-Mkhosi, 2007). There is also the impact on learners' and educators' emotional wellbeing as hot, cramped, small, dusty and unventilated classrooms with an inadequate number and quality of lavatories in the school makes for an unpleasant learning experience (Austin et al., 2011; Thapa et al., 2013). The low quality of infrastructure negatively impacts on learners' ability to concentrate and may make them tired and more irritable than their higher PQ counterparts (Bradshaw et al., 2014; Thapa et al., 2013). In schools with no cleaners learners' are expected to clean the school after school hours. It is possible that this may also have a negative impact on learning, as learners are not able to spend much time doing their homework or extra-curricular activities (Gaurdino & Fullerton, 2010). In lower PQ schools there were toilets which are small and located some way away from the classrooms which lend themselves to learners being unsupervised in these relatively remote areas. This makes it an easily accessible venue to engage in risky behaviours undetected. The physical environment in which people live can contribute to deviant behaviours (Bradshaw et al., 2014; Gaurdino & Fullerton, 2010). Pervert circumstances in the physical school environment contributes to deviant behaviours which may be

a possible reason for more risk behaviours reported amongst children in lower PQ schools. The physical infrastructure of dilapidation and neglect impacts on deviant behaviour in terms of engagement in risky sexual and substance use and abuse. This may partly be an explanation for the higher level of engagement in sexual risk and substance use behaviours as opposed to higher PQ schools (Health Promoting Clearinghouse, 2009; Vanwesenbeeck et al., 2016).

The drug use reported amongst learners in lower PQ schools is reflective of the increased drug use found among learners in lower socio-economic status communities in South Africa (Umraw, 2016, 2016; Morojele et al., 2013; MRC, 2008). In light of the recent deaths of learners due to self-produced drugs, referred to as mystery drugs, educators' concerns about learners' own drug mixes to make it cheaper and more accessible are of particular concern (Umraw, 2016). Other studies in SA support the findings that learners do make and use their own substances in the face of poverty (Adams-Tucker et al., 2016; Abdool Karim et al., 2009; Mutinta et al., 2013). Redonneta et al. (2012) states that there is a severity of the addiction to substances to the point of learners mixing their own substances which can be even more dangerous than other drugs. The results of this study showed that learners are using their own mixed drugs on school property. The fact that learners use the school premises for these deviant activities is in further support of the negative influence of the physical and psycho-social school environment on criminal and deviant behaviours (Cluver et al., 2016; DiClemente et al., 2013; Hale et al., 2014).

Involving caregivers in the school disciplinary processes implemented in higher PQ schools does not seem to be effective in lower PQ schools as the letters intended for caregivers to notify them of problems and the need to meet with the school, are to be delivered by the children. In higher PQ schools, educators are able to contact caregivers of learners directly through telephone or email and there is a suspension/expulsion policy in place. However, in lower PQ schools, the process is dependent on learners delivering letters from their educators to their caregivers, which most learners would not do. Lower PQ learners are less likely to be monitored by their caregivers and therefore a suspension/expulsion may have the opposite effect of discipline in these circumstances (Bornstein, 2015). Thus a lack of limited resources may have a crippling effect on the smooth running of the disciplinary process within lower PQ schools (Redonneta et al., 2012).

8.3.2. Caregiver involvement

Although there is a general awareness and recognition of the importance and relevance of sexuality education and LO for HIV, teenage pregnancy and STI prevention for learners by the school and key stakeholders, the study's findings highlight the low status of LO in the schools; which included caregivers' devaluation of LO. This was evident in learners' perceptions of LO as a non-academic subject, caregivers' lack of awareness of LO and its contents and their own preoccupation with the progress of their children in the academic subjects, as well as the schools' allocation of educators to LO teaching and the priority educators give to other subjects over LO. Educators reported that caregivers in higher PQ schools devalued LO and sexuality education to a greater extent than caregivers of learners in lower PQ schools. Caregivers in higher PQ schools perceived themselves as being more involved and believed that their children were not engaging in risky behaviours as they were able to monitor and supervise them. This message is probably carried over to children due to the influence that caregivers still maintain over them (Bornstein, 2016).

Regardless of PQ, caregiver involvement in the school is lower than desired however, caregiver involvement in their children's lives differs among the learners according to PQ schools. Lower PQ learners' caregivers are not adequately involved in their lives as opposed to their higher PQ counterparts. As mentioned, this may be due to the physical absence of caregivers from their homes and learners living with grandparents/other caregivers or with no adults at all. Both educators and learners reported that they do not have much of a support system and thus are more likely to engage in more risky behaviours i.e. sexual behaviour and other risky behaviours, than other learners. Furthermore, the higher the caregiver involvement, the higher the likelihood that they experienced higher levels of school connectedness. This finding is also supported by previous literature where caregiver involvement has been found to be associated with higher levels of self-esteem, locus of control and better adjustment (Bornstein, 2016; Buehler et al., 2006; Coetzee et al., 2014). This in turn has been associated with increased academic performance and social skills in all environments including the school, as well as being a protective factor for risky sexual behaviour engagement (Holland and Rendall-Mkhosi, 2007; Lewallen et al., 2015; Schafer and Sweeney, 2012). The older the caregivers, the less likely learners are subjected to careful monitoring and supervision, as older adults usually suffer with ill-health and are not as mobile and

energetic to be present in all the activities of learners (Strøm et al., 2013). According to Strøm et al., (2013), those aged 60 years and above are regarded as older caregivers who may be less able to care for children. However, it should be noted that this age spectrum is not applicable to all as it is health-dependant. They are also less likely than younger caregivers to be aware of and understand the current trends of upbringing and this may be a hindering factor in their efforts to prevent youth from engaging in risky behaviour (Hutchinson, 2007).

The study's findings reiterated the need for caregiver involvement in learners' school lives, inclusive of academic monitoring and home life, due to the critical positive influence of caregivers in reinforcing preventive sexuality education messages for the prevention of HIV, teenage pregnancy and STIs. It is necessary for caregivers to create open, trusting and communicative relationships with their children (Bornstein, 2016; Hutchinson, 2007). Caregivers should be encouraged to speak to their children on a daily basis regarding their schooling and personal life in order to create a close-bonded relationship for better communication, monitoring and supervision (Bornstein, 2016; Coetzee et al., 2014). There is thus a need to foster closer relationships with their children, more so if they do not live with their children, as the study's findings suggest that these children are more vulnerable to engage in risky sexual behaviour than children who reside with their caregivers and have supportive families. This is in congruence with prior studies' findings (Buehler et al., 2006; Finegood et al., 2017). While caregivers in the study were aware that it is important for them to be with their children and they also feel the loss for not being with them, their life circumstances play a role in them being absent as work opportunities might be elsewhere. Caregivers of children in lower PQ schools have been found to be particularly grateful for the role of the educators in schools as they are aware of the extended role they play as caregivers to their children due to their physical absence. This may be partly explained by their circumstances as they have to work remotely and may be single caregivers (Finegood et al., 2017; Koen, 2011). With lower socio-economic status employees, work is located wherever they are able to find it, which is usually in the urban areas, which are usually located a distance from their homes in rural/semi-rural areas (Buehler et al., 2006; Coetzee et al., 2014; Dessie et al., 2015). These employment opportunities are limited in their rural/semi-urban areas of residence and therefore take caregivers away from their children (Finegood et al., 2017; Ikamvayouth, 2016). This finding shows that their absence or limited direct involvement in their children's lives is not due to a lack of care. These structural factors are found to impact learner vulnerability for the engagement in

risk behaviours (Coetzee et al., 2014; Finegood et al., 2017). As many learners in the lower PQ schools indicated living alone or with elderly care-givers, a need exists for boarding establishments or school residences which would enable caregivers to work and be a source of financial survival to their children while their children are being monitored, supervised and cared for by these institutions.

Schools also appear to be making a positive impact on learners' lives in terms of learners' choices for safer sexual health. However, the study's findings indicate that caregiver attitudes in general are somewhat apathetic and too reliant on the school. The school would benefit from caregiver support for the sexuality education messages taught to learners in order to further embed and internalise these preventive messages (Buehler et al., 2006; Coetzee et al., 2014; Mertler, 2017). The schools are however attempting to connect with caregivers and to encourage their involvement. Given the literature regarding caregiver involvement in the school, it should be recommended that caregivers become more involved to enable optimal impact of the messages taught in sexuality education (Coetzee et al., 2014; Mertler, 2017). Furthermore, it is recommended that caregivers become aware of the exact messages being taught, the mediums through which they are taught and that they attach value to the sexuality education component of the LO curriculum. Caregivers are recommended to be increasingly involved in the school and in its activities and to attend school meetings, as well as to increase their awareness of the subject of LO and topic of sexuality education and its aims. Evidence exists for paternal involvement in learners' schooling and their lives, as being a protective factor for female and male risky sexual behaviour engagement (Bond et al., 2007; Rupp & Rosenthal, 2007).

Although it is challenging for caregivers to spend time when they have such a limited time available, caregivers are encouraged to spend some time on aspects that learners value, such as attending prize-givings and caregiver-meetings so that learners may feel supported in their most important moments (Coetzee et al., 2017; Dessie et al., 2015; Hutchinsonet et al., 2007). The study's findings also indicated that currently, only mothers were expected to participate in school activities and in their children's schooling lives. The role of care is thus predominantly designated to mothers which is a challenge, particularly, in a patriarchal society where it is still believed that mothers should shoulder the majority of the care for their children (Buehler et al., 2006; Coetzee et al., 2014; Hutchinson, 2007). Many households, particularly, in lower socio-economic contexts

are headed by females and thus, a stark absence of fathers are noted in many children's lives (Buehler et al., 2006; Dessie et al., 2015). Numerous studies establish the importance of the paternal role in children's lives, and children with an absence of fathers are therefore adversely impacted (Buehler et al., 2010; Finegood et al., 2017). The increased burden of care placed on mothers to care for their children is also a challenge for mothers, especially those who are working to provide financially for their children as well (Buehler et al., 2006; Dessie et al., 2015).

Caregivers also do not talk about sexuality with their children as they reported feeling that they do not fit in with the modern world and feel that their input in this area is irrelevant for their children. They feel that the educators are more knowledgeable on the topic and familiar with the current world and therefore prefer the educators to provide sexuality education to their children. This has also been supported by prior studies (Finegood et al., 2017; Namisi et al., 2013).

8.3.3. Psycho-social school environment

Considering the impoverished community and school environment as well as the lack of caregiver involvement, it is possible that learners may engage in escapism by seeking pleasurable activities i.e. sexual engagement and/or substance use and abuse (Bond et al., 2007; Redonneta et al., 2012). This was reported by educators in the study, who stated that learners used the school lavatories to smoke or use substances. This was also supported by other studies (Amoateng et al., 2006; Waller et al., 2014). This would suggest that there is a real struggle for survival and the need to escape their reality (Bond et al., 2007; Morojele et al., 2013). Although learners in lower PQ schools indicated higher levels of perceived school discipline, according to educators and caregivers in this study, this was not the case. In the absence of caregiver figures at home, living either alone or with elderly grandparents, it is likely that the existing discipline in the school has been experienced as stricter than what learners in more affluent schools experience. They seemed to experience greater caregiver monitoring and supervision. It is likely that their home experiences might have played a role in their higher expectation of discipline including that of the school (Gann, 2015; Gaurdino & Fullerton, 2010). The educators however, reported school discipline to be problematic in the lower quintile schools. Other studies reported similar results on school discipline (Bowe et al., 2017; Gann, 2015).

According to the study's findings, the school discipline policies and implementation pertaining to substance use and abuse in lower PQ schools are not as severe as that of higher PQ schools. In lower PQ schools, educators were somewhat outnumbered and felt more out of control and helpless to effectively monitor and discipline learners for substance abuse on the school property. Educators felt outnumbered due to the high learner to educator ratio in classes. This was possibly due to a higher learner to educator ratio than that of higher PQ schools and a higher number of learners who engage in risk behaviours in the lower PQ schools than in higher PQ schools. Other studies have also highlighted educators' feelings of helplessness as they have to fulfil so many roles and because they cannot monitor and control all the deviant activities in addition to ensuring an adequate quality of learning in the class room (Adam-Tucker et al., 2016; Mertler et al., 2017; Zuma et al., 2016). As mentioned above, the role of educators in lower PQ schools is further extended due to the absence of the caregiver in many lower PQ learners' homes (Holland & Rendall-Mkhosi, 2007; Zuma et al., 2016).

Lower PQ schools in this study seemed to have more social networks with other community stakeholders to support them at the school and engaged to a greater extent with NGOs, with whom they reported to work closely within the school. It can be viewed as a creative way to extend their limited resources to share the responsibility of caring for learners in contexts of greater poverty with other willing stakeholders. Schools with little resources have shown initiative by extending their human resources by working closely with NGOs and governmental departments to access social workers, counsellors, health promoters, the police, local clinics and nurses. A further benefit is that NGOs are also able to apply for funding which can be used for the school (DoH and DBE, 2013c). These networks bring valuable information, expertise and additional care to learners. They also provide information to educators for more impactful LO and sexuality education teachings. The need to extend networks to embrace various community stakeholders to become involved in the school is a key objective of the Health Promoting School's initiative worldwide (Health Promoting Clearinghouse, 2009) and in accordance with the South African Department of Health (DoH & DBE, 2013c; DoH, 2015; DoH, 2016; Holland & Rendall-Mkhosi, 2007).

All schools as per the school observation conducted by the researcher, have key stakeholders' contact numbers in their offices which included the school governing body and local

police contact numbers. In addition, educators, learners and caregivers made mention of the referral system which demonstrated the importance and reliance on each school's social networks to assist with the learners' challenges (Gann, 2015; Gaurdino & Fullerton, 2010). These are best practices which reinforce the sexuality education teachings in a practical manner in learners' lives and should be maintained by the schools (Bond et al., 2007; Roth & Brooks-Gunn, 2010).

School connectedness was different in lower PQ schools as opposed to higher PQ schools. In lower PQ schools, more learners reported not fitting in and feeling judged by their fellow peers. It should be noted that these schools were generally more homogenous in ethnicity but seemed to have a broader range of learners from different socio-economic households. It was observed and reported that learners from poverty-stricken households seemed to have had experiences of discrimination due to their poverty. The diverse socio-economic groups seemed to have resulted in the formation of in and out groups where the more affluent learners within that category of PQ were considered to be the desired "in" group and the direly poor were the "out" group who did not fit in, thereby negatively impacting on overall school cohesion (Neser, 2007; Monahan et al., 2010). The victims are thus those who are in dire poverty and perpetrators are those who are better off in terms of socio-economic status. Learners who are poorer than their peers in lower PQ schools are easily identifiable as their clothes are more worn and they are on the feeding scheme, whereas the more affluent learners within this PQ may have money for the school tuckshop in addition to home-made lunches. The importance of the feeding scheme for learners is that the DoE ensures that learners receive at least one meal per day (DoE, 2011d). The manner in which the feeding scheme is administered within the lower PQ schools is such that only the poorer learners within a classroom of learners partake in the meals and these learners are thus highly identifiable as the relatively poorer learners and therefore more likely to be subject to discrimination or ridicule by the non-partakers of the feeding scheme. This may also result in hungry learners not being willing to partake in the feeding scheme because of the associated stigma of being poor (De Palma & Francis, 2016; Finegood et al., 2017). This form of class discrimination within a lower PQ school is damaging to learners' emotional health and is a form of emotional bullying (Govender et al., 2013; Strøm et al., 2013).

In contrast, in higher PQ schools, there is respect for diversity amongst learners who are different and this extends beyond ethnicity to socio-economic class differences between learners.

This is evidenced by a higher school connectedness being reported in higher PQ schools despite the more multi-cultural ethnicity of learners in these schools. This may be due to a higher tolerance level for differences and thus the higher level of acceptance for each other which may be developed due to the exposure to diversity and being in a multi-cultural and multi-socio-economic status environment where everyone is viewed as different in some manner (Allport, 1954). There is therefore unity in diversity as bonds are created despite differences (Allport, 1954). The Contact Hypothesis explains this phenomenon (Allport, 1954). It is likely that poverty impacts the psyche of the poorer learner as they are made to feel lesser than their relatively better off peers and may develop a low sense of self-esteem which may remain with them for a lifetime (Monahan et al., 2010; Neser, 2007).

The study also highlights the benefit of the small, close-knit communities which learners in KZN schools are a part of. This could favourably be used as a protective factor for learner risky sexual engagement (Anderson et al., 2017; Dessie et al., 2015; Lewallen et al., 2015). The DoH (2013) explained the high HIV statistics in KZN as being determined by health and wellness challenges which persist into adulthood and cause a significant burden of illness on the community. This may translate into a range of chronic diseases and unhealthy lifestyles, including AIDS and tuberculosis (DoH, 2013a). In small, close-knit communities, it is easier for entire communities to be impacted in a positive manner and in turn, people within the communities can be used to impart positive values to each other (Lewallen et al., 2015; Roth & Brookes-Gunn, 2010).

8.3.4. Curriculum content

The low status accorded to LO has been found in various other studies and linked to the fact that while LO is an examinable subject it is of no significance for tertiary academic entrance submission (DoE, 2008; Helleve et al., 2011). LO is only an additional compulsory subject (DoE, 2008). It can be considered to be important as in LO, the "Self in Society" sub-topic holds great value for the future of learners (DoE, 2008). LO is therefore important for the development of skills and the emergence of new careers as career choice is a major challenge in SA (Helleve et al., 2011). However, many schools do not value this enough. LO is also helpful in the development of self-esteem and getting to know oneself (Matshoba & Rooth, 2014). It fosters a sense of creativity, communication skills, teamwork and self-reflection (Pillay, 2012). These are all skills

that are beneficial and relevant to a young adult's life and beyond. It is therefore of the most importance to ensure that LO be valued and portrayed in a more positive manner.

Despite its importance, the LO curriculum was criticised by learners for its repetitive presentation over the years. Learners reported that they no longer find the topics interesting and engaging, and educators experienced a lack of interested learners due to the repetitiveness of the subject. This was also found by prior studies (Bhana et al., 2005; Helleve et al., 2011; Matshoba & Rooth, 2011). It is likely that the repetitive nature in which the topics are dealt with in the curriculum may desensitise learners to the content; an issue that should be cautioned against. Therefore more relevant and innovative ways should be explored to address the topics over the developmental years.

8.3.5. Training of educators for the teaching of the LO curriculum

There are distinct differences in the pedagogies used by lower PQ LO educators as opposed to the higher PQ LO educators in delivering LO lessons. The lower PQ LO educators seem to be led by a vocational mission to develop the learners in their classes and/or schools and are inspirational to the learners they teach. LO educators in lower PQ schools were reported by learners as making a difference and these educators themselves reported how important it was for them to make an impact on the lives of the learners they teach. There is also a higher level of engagement with LO and sexuality education that was reported by learners and educators in lower PQ schools (McGraw et al., 2008). Learners and educators alike reported lower PQ educators efforts in making the LO lessons interesting and relevant for learners to practice in the personal lives. Higher PQ educators teach in accordance with the prescribed curriculum and do not usually deviate to include what learners in their classes find relevant to their personal lives. This was reported by learners and educators from higher PQ schools alike. This may be due to educators and learners reporting lower levels of learner sexual and other risky behaviour engagement than that of learners in lower PQs and thus not viewing sexuality education as relevant to learners' personal lives.

8.3.6. Learner-Educator relationship

The learners in the lower PQ schools reported higher scores on their relationships with their educators than those in the higher PQ school. The study's findings are likely linked to the commitment and "calling" of the educators in the lower PQ schools and is further suggestive of

greater creativity and innovation for mobilisation of resources in the face of limited resources that impact positively on the learner-educator relationship. The educators explained their personal investment in time, effort and sometimes even financial investment to care for learners within the challenging contexts of schools with limited resources. The learners and caregivers valued the extra effort that educators in lower PQ schools dedicate to learner care. It should be noted that the high educator commitment and the resultant emotional labour involved may result in burnout of educators particularly in the lower PQ schools as they are faced with more challenges regarding physical and material resources and are thus constantly challenged to creatively mobilise resources for the school and classroom (De Palma & Francis, 2014; Zuma et al., 2016). The additional time and emotional effort this demands in addition to their normal duties, may contribute to burnout, ill-health and lower motivation among educators in lower PQ schools, as opposed to those teaching in better resourced contexts (De Palma & Francis, 2014; Mathews et al., 2006; Mertler et al., 2017; Zuma et al., 2016). Educators should continue to encourage learners to participate in sexuality education and to make evident the value of engagement in LO sessions to foster in class to learners, in order to promote the participatory approach to learning which is deemed best practice for instilling positive behaviour and decision-making skills in learners (Abdool Karim et al., 2009; Bonell et al., 2010; Kirby et al., 2011). Educators need to enhance participatory learning opportunities by seeking innovative ways to involve learners and to make relevant the value of LO and sexuality education to learners, their caregivers and in schools as a whole. This could be accomplished by using social media, practical work and peer educator initiatives. There are peer education programmes in the lower PQ schools which do appear to be helping learners. However, learners are also required to assume responsibility for their learning (Eldredge et al., 2016). Learners who are more informed about daily events are more likely to make informed choices for their sexual health (Matshoba and Rooth, 2014; Pillay, 2012). Reading should be encouraged as an additional source of sexuality education which enables the schools' sexuality education messages to be reinforced (Hale et al., 2014; Harrison et al., 2010). A further suggestion could be to have a greater access and permission to use the internet and use the school computers, provided there are school computers available, in order to allow learners to seek their own information which they could have prepared before class.

The study indicated that older learners were more likely to engage in sexual behaviours than younger learners, a finding that was expected. However, they were also less likely to approach

their LO educators for assistance with sexuality education and or personal matters. It was reported by previous studies that older learners are less likely to engage with their LO educators than younger learners which may occur as a result of identity seeking and reaching the goal of autonomy and independence in their aspirations towards young adulthood (Furlong & Christenson, 2008; Scalici & Schultz, 2014). LO educators should nevertheless endeavour to build personal relationships with learners of all ages as this will promote trust and respect in learners and thus encourage older learners to approach them with their personal challenges (De Palma & Francis, 2014; Panday et al., 2009). According to the study's findings, some learners also expressed the view that they would not approach educators because they were not confident about the extent of confidentiality by educators. Educators should however be viewed as trustworthy by learners in order to have an impact on their sexual and other health risk behaviours as outlined by other authors such as Jimmyns and Roche, (2010) as well as Mashele (2014). Overall, most learners, regardless of their socio-demographic background perceived their educators to be credible providers of sexuality education knowledge and having open and trusting relationships with their learners. Learners, educators and caregivers alike indicated that this optimised the impact of sexuality education on learners, coupled with a more positive school environment created by the positive relationships between educators and learners. The study's findings suggest that this has been positively associated with learners' actual sexual behaviour. Learner-educator relationship quality is a key protective factor for learner engagement in risky sexual and associated behaviour (Sani et al., 2016; Johnson et al., 2008; Scott-Sheldon et al., 2013). Although adolescent learners are attempting to find their own identity, learners regardless of their age, still require support when applying sexuality education messages to their personal lives and when dealing with personal challenges (Sani et al., 2016; Scott-Sheldon et al., 2013).

Learners' also need to foster receptiveness to educators to allow for development of power within themselves in order to make the right decision regarding risky sexual and other risk behaviour engagement. It was particularly learners in higher PQ schools that did not consider listening to LO educators as important. It seems that power differentials played a role in the learner-educator relationships in these contexts, while it was different for learners in the lower PQ schools (Holtmann, 2011; Mertler, 2017). Learners in higher PQ schools, regarded their educators to be on the same level as them in terms of power however, lower PQ school learners indicated a higher level of respect for their LO educators and looked up to them. This was also noted in the

educator interviews regarding the type of relationship learners had with them. Learners from higher PQ schools seemed to view the career of being an educator as commanding relatively less status than other careers they would aspire to. This was evidenced by the question in the survey as to whether learners find their LO educators as a role model to them, where most learners responded in the negative, stating that they would not aspire to be educators as a career choice. Learners from the PQ5 school devalued the quality of their LO educator's expertise on sexuality and other risk behaviour education. This is reflected in PQ5 learners' attitudes towards their LO educators as gauged by the learner cross-sectional survey which indicated that although they did like their LO educator, they did not feel that their LO educator was approachable enough for them to share and discuss their personal issues with them and did not have a close enough learner-educator relationship with them to do so. These learners therefore did not view the messages that their LO educator taught them as important, as mentioned above. Learners who displayed a sense of self-entitlement are less receptive to the sexuality education messages as taught via their LO educators through the LO curriculum (Bundick & Tirri, 2014; McGraw et al., 2008; Mertler, 2017). Self-entitlement makes learners less receptive to their LO educator as they do not view their LO educator as an expert in the field since they themselves feel that they have sufficient knowledge and they do not view their LO educator as having as much status as they would certain alternate careers. Since higher PQ learners are more privileged and thus have access to other sources of sexuality education, they are not as appreciative of the role of LO educator in their lives. Therefore, they do not respect their LO educator nor the messages they deliver as much as their lower PQ counterparts.

8.4. Integrated Analysis of the Results

Table 44 below is an index which demonstrates the overall reports of all four types of respondents' data. There are three overarching factors which the study has found to impact on learners risky sexual and other risk behaviours:

1. Management of the school is critical for the schools' functioning and impacts on learners' engagement in risky sexual and other risk behaviours. This has been further categorised into the relationships between the stakeholders of the schools. The relationships between the key stakeholders in the schools is a measure of the school climate. The physical school environment has also been included.

2. Caregiver involvement is a protective factor and a buffer against risky sexual and the engagement in other risk behaviours.

3. The geographic environment and cultural environment in which the school is located also impacts their sexual and other risk behaviours.

Table 44

Index of the factors impacting learners' engagement in risky sexual and other risk behaviours

	Possible Scores	PQ2	PQ3	PQ4	PQ5
Management of the school	**(0/1)**	0	1	0	0
Learner to learner relationships	(0/1)	1	1	0	0
Learner to educator relationships	(0/1)	0	1	0	0
Educator to educator relationships	(0/1)	0	1	0	0
Caregiver to Educator relationships	(0/1)	1	1	1	0
Physical school environment	(0/1)	1	1	0	0
Caregiver Involvement	**(0/1/2)**	2	2	1	0
Geographic location of the school	**(0/1/2/3)**	2	3	1	0
TOTAL		**7**	**11**	**3**	**0**

*A low score on the index is a low score on risky sexual and other risky behaviour engagement. A score of 0 means that it is more positive than score of 1.

Figure 9 below indicates the main components of the school environment and the risky sexual behaviour and other risky behaviour engagement. In accordance with Table 44 above, it indicates the impact of the management of the school, caregiver involvement and geographic location of the school on risky sexual behaviour and other risky behaviour engagement. Green blocks in the figure are symbolic of a positive finding and red blocks are symbolic of a negative finding.

Figure 9: Summary of the impactful factors on the outcomes of sexual and other risk behaviours
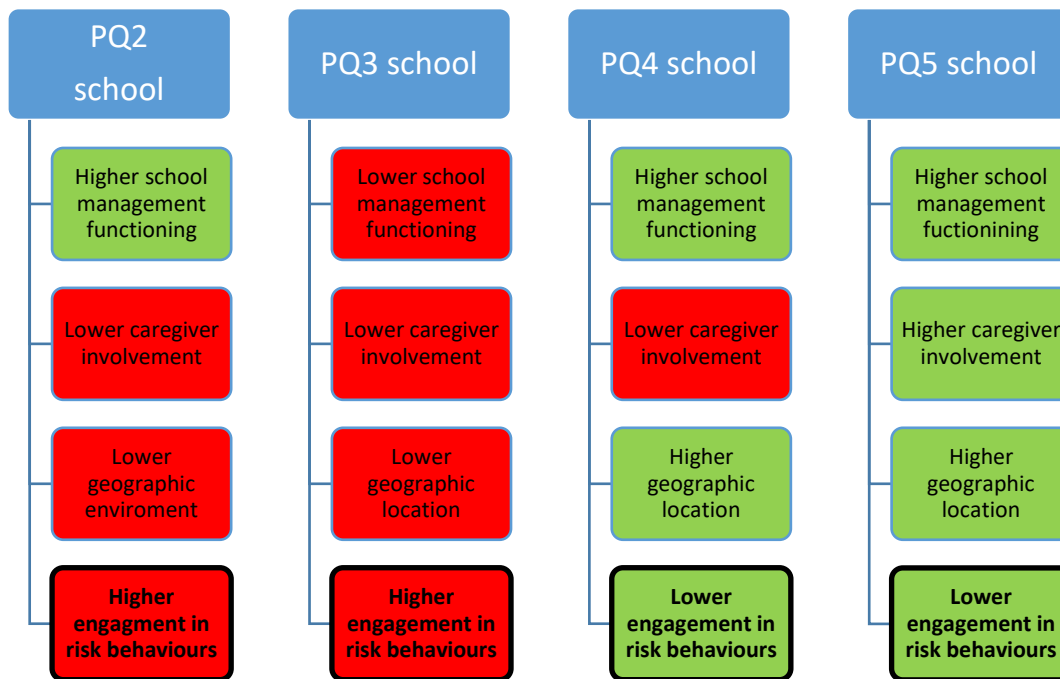
Irrespective of educator presence and caregiver involvement, if the environment surrounding the school is not conducive to the implementation of the sexuality education messages, the environment outweighs the protection offered by educator support and caregiver involvement. The protective factors of educator support and caregiver involvement are more possible and more successful in promoting learners' safe sexual behaviours and choices in conducive contexts. It is therefore of importance to call on national and local government to address the structural challenges and inequality of poverty and hopelessness as well as degradation and social ills in disadvantaged environments since it is apparent that the environment within which the school is situated has a major impact on the engagement in risk behaviours.

8.5. Limitations

The study is not without its limitations. Purposive sampling was used which has its limitations in the inability to generalise to all schools in KZN. In addition, the researcher met with caregivers who were more readily available and thus possibly more dedicated than others. Caregivers involved in the study may therefore not be fully representative of caregivers of KZN secondary school learners.

Furthermore, the generalisability of data to SA may be limited due to the study being conducted only in the province of KZN, among a small group of schools. As previously mentioned, the province of KZN in SA was selected due to the high prevalence of HIV and AIDS, teenage pregnancy, STIs and risky youth sexual behaviours (HSRC, 2014; Ikamvayouth. 2016; Mutinta et al., 2013; Statistics South Africa, 2016). In terms of age, the sample may not be generalizable to those out of the age range of secondary schools learners. In addition, data was collected in written and spoken English which may have biased the results, especially for non-English first language speaker participants. However, pilot testing of all instruments attempted to reduce this element of bias.

8.6. Recommendations

Based on the results and literature review, the following are recommendations for improved and thus greater impact sexuality education in schools in KZN for learners, educators, caregivers, the school, the local community and the government:

8.6.1. Educators

It is recommended that LO educators continue to foster open and trusting relationships with learners to encourage learners to open up in LO class and to actively participate in the lessons.

Educators should continue to encourage learners to participate in sexuality education and to make evident the value of engagement in LO sessions. Innovative techniques can be applied to engage learners more. For example, the use of narrative drama activities, debates among gender groups, group work activities and educational games, the involvement of relevant stakeholders or important role models and creation of a youth school website where young people can ask questions etc. All of these may also be helpful in enhancing the status and value of LO.

Educators are recommended to remain focussed on assisting older learners in spite of their drifting away from the educator as a source of sexuality education as these learners have a higher rate of risky sexual and other risky behaviour engagement in conjunction with the lower quality of educator-learner relationship reported by these older learners.

To sustain the momentum of commitment, educators should be praised and rewarded for their extra effort and time. This will keep them motivated to continue with their good efforts.

Educators also need to have opportunities to share experiences with other educators and learn from one another.

The provision of special scholarships for those learners who are high academically achieving learners from lower PQ schools should be made available in order for them to study teaching. These learners could then return to their home-communities as educators and be role models to learners in their home communities. This would create a cycle of empowerment for disadvantaged learners and instil a sense of hope in the learners that they teach which will demonstrate that there is a possible manner in which to escape the cycle of poverty in these communities.

8.6.2. Caregivers

Caregivers are recommended to be involved increasingly in the school and in its activities and to attend school meetings and can do this by spending limited, but quality time to overcome the challenges they face which hinder their ability to spend time on school involvement.

It is recommended that caregivers become aware of the exact messages being taught, the mediums through which they are taught and that they attach value to the sexuality education component of the LO curriculum.

Schools should maintain and improve relationships with caregivers by the warm and welcoming nature they currently extend to caregivers and learners in order to contribute towards a positive school climate and culture, however, they should improve on communication and delivery of requests and services to caregivers, in order to increase caregiver involvement in the school.

8.6.3. Schools

Schools should also maintain the good social networking they conduct with stakeholders in their communities, and communities, in turn, need to have rapport with the school. A further recommendation is that schools have NGOs based on the school premises for close interaction with learners, thus easing the sole responsibility of caring for learners from the educators. NGOs are also eligible for funding which they could then use to support the school and community.

It is recommended that the school allocate LO educators to teach LO exclusively as a subject and to attach as much importance to LO as a subject as the more academically viewed subjects. There are thus implications for the DoE regarding the provision of funding for sufficient numbers of educators in this regard if they endeavour to fulfil the aims of the sexuality education component of the LO curriculum and of the LO curriculum as a whole.

Schools should distribute resources between LO and other more academically perceived subjects equally.

In terms of maintenance of best practices, schools should continue to promote and encourage the attendance of training opportunities for LO educators and continue to grow networks with stakeholders to provide their valuable services and provide social support

Awareness for sexuality education and LO for caregivers should also be created by the school in the form of communication such as meetings and letters.

It is recommended that schools become physically safer, in terms of improved infrastructure in order to have an increased impact on sexuality education message internalisation and to reduce learner engagement in risky sexual behaviour. It is therefore recommended that schools with lower resources be funded to close the gap in support for the promotion of positive and safer school environments.

It is recommended that lower PQ schools serve the feeding scheme meals to all learners in all socio-economic classes to prevent poorer learners from being identified and discriminated against due to their relatively lower socio-economic status.

Schools should continue to have a health promoting school environment, especially in terms of promoting a sense of belonging, psychological sense of school membership, and engagement with the school climate in order to maintain and further impact on the lower rates of learner risky sexual behaviour.

8.6.4. Communities

It is recommended that the communities and the community police be especially vigilant in lower PQ areas especially during transportation times to and from school as the study identified

a disadvantage of low physical safety in the areas surrounding the schools, which is a pre-requisite for learner health and wellbeing.

The involvement of caregivers and the community in sexuality education also needs to be addressed so that compromising social and cultural norms may be improved to reduce risky sexual behaviour and be replaced with health-promoting norms and values, which could then be circulated within the community.

Awareness should be created in communities to reduce the stigmatisation of learners based on their family situations, especially in closely-knit communities where there is awareness amongst community members of the challenges of each family.

Interventions about the dangers and types of street-drugs which children in lower PQ schools are making should be held to educate communities and caregivers about these types of drugs. This may be useful in limiting the production and use of such drugs by learners. Interventions can be held by groups/NGOs in person to communities or create awareness over social media. This will also assist educators who currently carry most of the responsibility of being aware of the substances which are being abused by learners. This burden of care will therefore be shared by caregivers and other community members. The local police should also be involved in putting up posters to create awareness and community members could report cases of production and use to them. The current LO curriculum should also be updated to include learners' own production of substances and the dangers of using them. The curriculum should be updated with the current substances which are being made and used at the time in order for the content to be directly relevant to learners' lives.

8.6.5. The government and NGOs

It is recommended that LO be portrayed in another manner whereby it is valued by caregivers, learners and schools alike.

Due to the repetitiveness of the LO curriculum causing non-engagement and disinterest in learners, it is recommended that the content of curriculum including that of sexuality education be staggered through the grades and that the content be adjusted to be more practically relevant to learners.

Effort should also be made by the DoE to provide necessary resources to lower PQ schools for these educators to use in order to reduce the risk of educator burnout. The DoE could assist lower PQ educators by having trainings where key stakeholders are present in order to network educators.

The government should support the efforts of schools to network with stakeholders by providing them with contact lists of relevant stakeholders in their areas.

The government is recommended to allocate more LO educators to schools, introduce policies that LO educators should solely be educators of the subject and provide more physical resources such as posters and apparatus to watch videos in classrooms.

It is recommended that KZN NGOs or the government offer caregiver training and support initiatives to assist caregivers with sexuality education, monitoring and supervision of their children. These campaigns should also remind caregivers that both caregivers should bear responsibility for their children's school connectedness by being involved caregivers both at home and in the school.

The establishment of boarding houses or school residences.to provide safe and caring havens for the care, monitoring and supervision of learners without adequate adult care in their homes can be implemented. This initiative that can be driven by government in collaboration with private stakeholders can be implemented in cases where learners are living with no adults or with limited adult supervision i.e. in the case of being cared for by the elderly or adults with ill-health.

The Department of Education's poverty quintile system does seem to be having a positive impact in combatting the inequality in schools in terms of resource allocation and thus, should be maintained.

8.7. Conclusion

The study highlights the importance of expectations and drivers for LO and sexuality education in schools. Overall, schools do seem to be somewhat successful in preventing early sexual debut and in protecting youth from risky sexual behaviour. The study's finding show that sexuality education lessons do appear to be a partially protective factor in learners' sexual behaviour. This was reported by the three sources in the study i.e. learners, educators and

caregivers. The absence of caregivers having 'the talk' with their children and children having a readily available source of sexuality education in the school, increases the likelihood that the sexuality education lessons are the predominant and most impactful source of sexuality education. However, the far-reaching consequences of poverty in terms of the provision of resources of a physical, psycho-social and social capital nature, has significant consequences and impact on the physical and psychological wellbeing of the child. This may possibly have a lasting impact on the child well into adulthood. If the school environment is not improved, the young potential in terms of academic and sporting/cultural activity ability in South Africa may go unrecognised and undeveloped due to the lack of opportunities and infrastructure for development of the child within the school. The poorer school is unable to identify and develop the talent of the children in attendance. Therefore, this results in a group of people which the school has failed as the school does not provide the opportunities to escape from the cycle of poverty. This may result in fewer people in South Africa reaching their full potential in terms of careers, skills and abilities and therefore limit the growth of those most vulnerable groups in the country.

While the study reiterated some findings of previous research, this study's holistic approach in focussing on the school, it's physical and psychological climate, learners', educators' and caregivers' views about the school and about each other and their roles in sexuality education; allows for insightful corroboration of information about relevant aspects and different stakeholders at a particular point in time. New insights have thus been gained in the following areas:

The study highlighted the importance of educators from lower PQs coming from the same community as the learners they teach, and thus being considered as important role models by the learners. These educators offer a means of hope to learners in these disadvantaged contexts as these role models are evidence that a different future is possible and that one is able to escape the cycle of poverty. Learners are therefore more likely to listen to the sexuality education messages taught by these LO educators than others. The unique contribution of this study also highlights the resource mobilisation skills that educators from lower PQ schools are able to implement. In spite of the lack of resources, educators use innovative ways to build and use their networks as well as extend their caregiving role beyond what is required of an educator. The efforts stem from their passion for their learners' development and service to their community. This results in better educator assistance to learners and may play a protective role as learners perceive them to be

approachable and a confidant with whom they can share their personal problems. This is indicative of the close bond that educators and learners in lower PQ schools have.

It is however, concerning that learners from lower PQ schools feel more disconnected to their peers than those in higher PQ schools. Learners in these schools seems similar in terms of ethnicity and all can be considered to be relatively poor, however the distinction is that some learners do have some money at their disposal while others are destitute. This socio-economic differential is played out as a divisive factor resulting in open power display where those who are destitute are made to feel worthless and are being discriminated against. Furthermore, community dynamics that stem from the close proximity in which communities live i.e. consistent awareness of the whereabouts and behaviours of neighbours may protect against the engagement in risky behaviours in fear that significant others would learn about it through others who may share this information in the community or propel youth towards the engagement of risk as a way to cope with the stressors of the constant gaze of others.

On the other hand, for learners in the higher PQ schools where diversity is both in ethnicity and in socio-economic class, learners experience higher levels of connectedness with their peers than those in the lower PQ schools. This is an interesting finding in SA, coming from a history of apartheid , and is most likely due to the consequence of greater racial integration and better connectedness. The racial diversity was reflected in the demographics of the learners who participated in the survey. This may bode well for the future in a country with so much division.

The study findings also point to the negative impact of community and environmental disintegration on learners' risk behaviours i.e. sexual activity and substance abuse. The lower PQ schools' social and physical environments can be described as lacking in resources, infrastructure and equipment. Poverty as a structural factor has been noted to have a pervasive and divisive direct and indirect impact on learners' health and wellbeing which is a concern that remains a priority for the South African context. The absence of caregivers in learners' own communities as a result of poverty further impacts the child and increases vulnerability to engagement in risky sexual and other risk behaviours.

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School name: _____

Carried out by researcher

(The aim of this measure is to provide congruency and a comparison with all 3 other measures for triangulation and to reduce response bias from the other 3 sources/verify their responses).

1. Classroom observation:
Safe classroom and school environment
How much does the school environment meet & achieve each of these qualities?
Please use the rating scale provided to mark the most correct response for each item.
Please only select 1 answer per statement.

1 = Not achieved,	2 = Somewhat achieved,	3 = Mostly achieved,	4 = Fully achieved

		Not achieved	Somewhat achieved	Mostly achieved	Fully achieved
a)	The classroom(s) is/are protected from the elements (solid roof, walls, and floor).	1	2	3	4
b)	The classroom has enough ventilation.	1	2	3	4
c)	The classroom is a comfortable temperature (learners are neither hot nor cold).	1	2	3	4
d)	The classroom lighting is enough for learners to work.	1	2	3	4
e)	The classroom is clean and orderly (the floor is clean, the tables are orderly, no garbage on the floor).	1	2	3	4
f)	Outside noise does not affect communication within the classroom.	1	2	3	4
g)	Learners each have enough space to work.	1	2	3	4
h)	Furniture is of the right size for learners to work comfortably.	1	2	3	4
i)	There are examples of learners' work or projects shown in the classroom.	1	2	3	4
j)	There are security guards at the school.	1	2	3	4
k)	The school is physically safe.	1	2	3	4
l)	There are security gates and walls around the school.	1	2	3	4
m)	There is lots of litter at the school	1	2	3	4

1b. Healthy Learning Environment: Hygiene and Sanitation
To what extent does the school environment achieve each of these qualities? Please use the rating scale provided to circle the most correct response for each item.
[SINGLE MENTION]

1 = Not achieved,	2 = Sometimes achieved,	3 = Mostly achieved,	4 = Fully achieved

		Not Achieved	Sometimes achieved	Mostly achieved	Fully achieved
a)	Learners and staff have ongoing, easy access to drinking water.	1	2	3	4
b)	Sinks that work properly with soap are near the toilets.	1	2	3	4
c)	Toilets are designed to allow learners privacy.	1	2	3	4
d)	There are enough working toilets available so that learners do not have to wait too long to use them.	1	2	3	4
e)	Toilets are safe and in a good state.	1	2	3	4
f)	Toilets are close to classrooms.	1	2	3	4
g)	Toilets and sinks are clean and hygienic.	1	2	3	4

1c. The school buildings are clean:

	Not Achieved	Sometimes achieved	Mostly achieved	Fully achieved
a) Grounds are clean.	1	2	3	4
b) Hallways are clean.	1	2	3	4
c) Classrooms are clean.	1	2	3	4
d) School buildings provide enough protection from the rain, heat, cold, wind and dust.	1	2	3	4
e) The school grounds are kept free of litter and garbage, except in selected bins.	1	2	3	4

f) The school grounds are kept free of unwanted animals (e.g. Stray dogs and cats) as well as animal waste. Any school pets are kept in clean conditions.		1	2	3	4

2. Reception at the school: (open-ended question)

- Helpfulness & cooperation (responsiveness - number of calls/emails – to the school contact to obtain cooperation and meet objectives, access to principal and staff, LO HOD/educator)
- Warmth – on telephone/email correspondence/in person
- Reception area and staff – warmth/delivery of messages/emails
- Organisation – how physically organised school was and what was the researcher's experience of this?
- Discipline – e.g. Walking with an educator while being harassed by learners and lack of action.
- Classrooms
- Evidence of learner care/interaction by staff
- Building school pride and showcasing learner achievements (having learners' trophies/guilds in the reception area/on show in another location)
- Physical school safety (theft, violence, substance abuse)
- Space
- Hygiene, sanitation and cleanliness
- Transportation
- Demographic factors– ethnicity, gender, culture
- Area it's located in (remote, rural/semi-rural, safety and crime, safety issues e.g. Maybe located in a remote area so it is not safe/people in the surrounding area are friendly and seem honest)
- Access to resources and resource mobilisation within the school e.g. Maybe they do not have resources but do use what they have. E.g. School nurse, counsellor, academic head, technological equipment, furniture, school grounds.
- Educator and staff qualifications, experience, expertise
- Learner behaviour e.g. Toward the researcher, staff and peers.
- Presence/evidence of interaction/involvement/networking with external stakeholders e.g. Police, NGO, peer education programme, the Department of Education.
- Number of learners in a class
- Principal's enthusiasm and taking responsibility for the school – assigning importance to study outcomes based on their representation of the school. E.g.

School principal trying his/her best to showcase positive aspects of the school and efforts they have been making to improve/maintain school's positive environment/image.

- Entertaining external stakeholders – e.g. Having peer educators approach them, NGOs – are they receptive to them and do they make arrangements to meet with them? Do they take their own initiative to build relationships with external partners e.g. School could have evidence of rapport with the local police station – have their phone numbers up on the wall for learners and staff access.
- Stigma/discrimination

Appendix B: Instrument – Learner Cross-sectional Survey

Questionnaire for learners - (estimate about 40 minutes)

FOR OFFICIAL USE ONLY	
INTERVIEW NO.	
DISTRICT	
SCHOOL	
DATE (dd/mm/yy)	
FIELD WORKER INITIALS	

A] Demographic information:
The Following Questionnaire is in partial fulfilment of the PhD. Degree in Psychology at the University of KwaZulu-Natal, Howard College Campus.
As you respond to each item, focus on your thoughts and feelings based on your own personal experiences as a learner at your school.
There are no right or wrong answers—we would like to know how you feel. Your responses will provide us with important information to help your school become better.
All your responses are completely anonymous. No one from your school will ever see your answers and no identifying information (name, ID, classroom, or survey ID) will be connected to your answers.
All learner results will be reported only in terms of how groups of learners responded. Your individual responses are never seen by your school or anyone else besides the researcher.
The survey should take you about 45 minutes to complete
Please complete the name of your school here:
1) School:

_____

Please fill out the following questionnaire by ringing the answer that applies to you.
USE A PENCIL SO YOU CAN ERASE A POSSIBLE INCORRECT ANSWER.
Please choose only one answer:
2) Grade: 9 / 11
3) Gender: Male / Female
4) Age: Years _____   Months _____
5) Race: White / Black / Indian / Coloured / Other _____
6) Home Language: English / Afrikaans / Zulu / Sotho / Xhosa / Other _____
7) Religion: Christian / Hindu / Muslim / African Religions / Other _____
8) Location of home (Please indicate the region within Durban):   _____
9) How many siblings (brothers and sisters) live at home with you? _____
10) How many adults live in your home? (Adults are over 21 years) _____

B] Main questionnaire

1. Classroom observation:
Safe classroom and school environment
How much does the school environment meet & achieve each of these qualities?
Please use the rating scale provided to mark the most appropriate response for each
item. Please only select 1 answer per statement.

1 = Not achieved,	2 = Somewhat achieved,	3 = Mostly achieved,	4 = Fully achieved

For example:

Your classroom is clean	1	~~2~~	3	4

Youth risk	Not achieved	Somewhat achieved	Mostly achieved	Fully achieved
n) Your classroom(s) is/are protected from the elements (solid roof, walls, and floor).	1	2	3	4
o) The classroom has enough ventilation.	1	2	3	4
p) The classroom is a comfortable temperature (learners are neither hot nor cold).	1	2	3	4
q) The classroom lighting is enough for learners to work.	1	2	3	4
r) The classroom is clean and orderly (the floor is clean, the tables are orderly, no garbage on the floor).	1	2	3	4
s) Outside noise does not affect communication within the classroom.	1	2	3	4
t) Learners each have enough space to work.	1	2	3	4
u) Furniture is of the right size for learners to work comfortably.	1	2	3	4
v) There are examples of learners' work or projects shown in the classroom.	1	2	3	4
w) There are security guards at your school.	1	2	3	4
x) Your school is physically safe.	1	2	3	4
y) There are security gates and walls around your school.	1	2	3	4

2. Please use the rating scale provided to circle the most appropriate response for each item. Only think of yourself and the learners in your school when completing these questions. Please only select 1 answer per statement.

1 = Never	2 = Sometimes	3 = Most of the time	4 = Always

	Never	Sometimes	Most of the time	Always
a) Do you feel that your belongings are safe at your school?	1	2	3	4
b) Do you feel that you are safe from bullying at your school?	1	2	3	4
c) Do you feel that you are safe from physical abuse and violence at your school?	1	2	3	4
d) During the past 12 months, how often have you been pushed, shoved, hit, etc. on school property?	1	2	3	4
e) During the past 12 months, how often have you seen or heard of learners being in a physical fight on school property?	1	2	3	4
f) During the past 12 months, how often have you been involved in a physical fight on school property?	1	2	3	4
g) During the past 12 months, how often have you seen or heard of learners being afraid of being beaten up on school property?	1	2	3	4

3a. Healthy Learning Environment: Hygiene and Sanitation
To what extent does the school environment achieve each of these qualities? Please use the rating scale provided to circle the most correct response for each item. [SINGLE MENTION]

1 = Not achieved,	2 = Sometimes achieved,	3 = Mostly achieved,	4 = Fully achieved

		Not Achieved	Sometimes achieved	Mostly achieved	Fully achieved
h)	Learners and staff have ongoing, easy access to drinking water.		1	2	3	4

		Not Achieved	Sometimes achieved	Mostly achieved	Fully achieved
i)	Sinks that work properly with soap are located close to toilets.	1	2	3	4
j)	Toilets are designed to allow learners privacy.	1	2	3	4
k)	There are enough working toilets available so that learners do not have to wait too long to use them.	1	2	3	4
l)	Toilets are safe and in a good state.	1	2	3	4
m)	Toilets are close to classrooms.	1	2	3	4
n)	Toilets and sinks are clean and hygienic.	1	2	3	4

3b. The school buildings are clean:

		Not Achieved	Sometimes achieved	Mostly achieved	Fully achieved
g)	Grounds are clean.	1	2	3	4
h)	Hallways are clean.	1	2	3	4
i)	Classrooms are clean.	1	2	3	4
j)	School buildings provide enough protection from the rain, heat, cold, wind and dust.	1	2	3	4
k)	The school grounds are kept free of litter and garbage, except in selected bins.	1	2	3	4
l)	The school grounds are kept free of unwanted animals (e.g. Stray dogs and cats) as well as animal waste. Any school pets are kept in clean conditions.	1	2	3	4

4. Caring Environment

How much does the school environment meet & achieve each of these qualities?
Please use the rating scale provided to circle the most correct response for each item.
[SINGLE MENTION]

1 = Never,	2 = Sometimes,	3 = Most of the time,	4 = Always

	Never	Sometimes	Most of the Time	Always
a) I feel like I belong at my school.	1	2	3	4
b) I feel like my ideas count at my school.	1	2	3	4
c) People really listen to me at my school.	1	2	3	4
d) I feel like I'm successful at my school.	1	2	3	4
e) My school is a comfortable place to hang out.	1	2	3	4
f) At my school I feel like I matter.	1	2	3	4
g) If I didn't show up, my peers at my school would notice I was not around.	1	2	3	4
h) The principal asks learners about their ideas at my school.	1	2	3	4
i) My school is a good place to be.	1	2	3	4
j) I feel like I belong at my school.	1	2	3	4
k) My school is important to me.	1	2	3	4

5. Sense of Belonging

How much do you agree or disagree with the following statements? Please use the rating scale provided to circle the most appropriate response for each item.

1 = Strongly agree,	2 = Agree,	3 = Neither,	4 = Disagree	5 = Strongly disagree

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
a) I feel proud of belonging to my school.	1	2	3	4	5

	1	2	3	4	5
b) I am treated with as much respect as other learners.	1	2	3	4	5
c) I feel very different from most other learners here.	1	2	3	4	5
d) The educators here respect me.	1	2	3	4	5
e) There's at least one educator or other adult in this school I can talk to if I have a problem.	1	2	3	4	5

6. Please tick the box which applies and then provide the reasons why below:

a. Are there any groups of learners that are not respected or treated differently by other people at your school?

Yes	No

Who are they and how are they treated?

_____
_____
_____
_____
_____

b. Do you feel respected in your school? Please tick the box which applies and then provide the reasons why below:

Yes	No

Please state the reasons why you feel this way:

_____
_____
_____
_____
_____

c. Do you feel accepted as a person at this school?

Yes	No

Please state the reasons why you feel this way:

_____
_____
_____
_____
_____

d. Do you feel that you can truly be yourself at this school?

Yes	No

What are the reasons you feel this way?

_____
_____
_____
_____
_____

7. Please answer the questions based on your experiences at the school you currently attend.
Please complete by ticking the box below that is true for you for each statement. **Please only tick ONE box per statement** and use the rating scale provided to mark the most appropriate response for each item.

1 = Strongly agree,   2 = Agree,   3= Disagree,   4 = Strongly Disagree

This school …

	Strongly Agree	Agree	Disagree	Strongly Disagree
is a supportive place for learners to learn.	1	2	3	4
is welcoming to parents and helps parents to be involved.	1	2	3	4
is a safe place for learners.	1	2	3	4
sets high standards for academic performance for all learners.	1	2	3	4
promotes academic success for all learners.	1	2	3	4
emphasises helping learners academically when they need it.	1	2	3	4
provides good enough counseling and support services for learners.	1	2	3	4
emphasises teaching LO lessons in ways which are helpful to learners.	1	2	3	4
is a supportive and inviting place for learners to be in.	1	2	3	4
promotes trust and unity among learners.	1	2	3	4
provides the materials and resources needed for you to learn effectively.	1	2	3	4
provides effective confidential support and referral services for learners who need help.	1	2	3	4

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m. Are there programmes outside of Life Orientation (LO) to assist learners with alcohol/substance abuse, violence, or other problems? Please state what programmes are available and what issues are dealt with?

_____
_____
_____
_____

8. Please answer the following questions with the first answer that comes to mind. Please tick Yes or No and then explain the reasons for you feeling this way:
a) Do you like your LO educator?

Yes	No

What are the reasons for you feeling this way?

_____
_____
_____
_____

b) Does your LO educator show you support and respect?

Yes	No

What are the reasons for you feeling this way? Please provide examples if they have, or have not shown you support and respect.

_____
_____
_____
_____

c) If you had a problem or were in need of help about a sensitive issue, would you go to your LO educator for help?

Yes	No

What are the reasons for you feeling this way? Please provide examples if they have, or have not shown you care.

_____
_____
_____
_____

d) Is there anyone else at school you would feel comfortable talking to if you had a problem or needed help with something personal?

Yes	No

What are the reasons for you feeling this way? Please provide examples if they have, or have not shown you care.

_____
_____
_____
_____

e) Do you consider your LO educator as a role model for you?

Yes	No

What makes or does not make your LO educator a role model for you?

_____
_____
_____
_____

9. Please answer the questions based on your experiences at the school you currently attend.
School Discipline
Please complete by ticking the box that is relevant to you below for each statement. Please only tick one box per statement and use the rating scale provided to circle the most appropriate response for each item.

1 = Strongly agree,	2 = Agree,	3 = Disagree,	4 = Strongly Disagree

		Strongly Agree	Agree	Disagree	Strongly Disagree
	This school clearly informs learners about what would happen if they break school rules.	1	2	3	4
	All learners are treated fairly when they break the rules.	1	2	3	4
	This school effectively handles learner discipline and behaviour problems.	1	2	3	4
	This school considers learners breaking the school rules on a case–by–case basis.	1	2	3	4
	This school punishes first–time abuse of alcohol or other drug use by at least an out–of–school suspension.	1	2	3	4
	This school applies zero tolerance policies.	1	2	3	4

10. Please complete by ticking the box that is relevant to you below for each statement. Please only tick one box per statement.

a. I follow the rules at school:

Never	On Occasion	Some of the Time	Most of the Time	All of the Time
1	2	3	4	5

b. I get in trouble at school:

Never	On Occasion	Some of the Time	Most of the Time	All of the Time
1	2	3	4	5

11. Please answer the questions based on your experiences at the school you currently attend.
Please complete by ticking the box that is relevant to you below for each statement. Please only tick one box per statement and use the rating scale provided to circle the most appropriate response for each item. [SINGLE MENTION]

1 = Never,	2 = Sometimes,	3 = Most of the time,	4 = All the time

		Never	Sometimes	Most of the time	All the time
a)	How much does this school work to prevent harassment or bullying?	1	2	3	4
b)	How much does this school provide assistance with conflict resolution or behaviour management?	1	2	3	4
c)	How much does this school provide teaching on prevention of alcohol or drug use?	1	2	3	4
d)	How much does this school provide in teaching on prevention of tobacco use?	1	2	3	4
e)	How much does the school provide in quality counselling or other ways to help learners with social or emotional needs?	1	2	3	4
f)	How much does the school provide in teaching on prevention of risky sexual behaviour?	1	2	3	4

12. Think about **your** experience in your school as you read each statement below. Then fill in an X in the box that best describes how much you agree or disagree with each statement and use the rating scale provided to circle the most appropriate response for each item. [SINGLE MENTION]

		Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
a)	My school tries to get learners to join in after school activities.	1	2	3	4	5
b)	Adults who work in my school treat learners with respect.	1	2	3	4	5
c)	In my school, we talk about ways to help us control our emotions.	1	2	3	4	5
d)	Many learners at my school go out of their way to treat other learners badly.	1	2	3	4	5
e)	Adults in my school seem to work well with one another.	1	2	3	4	5
f)	Learners in this school respect each other's differences (for example, gender, race, culture, etc.).	1	2	3	4	5
g)	In my school, we have learned ways to resolve disagreements so that everyone can be satisfied with the outcome.	1	2	3	4	5
h)	My school tries to get all families to be part of the school activities.	1	2	3	4	5
i)	My educators encourage me to try out new ideas (think independently).	1	2	3	4	5
j)	I have been insulted, teased, harassed or otherwise verbally abused more than once in this school.	1	2	3	4	5
k)	In my school, we talk about the way our actions will affect others.	1	2	3	4	5

l)	Learners have friends at school they can turn to if they have questions about homework.	1	2	3	4	5
m)	In my school, we discuss issues that help me think about how to be a good person.	1	2	3	4	5
n)	In my school, there are clear rules against physically hurting other people (for example, hitting, pushing or tripping).	1	2	3	4	5
o)	I have friends at school whom I can trust and talk to if I have problems.	1	2	3	4	5
p)	Adults in this school have high expectations for learners' success.	1	2	3	4	5
q)	People here notice when I am good at something.	1	2	3	4	5
r)	It is hard for people like me to be accepted here.	1	2	3	4	5
s)	Other learners in this school take my opinions seriously.	1	2	3	4	5
t)	Most educators at my school are interested in me.	1	2	3	4	5
u)	Sometimes I feel as if I don't belong here.	1	2	3	4	5
v)	There is at least one teacher or other adult in this school I can talk to if I have a problem.	1	2	3	4	5
w)	People at this school are friendly to me.	1	2	3	4	5
x)	Educators here are not interested in people like me.	1	2	3	4	5
y)	I am included in lots of activities at my school.	1	2	3	4	5
z)	I am treated with as much respect as other learners.	1	2	3	4	5
aa)	I feel very different from most other learners here.	1	2	3	4	5
bb)	People here know I can do good work.	1	2	3	4	5

cc)	I wish I were in a different school.	**1**	**2**	**3**	**4**	**5**
dd)	I feel proud to belong to my school.	**1**	**2**	**3**	**4**	**5**
ee)	Other learners here like me the way I am.	**1**	**2**	**3**	**4**	**5**

13. Please answer the following questions about LO lessons in sexuality, teenage pregnancy, STIs and HIV and AIDS:

a. What have you learnt from your LO teacher about sex, HIV and AIDS, teenage pregnancy and STIs **in 2015**? If you have not yet had lessons in sex and HIV and AIDS please state this.

_____
_____
_____
_____
_____

b. How many lessons have you had during LO about sex, HIV and AIDS, teenage pregnancy and STIs **in 2015**? [SINGLE MENTION]

None	1 – 3	4 – 6	6- 9	9 or more

c. How do you feel about learning about HIV and AIDS, teenage pregnancy, STIs and sexual issues from your LO educator?

_____
_____
_____
_____

d. Does your teacher do a good job teaching you about HIV and AIDS, teenage pregnancy, STIs and sexual topics? Please tick Yes or No and then provide an explanation as to why or why not.

Yes	**No**

Please state the reasons why or why not:

_____
_____
_____
_____

e. In your view does your LO educator have a good knowledge of HIV and AIDS, teenage pregnancy, STIs and sexual issues?

Yes	**No**

Please state the reasons why or why not:

_____
_____
_____
_____

f. Are condoms available to you at this school?

Yes	No	

g. Would you like condoms to be available to you at school?

Yes	No	

Please state your reasons for your answer above

_____
_____
_____
_____
_____

h. Do you feel that you are able to apply what you have learnt about sexuality which you learn in LO; to your personal life? Please provide a reason or reasons as to why you feel it does or does not do so.

Yes	No	

Please provide the reasons as to why or why not you feel it does do so:

_____
_____
_____
_____
_____

i. Do you feel that your school environment makes it easier to apply what you have learnt in the sexuality aspect of LO to your personal life? Please provide reasons and state how it does so. If it does not please also state how it does not do so.

_____
_____
_____
_____
_____

14. Parental Involvement in the School and Learners' Lives. Please mark your answers below with an "X". Please only select one answer per statement and use the rating scale provided from 1 – 4 as per below: [SINGLE MENTION]

1 = Never,	2 = Sometimes,	3= Most of the time,	4 = All the time

		Never	Sometimes	Most of the time	All the time
a)	My parents ask if my homework is complete.	1	2	3	4
b)	Would your parents know if you did not come home on time?	1	2	3	4
c)	When I am not at home, one of my parents knows where I am and who I am with.	1	2	3	4
d)	The rules in my family are clear.	1	2	3	4
e)	My family has clear rules about alcohol and drug use.	1	2	3	4
f)	If you drank some beer or wine or liquor (for example, vodka, whiskey, or gin) without your parents' permission, would you be caught by your parents?	1	2	3	4
g)	If you skipped school, would you be caught by your parents?	1	2	3	4
h)	Does your school try to get your parents involved in your schooling?	1	2	3	4
i)	Does your school let your parents know about LO lessons regarding sexuality and substance abuse?	1	2	3	4
j)	Does your school contact your parents if there is a problem with you or other learners or a general problem?	1	2	3	4
k)	This school is welcoming to and encourages parents' involvement.	1	2	3	4
l)	This school encourages parents to be an active partner in educating you.	1	2	3	4
m)	This school keeps parents well–informed about school activities.	1	2	3	4
n)	This school keeps parents well–informed about your progress in school.	1	2	3	4
o)	This school promptly responds to parents' phone calls, messages, or e–mails.	1	2	3	4
p)	This school allows input and welcomes parents' contributions.	1	2	3	4
q)	My school tries to get all families to be part of school activities.	1	2	3	4
r)	Parents know what is being taught to you during LO lessons.	1	2	3	4

s)	Parents are aware of what you learn about in HIV and AIDS education and prevention.	1	2	3	4

15. Learner Sexual and Substance Use Activity. Please mark your answers below with an "x". Example: X

1. Have you ever had sexual intercourse?

Yes
No

2. How old were you when you had sexual intercourse for the first time? [SINGLE MENTION]

I have never had sexual intercourse	1
11 years old or younger	2
12 years old	3
13 years old	4
14 years old	5
15 years old	6
16 years old	7
17 years old or older	8

3. During your life, with how many people have you had sexual intercourse? [SINGLE MENTION]

I have never had sexual intercourse	1
1 person	2
2 people	3
3 people	4
4 people	5
5 people	6
6 or more people	7

4. During the past 3 months, how many people did you have sexual intercourse with? [SINGLE MENTION]

I have never had sexual intercourse	1
I have had sexual intercourse, but not during the past 3 months	2
1 person	3
2 people	4
3 people	5
4 people	6
5 people	7

6 or more people	8

5. Did you drink alcohol or use drugs before you had sexual intercourse the last time?
[SINGLE MENTION]

I have never had sexual intercourse	1
Yes	2
No	3

6. The last time you had sexual intercourse, did you or your partner use a condom?

I have never had sexual intercourse	1
Yes	2
No	3

7. The last time you had sexual intercourse, what one method did you or your partner use to prevent pregnancy? Select only one response by ticking the number next to your response on the right:

I have never had sexual intercourse.	1
No method was used to prevent pregnancy.	2
Birth control pills.	3
Condoms	4
Any injectable birth control e.g. Depo-Provera, or any birth control ring e.g. Nuva Ring.	5
An implant or any IUD.	6
Withdrawal	7
Some other method – please state details:_____	8

8. Please tick the box that best applies to you in each row. Only select 1 answer per row.

8a.	Have you used condoms every time you have had sex in the past 3 months?	A. Yes		B. No		C. Does not apply	
b.	Have you ever had sex with someone when you did not want to?	A. Yes		B. No		C. Do not want to disclose	
c.	Have most of your friends had sex before?	A. Yes		B. No		C. Does not apply	
d.	Are most of your friends using condoms when they have sex?	A. Yes		B. No		C. Does not apply	D. Do not know

e.	In the past 30 days have you drunk any alcohol that involved having **more** than just a sip of alcohol?	**A. Yes, once.**		**B. Yes, more than once**		**C. No**	
f.	In the past 30 days has there been a time when you drank 5 or more alcoholic drinks in one day?	**A. Yes, once.**		**B. Yes, more than once**		**C. No**	
g.	In the past 30 days have you used any drugs such as Dagga (Zol/Weed), Cocaine, Crack, Mandrax, Ecstasy or any other illegal drugs?	**A. Yes, once.**		**B. Yes, more than once**		**C. No**	
h.	Do most of your friends drink alcohol?	**A. Yes**		**B. No**		**C. Not sure**	
i.	Do most of your friends use drugs?	**A. Yes**		**B. No**		**C. Not sure**	

Appendix C: Instrument – Educator In-depth Interview Guide

INTERVIEW GUIDE FOR PRINCIPALS/ LO EDUCATORS

Interview guide for principals and LO Educators

FOR OFFICIAL USE ONLY	
INTERVIEW NO.	
DISTRICT	
SCHOOL	
DATE (dd/mm/yy)	
FIELD WORKER INITIALS	

The Following Interview is in fulfilment for the PhD. Degree in Psychology at the University of KwaZulu-Natal, Howard College Campus.

All the information provided by you will be held strictly confidential and your anonymity will be preserved.

Please kindly respond to all the questions with the first answer that comes to mind. I am not looking for a correct answer but simply your opinion towards the given questions.

As you respond to each item, focus on your thoughts and feelings based on your own personal experiences as an educator at your school. There are no right or wrong answers—we want to know how you feel. Your responses will provide us with important information to help your school become better.

All your responses are completely anonymous. No one from your school will ever see your answers and no identifying information (name, ID, classroom, or survey ID) will be connected to your answers. Your individual answers are never seen by your school nor anyone other than the researcher.

The interview should take you approximately 45 minutes to complete

This interview is designed to provide schools with data useful for fostering a positive learning and working environment that promotes healthy wellbeing among all learners. Your participation is very important to ensure relevant and useful data.

Please answer the questions based on your experiences only at the school that asked you to complete it, not your experiences with the district overall or another school where you might also work or have been employed at in the past. Questions about staff or adults at the school refer to ALL staff — administrators, educators, educator assistants, counsellors, and all other certified and classified staff.

All responses are anonymous and confidential. A few questions ask for personal information, such as the work you do at the school, how long you have done it, and your race/ethnicity. But these reports will not be made public and are strictly confidential.

A) **Demographic information:**

Educator information:

1. Name of School: _____

2. Age: _____

3. Gender:

Male	Female

4. Home Language:

English	Afrikaans	Zulu	Sotho	Xhosa	Other _____

5. Language used to teach LO

English	Afrikaans	Zulu	Sotho	Xhosa	Other _____

6. Years of teaching experience?   _____ years

7. Number of years spent teaching LO   _____ years

8. Is LO your preferred subject to teach?

YES	NO

Please fill out the following questionnaire by ringing the alternative that is applicable to you. Please choose only one alternative:

9. Which Grade do you teach: 9 / 11/both Grade 9 & 11

10. Race: White / Black / Indian / Coloured / Other _____

11. Religion: Christian / Hindu / Muslim / African Religions / Other _____

12. Location of home: Please indicate the region within KwaZulu-Natal: _____

13. What is your role at this school?

A) LO Educator	B) LO Head Educator

14. How many years have you worked, in any position, at this school?

A) Less than one year
B) 1 to 2 years
C) 3 to 5 years
D) 6 to 10 years
E) Over 10 years

15. How many years have you worked in this school in your current position?

A) Less than one year
B) 1 to 2 years
C) 3 to 5 years
D) 6 to 10 years
E) Over 10 years

How would you describe the relationship you have with the learners in your LO classes? (ask about trust between them, openness, quality of the relationship)

- How does your relationship with learners influence the way you teach LO? (Does it influence how you teach LO or what you teach them about?) – Do you feel that they can relate to you as a good role model for them?

- Have learners approached you in the past to discuss personal issues with you?

How would you describe the support you receive from fellow educators, the HoD for LO and the principal to teach LO?
- How supportive are they of you teaching learners about HIV and AIDS and sex topics? (Who is not supportive?)
- To what extent do you feel that teaching learners about HIV and AIDS and sex is a priority at your school? (Are HIV and sex education seen as important issues by other staff members?)

How would you describe the parents' influence or involvement in the LO programme?
- Do the parents know what is being taught to their children during LO?
- Are parents aware of what you teach to the learners about HIV and AIDS education and prevention?

Broader school/structural environment and influence on the delivery of LO:

How would you describe the school environment? (stigma/ discrimination, violence, respect, support, etc.)
- In what way does this environment help you or hinder you in teaching learners about LO topics such as HIV/AIDS, sexual behaviour, healthy lifestyles, substance abuse, personal development etc.
- In what way does this school environment influence what you decide to teach learners in LO lessons? (are there things that prevent/enable you from/to teach(ing) certain aspects that you would like to teach)
- In your opinion, how does this school environment affect learners' participation and willingness to learn about HIV and sexual issues?

Now I am going to ask more specific questions about the school resources:
- Does the school have an HIV and AIDS and STI policy? Please provide details such as what is the main aim of the policy and who is it intended for i.e. learners and educators or learners only.
- Does the school have an HIV and AIDS prevention programme in place? Please provide the details of when, where, how, who is in charge, what activities are done, the objectives of the programme, the percentage of learners who attend out of those invited to attend and whether all learners are invited to attend.

- Does the school have a teenage pregnancy policy and programme in place? Please elaborate on who runs the programme and the proportion of learners who attend out of those invited?
- Is there a school nurse? Do you feel that the school nurse is approachable for learners who may be having personal problems such as teenage pregnancy, STI's or HIV and AIDS? Please state your reasons for your answer.
- Is there a school counsellor? Do you feel that the school counsellor is approachable for learners who may be having personal problems such as teenage pregnancy, STI's or HIV and AIDS? Please state your reasons for your answer above
- Do you feel that you as the LO educator/principal are approachable for learners who may be having personal problems such as teenage pregnancy, STI's or HIV and AIDS? Please state your reasons for your answer
- Does the school have a sick room? Is there any; and if so what is the type of infrastructure provided for those already pregnant/STI/HIV) affected?

- In view of everything that we've discussed in the interview, what do you believe are the most **important factors that help you to** teach the LO programme to learners at your school?
- What are the most important aspects you teach about sex and substance abuse to learners? If you have not yet covered lessons in sex and substance abuse in your career at this school; please state this.
- **Do you feel that learners are applying what they have learnt in the sexuality component of the LO curriculum to their personal daily lives?** What are the reasons for you feeling this way? Please provide examples or generalisations if you can.
- Do you feel that there is stigma experienced by learners with HIV and AIDS, STIs or are pregnant at the school? Please explain or provide examples if there is any stigma for those who have, STIs or who are pregnant.
- **Do you feel that the school provides a conducive/supportive environment for learners to apply what they have learnt in the sexuality component of the LO curriculum to their personal daily lives?** What are the reasons for you feeling this way? Please provide examples or generalisations if you can.

- What are some of the **main obstacles and challenges** that make it difficult for you to teach the LO programme?

Appendix D: Instrument – Parent Focus Group Discussion Guide

FOCUS GROUP GUIDE FOR PARENTS
Demographic information of the focus group participants:
School of learner:_____

Learner grade:

9	11

Ages:_____
Level of education:_____
Gender: _____Male   _____Female
Employment status:
(Employed/unemployed)_____
_____
_____
_____

1. **Is this school a safe place for your child/children and what are the reasons**
- Physical safety – gates, walls
- Hygiene – sanitation, wellbeing and maintenance of the school
- Safety from other learners – bullying/violence/fighting
- Safety from other learners/staff in terms of theft and learner possessions.
- Emotional safety in terms of peer pressure for alcohol/cigarette/drug abuse and sexual activity.

2. **Do you feel that you children are cared for by the school?**
   - Educator care – will they notice and inform parents of absenteeism or if something was wrong?
   - Does any other educator other than their registration educator care?
   - Does any other staff member at the school – school nurse/receptionists/principle/school counsellor care? (Does the school have these staff member available for your child/children to contact?)
3. **Do you feel that your child/children is/are respected by peers, educators and support staff within their school and do your children have connectedness to the school?**
   - Do your child/children have any problems "fitting in" at school? If so what are the problems
   - If so, have these problems been addressed by *you* and have they been noticed by *the school*? Is anyone at the school doing anything to assist your child/children?
   - In your opinion is/are your child/children respected by their peers at the school?

- In your opinion is/are your child/children respected by their educators and other staff at the school?

4. **Do you feel that learners have networks of social support they can access within their schools and were you made aware of these networks?**
   - What are the networks of social support – school nurse/counsellor/LO educator/out of school programme(s) that target teenage risky behaviour prevention and assistance?
   - Are you aware of the networks?
   - How were you made aware of the networks?
   - What is your opinion of the social support networks?
   - Would you approve and encourage your child/children to access these networks if they need to?

5. **Do you feel that your child/children has/have positive role models at the school from which they can learn positive behaviour from?**
   - Are you happy with the LO educator being a role model for your children? What are the reasons for this?
   - Are you happy with other educators and other school staff being role models for your children? What are the reasons for this?
   - If you are happy with the educators being role models, do you feel the staff at the school lead by example? What are the reasons for you feeling this way?
   - Has your child/children ever experienced a problem where the educator/counsellor/school nurse or another school staff member assisted them and was an example they aspired (wanted) to be?

6. **What is your perception of the discipline and order within the school environment?**
   - Does this school clearly tell students in advance what will happen if they break school rules?
   - Does this school enforce school rules equally and fairly for my child and all students?
   - Does this school effectively handle student discipline and behavioural problems?
   - Does this school consider sanctions (permission) for student violations of rules and policies on a case–by–case basis with a wide range of options?
   - Does this school punish first–time violations of alcohol or other drug policies by at least an out– of– school suspension?
   - Does this school enforce zero tolerance policies for learners if they break school rules?
   - Does this school effectively handle student discipline and behavioural problems?

7. **How does the school environment impact on risky behaviour change? How does the school provide a supportive environment for programmes that target behaviour change?**
   - Do you find an improvement in your child's or other children's (that you may be aware of) risky sexual behaviour (delay of onset of sexual intercourse/use of contraceptives, decrease in number of partners, decrease in sexual interest i.e. not wanting to date/wear revealing clothing, wanting to use contraceptives, not abusing substances, not going out until late with the opposite gender)?
   - If so, do you feel that the school may play a role in this improvement?
     - ○ Which aspect do your think most played a role – LO sexuality education or co-curricular programmes or another outside programme or the counsellor or school nurse or educators or school policy?
     - ○ Do you believe the LO curriculum is beneficial to your child's wellbeing specifically looking at risky sexual behaviour prevention?
   - Are you happy with having your child/children in the school environment and do you feel it enables them to reduce risky behaviour?
   - Do you find the school environment reinforces what you are teaching your child about risky sexual behaviour and substance abuse prevention?
   - Do you find that the LO curriculum sexuality education teachings reinforces what you teach your child about risky sexual behaviour prevention?
   - Do you speak to your child about risky sexual behaviour prevention or do you leave it to the school?

8. **What is your opinion of the overall school climate i.e. the values, morals, discrimination, stigma, acceptance and tolerance etc.**
   - Are you aware of learners with HIV and AIDS/STIs or pregnancy that have been discriminated against or stigmatised by learners/educators and other staff at the school? Please provide examples (no names).
   - What is your opinion of the values and morals taught at the school?
   - Do you feel the school is tolerant and has acceptability for learners of different races/gender/sexual orientation/HIV positive/pregnant/have STIs etc.

9. **How do you think your child/children feel(s) about being able to apply what they have learnt in LO in the context of their school environment?**
   - Do you think that the sexuality education component of the LO curriculum is worthwhile learning for your child/children and what are the reasons for this?
   - Do you feel your child/.children is/are learning these lessons?
   - Do you feel your child/children are applying these lessons in his/her/ their daily lives?

- Do find that the school environment enables/discourages learners from applying what is learnt in the sexuality and risky behaviour component of the LO lessons to their daily lives?

10. **The next few questions are to explore your perceptions and experiences of the school environment in terms of being conducive to LO's sexuality educations' aims. It also explores parents overall support for the learner's school connectedness.**
    - Is this school welcoming and does it facilitate parent involvement?
    - Does this school allow input and welcome parents' contributions?
    - Does this school encourage me to be an active partner in educating my child?
    - Does this school keep me well–informed about school activities?
    - Does this school keep me well–informed about my child's progress in school?
    - Does this school promptly respond to my phone calls, messages, or e–mails?
    - Does this school allow input and welcome parents' contributions?
    - Are you aware of what is being taught in the sexuality component of the LO curriculum?
    - How comfortable are you to let you child/children be taught what is being taught in the sexuality component of the LO curriculum?
    - Have you had any contact from the school about what is being taught in sexuality component of the LO curriculum to support the aims of risky teenage pregnancy/STI/HIV and AIDS and substance abuse prevention?
        o How did they contact you – via letter/email/phone/homework book/learner communication?
        o What did they contact you about?
        o Did they ask for your feedback?

11. **How do you see your role in the school and how would you want to be involved in the school?**
    - Do you see yourself as an involved parent of your child as a learner in the school?
    - In what ways would you like to be involved in the school?

Appendix E: Letter of Informed Consent– Learners

INFORMED CONSENT FORM FOR LEARNERS (QUANTITATIVE)
INFORMED CONSENT TO PARTICIPATE IN RESEARCH

Research Project:

A review of secondary schools as supportive environments for HIV prevention and sexuality education amongst secondary school learners in Durban and surrounding areas, KwaZulu-Natal, South Africa.

1. The researcher is asking you to take part in this research study to help them understand how learners and parents perceive and experience their school environments. The researcher wants to determine whether the school environment is suitable to promote the aims of the LO programme

2. This research study has been granted ethical approval from the University of KwaZulu-Natal Human and Social Sciences Research Ethics Committee. Should you wish to contact them; their contact details are: 031 260 4769 or 031 260 3587

3. The research study is being conducted by a PhD student from the University of KwaZulu-Natal and not the educators or the school itself. The regional Department of Basic Education KwaZulu-Natal has given permission for the researchers to conduct the study among Grade 9 and Grade 11 learners at the school and has reviewed the PhD students study proposal and questionnaires.

4. The researcher would like you to fill in a questionnaire that will be given to you by a PhD student from the University of KwaZulu-Natal. You have been randomly selected from classes of grade 9 or 11 learners in your selected school.

5. If you agree to participate in this study, the questionnaire you will complete will ask questions about these topics: family and home environment, views on safety, being cared for and respected by peers, educators and support staff within the school, views on the overall school environment and perceptions on parental involvement and awareness of the school and LO programme. You will not be forced to fill in any sensitive information you do not want to reveal.

6. Participation is voluntary and you are free to withdraw at any stage. You will not be disadvantaged or penalised by your school should you not want to participate in the study.

7. Your participation will help us to understand how the school can be a context that supports the aims of the LO curriculum to promote learner wellbeing especially within the area of risky sexual behaviour.

8. If you agree to participate, your identity will be kept confidential and you will be allowed to participate on an anonymous basis without writing your name on the questionnaire you complete. We will not share any information you provides us with by name to any of the staff from the school. The research reports and publications from this study will be reported at the level of the school, area or district and not by the names of learners who participated. All the questionnaires will be stored in a secure location and only the researchers will be allowed access to them.

9. The questionnaires will take learners roughly 40 minutes to complete and will be supervised by the PhD student and an educator from the school.

10. If you have any questions after today you can call the researcher, Ms. Candice Alexis Jimmyns (031) 261-5880 or the researcher's supervisor, Prof. Anna Meyer-Weitz (031-260 7618) or Humanities and Social Science Research Ethics Committee (HSSREC) representative, Ms. Phumelele Ximba (031) 2603587 or on ximbap@ukzn.ac.za.

11. Signing your name at the bottom means you agree to participate in this study, in keeping with the conditions specified below.

Please cut---

I, _____ (name) give my consent to participate in the study described above. I understand that my participation is entirely voluntary, that my identity will not be reported in any publications or reports and that I can withdraw from the study at any time.

_____

Learner's signature   **Date**_____

Appendix F: Letter of Informed Consent– Parents of Learners

APPENDIX F: INFORMED CONSENT FOR PARENTS OF LEARNERS TO PARTICIPATE IN RESEARCH

Research Project: A review of secondary schools as supportive environments for HIV prevention and sexuality education amongst secondary school learners in KwaZulu-Natal, South Africa.

1. The researcher is asking your permission for your child to take part in this research study to help them understand how learners and parents perceive and experience their school environments and its impact on learner internalisation of messages taught by the sexuality education component of the LO curriculum. The researcher wants to determine whether or not the school environment is suitable to promote the sexuality education aims of the LO programme.

2. This research study has been granted ethical approval from the University of KwaZulu-Natal Human and Social Sciences Research Ethics Committee. Should you wish to contact them their contact details are: 031 260 4769 or 031 260 3587

3. The research study is being conducted by a PhD student from University of KwaZulu-Natal and not the educators or the school itself. The Department of Basic Education has given permission for the researchers to conduct the study among Grade 9 and Grade 11 learners at the school and has reviewed the researchers' study proposal and questionnaires.

4. The researcher would like your child to fill in a questionnaire that will be given to them by a PhD student of the University of KwaZulu-Natal. Learners have been randomly selected from classes of grade 9 or 11 learners in the selected schools.

5. If you agree to let your child participate in this study, the questionnaire your child will complete will ask them questions about these topics: family and home environment, views on safety, being cared for and respected by peers, educators and support staff within the school, views on the overall school environment and perceptions of parental involvement and awareness in the school and LO programme. Your child will not be forced to fill in any sensitive information they do not want to reveal.

6. Participation is voluntary and your child is free to withdraw at any stage. You child will not be disadvantaged or penalised by their school should you not want them to participate in the study.

7. Your child's participation will enable us to understand how the school can be a context that supports the aims of the LO curriculum to promote learner wellbeing especially within the area of risky sexual behaviour.

8. If you agree to allow your child to participate, their identity will be kept confidential and they will be allowed to participate on an anonymous basis without writing their names on the questionnaires they complete. We will not share any information your child provides us with by name to any of the staff from the school. The research reports and publications from this study will be reported at the level of the school, area or district and not by the names of learners who participated. All the questionnaires will be stored in a secure location and only the researchers will be allowed access to them.

9. The questionnaires will take learners roughly 40 minutes to complete and will be supervised by the PhD student and a teacher from the school.

10. If you have any questions after today you can call the researcher, Ms. Candice Alexis Jimmyns (031) 261-5880 or the researcher's supervisor, Prof. Anna Meyer-Weitz (031) 260 7618 or Humanities and Social Science Research Ethics Committee (HSSREC) representative, Ms. Phumelele Ximba (031) 2603587 or on ximbap@ukzn.ac.za.

11. Signing your name at the bottom means you agree to let your child participate in this study, in keeping with the conditions specified below.

Please cut--
I, _____ (parent/guardian) give permission for
_____(learner) to participate in the study described above. I understand

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that their participation is entirely voluntary, that their identity will not be reported in any publications or reports and that they can withdraw from the study at any time.

_____   _____

Parent/ Guardian signature   **Date**

Appendix G: Letter of Informed Consent– Principal/LO Educator
INFORMED CONSENT TO PARTICIPATE IN RESEARCH
Research Project: A review of secondary schools as supportive environments for HIV prevention and sexuality education amongst secondary school learners in KwaZulu-Natal, South Africa.

1. The researcher is asking you to take part in this research study to help us understand how learners, educators and parents perceive and experience their school environments. The researcher wants to determine whether the school environment is suitable to promote the aims of the sexuality education component of the LO programme

2. This research study has been granted ethical approval from the University of KwaZulu-Natal Human and Social Sciences Research Ethics Committee. Should you wish to contact them their contact details are: (031) 260 4769 or (031) 260 3587.

3. The research study is being conducted by a PhD student from University of KwaZulu-Natal and not the educators or the school itself. The regional Department of Basic Education KwaZulu-Natal has provided permission for the PhD student to conduct the study among Grade 9 and Grade 11 learners at the school and has reviewed the PhD student's study proposal and questionnaires.

4. The researcher would like you to participate in an interview that will be facilitated by the PhD student from the University of KwaZulu-Natal. You have been randomly selected from educators who teach the LO curriculum to classes of grade 9 or 11 learners in your selected school.

5. The interview will take roughly 45 minutes in duration and will be conducted during your break time or free periods. You will be asked permission for the PhD student to record the interview with an audio recorder.

6. If you agree to participate in this study, you will be asked to share your views of learners' family and home environment, views on school safety, perceptions of learners being cared for and respected by peers, educators and support staff within the school, views on the overall school environment and perceptions on parental involvement and awareness in the school and LO programme. You will not be forced to share any sensitive information that you do not want to reveal.

7. Participation is voluntary and you are free to withdraw at any stage. You will not be disadvantaged or penalised by your school should you not want to participate in the study.

8. Your participation will help us to understand how the school can be a context that supports the aims of the LO curriculum to promote learner wellbeing especially within the area of risky sexual behaviour.

9. If you decide to participate, your identity will be kept confidential and you will be allowed to participate on an anonymous basis. We will not share any information you provide us with by name to any of the staff from the school. The research reports and publications from this study will be reported at the level of the school, area or district and not by the names of principals/LO educators who participated. The recordings from the interviews will be stored in a secure location and only the researchers will be allowed access to them.

10. If you have any questions after today you can call the researcher, Ms. Candice Alexis Jimmyns (031) 261-5880 or the researcher's supervisor, Prof. Anna Meyer-Weitz on (031) 260 7618 or Humanities and Social Science Research Ethics Committee (HSSREC) representative, Ms. Phumelele Ximba (031) 2603587 or on ximbap@ukzn.ac.za.

11. Signing your name at the bottom means you agree to participate in this study, in keeping with the conditions specified below.

Please cut--

I, _____(name) give my consent to participate in the study described above. I understand that my participation is entirely voluntary, that my identity will not be reported in any publications or reports and that I can withdraw from the study at any time. I consent to audio recordings of the interview.

_____   _____

Educator's signature   **Date**

Appendix H: Letter of Informed Consent– Parents

Appendix H: Letter of Informed Consent–Focus Group Discussions with Parents
INFORMED CONSENT FORM FOR PARENTS (QUALITATIVE) TO PARTICIPATE IN RESEARCH
Research Project: A review of secondary schools as supportive environments for HIV prevention and sexuality education amongst secondary school learners in KwaZulu-Natal, South Africa.

1. The researcher is asking you to take part in this research study to help us understand how learners and parents perceive and experience their school environments. The researcher wants to determine whether the school environment is suitable to promote the aims of the sexuality education component of the LO programme.
2. This research study has been granted ethical approval from the University of KwaZulu-Natal Human and Social Sciences Research Ethics Committee. Should you wish to contact them their contact details are: 031 260 4769 or 031 260 3587.
3. The research study is being conducted by a PhD student from the University of KwaZulu-Natal and not the educators or the school itself. The regional Department of Basic Education KwaZulu-Natal has given permission for the PhD student to conduct the study among Grade 9 and Grade 11 learners at the school and has reviewed the PhD student's study proposal and questionnaires.
4. The researcher would like you to participate in a focus group with roughly six or seven other learners' parents that will be facilitated by the PhD student from the University of KwaZulu-Natal.
5. The focus group will take roughly 40 minutes in duration and will be conducted during their break time or free periods depending on your school's permission. You will be asked permission for the PhD student to record the focus group with an audio recorder.
6. If you agree to participate in this study, you will be asked to share your family and home environment, views on safety, perceptions of your child being cared for and respected by peers, educators and support staff within the school, views on the overall school environment and perceptions on parental involvement and awareness in the school and LO programme. You will not be forced to share any sensitive information you do not want to reveal.
7. Participation is voluntary and you are free to withdraw at any stage. You will not be disadvantaged or penalised by the school should you not want to participate in the study.
8. Your participation will help us to understand how the school can be a context that supports the aims of the LO curriculum to promote learner wellbeing especially within the area of risky sexual behaviour.
9. If you participate, your identity will be kept confidential and you will be allowed to participate on an anonymous basis. The researcher will not share any information you provide us with by name to any of the staff from the school. The research reports and publications from this study will be reported at the level of the school, area or district and not by the names of those who participated. The recordings from the focus groups will be stored in a secure location and only the researcher will be allowed access to them.
10. If you have any questions after today you can call the researcher, Ms. Candice Alexis Jimmyns (031) 261-5880 or the researcher's supervisor, Prof. Anna Meyer-Weitz on (031 260 7618) or Humanities and Social Science Research Ethics Committee (HSSREC) representative, Ms. Phumelele Ximba (031) 2603587 or on ximbap@ukzn.ac.za.
11. Signing your name at the bottom means you agree to participate in this study, in keeping with the conditions specified below.

Please cut--
Informed Consent Form
I, _____ (name) give permission for myself to participate in the study described above. I understand that my participation is entirely voluntary, that my identity will not

be reported in any publications or reports and that I may withdraw from the study at any time. I consent to audio recordings of the interview.

_____   _____

Parent/ Guardian signature   **Date**

Appendix I: Informed Consent letter for Educators and Parents for participation in Interviews and Focus Group Discussion Recordings.

Social Sciences, College of Humanities,
University of KwaZulu-Natal,
Howard College Campus,
Durban
South Africa
4091

Dear Participant

INFORMED CONSENT LETTER

My name is Candice Alexis Jimmyns. I am a Social Science PhD candidate studying at the University of KwaZulu-Natal, Howard College campus, Durban, South Africa.

I am interested in learning about whether, to what extent and how the school environment provides support for the teaching of the Life Orientation Curriculum; specifically in assisting prevention of HIV and AIDS, STIs, teenage pregnancy and risky sexual behaviour in secondary school-aged learners in KwaZulu-Natal.

I am studying schools in Durban and nearby surrounding areas. Your school is one of the schools in which I am conducting interviews and focus groups. To gather the information, I am interested in asking you some questions.

Please note that:

- Your confidentiality is guaranteed as your inputs will not be attributed to you in person, but reported only as a population member opinion.
- The interview may last for about 1 hour and may be split depending on your preference.
- Any information given by you cannot be used against you, and the collected data will be used for purposes of this research only.
- Data will be stored in secure storage and destroyed after 5 years.
- You have a choice to participate, not participate or stop participating in the research. You will not be penalized for taking such an action.
- The research aims to discover whether, to what extent and how your school provides a supportive environment for the promotion of the Life Orientation Curriculum's aims of prevention of risky sexual behaviour.
- Your involvement is purely for academic purposes only, and there are no financial benefits involved.
- If you are willing to be interviewed, please indicate (by ticking as applicable) whether or not you are willing to allow the interview to be recorded using the following equipment:

	Willing	Not willing

Audio equipment		
Photographic equipment		
Video equipment		

I can be contacted at:

Email: alexisjimmns@gmail.com
Cell: +27739845366

My supervisor is Professor Anna Meyer-Weitz who is located at the School of Psychology, Howard College campus of the University of KwaZulu-Natal.

Contact details: email: meyerweitza@ukzn.ac.za   Phone number: +27312607618.

You may also contact the Research Office through:

P. Mohun
HSSREC Research Office,
Tel: 031 260 4557 E-mail: mohunp@ukzn.ac.za

Thank you for your anticipated contribution to this research.

Yours sincerely,
Ms. Candice Jimmyns

DECLARATION

I………………………………………………………………… (full names of participant) hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participate in the research project.

I understand that I am at liberty to withdraw from the project at any time, should I so desire.

SIGNATURE OF PARTICIPANT   DATE

…………………………………………   …………………………………

Appendix J: Letter Requesting Access to Schools – Provincial Department of Basic Education

Dear Sir/madam,

I am a PhD. student of Psychology at the University of KwaZulu-Natal and I would like to conduct research in fulfilment of my degree at various secondary schools in the Durban and surrounding districts area; during the course of this year. I would like to request permission from the KwaZulu-Natal Department of Basic Education's relevant districts to carry out my fieldwork. The districts that I intend using to conduct my research in are the Umgungundlovu, Durban Central, Phoenix, Pinetown and Ilembe districts.

The study will aim to understand how learners, educators and parents of learners feel about and experience their school environments to determine whether these external conditions are conducive to the aims of the sexuality education component of the LO programme to investigate the impact on learners' risky sexual behavior attitudes and behaviour . Please see my attached research proposal as well as proof of registration for further details of the study.

If I am granted permission to conduct my study in the selected districts in KwaZulu-Natal, I would kindly request a letter from the KwaZulu-Natal Department of Basic Education in order to obtain ethical clearance for my study as well as to present at the schools at which I intend to conduct fieldwork .

My supervisor is Professor Anna Meyer-Weitz from the University of KwaZulu-Natal. Both our contact details are below should you require any further information.

I look forward to your response.

Kind regards,
Candice Jimmyns

Ms. Candice Jimmyns
PhD student
University of KwaZulu-Natal
Tel: 031 261 5880
Email: 208525636@stu.ukzn.ac.za

Prof. Anna Meyer-Weitz
Head of School and Senior Professor
University of KwaZulu-Natal
Tel: 031 260 7618
Email: meyerweitza@ukzn.ac.za

Ms. Phumelele Ximba
UKZN Ethics committee
Research Office, UKZN
Tel: 031 360 3587
E-mail: ximbap@ukzn.ac.za

Appendix K: Letter Requesting Access to Schools – School Principals

<div align="right">

University of KwaZulu-Natal
Glenwood
Durban
4001

</div>

June 2014

Re: Request for permission to conduct research among staff, learners and parents of learners

Dear

I am approaching you to request your permission to conduct a research study at your school in fulfilment of a PhD in Psychology degree. This study has been approved by the Department and Basic Education (DBE) and its aim is to conduct research around the implementation of the sexuality education component of the (LO) programme in relation to the school environment in order to investigate the impact of sexuality education through the LO curriculum on learner attitudes and internalisation toward the prevention of risky sexual practices. I have attached herewith a letter from the provincial DBE that indicates their approval for the study.

The researcher intends to examine the factors associated with the implementation of the LO programme that can be used to develop recommendations to enhance the school environment in order to improve the internalisation of messages taught within the revised LO curriculum in South African schools.

I approach your school in the hope that I may conduct a small study amongst the Grade 9 and 11 learners, LO educators, LO Heads of Department as well as parents, that will enable me to collect data on the school environment in relation to the aims of the LO curriculum. In terms of the nature of the research request, I would like to conduct an observation of the school, have two classes each of learners from Grade 9 and 11 complete our questionnaires & LO Heads of Department complete interviews. I would also be grateful for the opportunity to conduct 2 focus groups (five to six parents of learners per group) with both the Grade 9 and 11 parents of learners, as well as conduct a school environment observation with the principal or LO Head. This will assist me to gain the learners', educators', principal's and parents' suggestions for school environment improvement. The questionnaires, interviews as well as the focus groups and will take approximately 40 minutes to complete and will be undertaken by myself, a student of Psychology at the University of KwaZulu-Natal and not by the DBE. Participants will generally be asked about their views and experiences of the LO programme, their perceptions of the school environment and relationships between educators, learners and community organisations.

As specified by the DBE, I would like to conduct my research at a time convenient to all participants involved. No one will be forced to share any sensitive information they do not want to reveal and their participation will be on a voluntary and confidential basis. I kindly request the schools' permission to conduct this research study amongst these individuals during the period of

18 January – 18 February 2016. I will ensure that the research is carried out under conditions in which the respect and dignity of all participants is thoroughly maintained. Please feel free to contact myself or my supervisor, Professor Anna Meyer-Weitz, with the contact details below should you have any further questions or queries.

Kind regards

Ms. Candice Jimmyns
PhD student
University of KwaZulu-Natal
Tel: 031 261 5880
Email: 208525636@stu.ukzn.ac.za

Prof. Anna Meyer-Weitz
Head of School and Senior Professor
University of KwaZulu-Natal
Tel: 031 260 7618
Email: meyerweitza@ukzn.ac.za

Ms. Phumelele Ximba
UKZN Ethics committee
Research Office, UKZN
Tel: 031 360 3587
E-mail: ximbap@ukzn.ac.za

University of KwaZulu-Natal
Glenwood
Durban
4001

June 2014

Re: Request for permission to conduct research among staff, learners and parents of learners

Dear Parent,

I am approaching you to request your permission to involve your child in a research study at your child's school in fulfillment of a PhD in Psychology degree. This study has been approved by the Department and Basic Education (DBE) and its aim is to conduct research around the implementation of the sexuality education component of the Life Orientation (LO) programme in relation to the school environment. I have attached herewith a letter from the provincial DBE that indicates their approval for the study.

The research intends to examine the factors associated with the implementation of the LO programme that can be used to develop recommendations to enhance the school environment in order to improve the internalisation of messages taught within the revised LO curriculum in South African schools.

I would like your permission for your child to participate in this research study as it involves randomly selected Grade 9 and 11 learners, LO educators, LO Heads of Department as well as parents, that will enable me to collect data on the school environment in relation to the aims of the LO curriculum. In terms of the nature of the research request, I would like to have two classes of learners from Grade 9 and 11 as well as the LO educators and LO Heads of Department complete our questionnaires. I would also be grateful for the opportunity to conduct 2 focus groups (five to six parents of learners per group) with both the Grade 9 and 11 parents of learners, as well as conduct a school environment observation with the principal or LO Head. This will assist me to gain the learners', educators', principal's and parents' suggestions for school environment improvement. The questionnaires as well as the focus groups and will take approximately 40 minutes to complete and will be undertaken by myself, a student of Psychology at the University of KwaZulu-Natal and not by the DBE. Participants will generally be asked about their views and experiences of the LO programme, their perceptions of the school environment and relationships between educators, learners and community organisations.

As specified by the DBE, I would like to conduct my research at a time convenient to all participants involved. No one will be forced to share any sensitive information they do not want to reveal and their participation will be on a voluntary and confidential basis. I kindly request the schools' permission to conduct this research study amongst these individuals during July/August 2014. I will ensure that the research is carried out under conditions in which the respect and dignity

of all participants is thoroughly maintained. Please feel free to contact myself or my supervisor, Professor Anna Meyer-Weitz, with the contact details below should you have any further questions or queries.

Kind regards

Ms. Candice Jimmyns   Prof. Anna Meyer-Weitz
PhD student   Head of School and Senior Professor
University of KwaZulu-Natal   University of KwaZulu-Natal
Tel: 031 261 5880   Tel: 031 260 7618
Email: 208525636@stu.ukzn.ac.za   Email: meyerweitza@ukzn.ac.za

Please sign the form below if you provide permission for your child to participate in this research study:

I (full name)_____, provide my consent for my child to participate in this research study. Signed at_____ on _____day of _____ 2014.

_____

(Signature here please)

education

Department:
Education
PROVINCE OF KWAZULU-NATAL

Enquiries: Nomangisi Ngubane	Tel: 033 392 1004	Ref.:2/4/8/431

Ms CA Jimmyns
52 Somerset Country Estate
450 Queen Elizabeth Avenue
WESTRIDGE
4091

Dear Ms Jimmyns

PERMISSION TO CONDUCT RESEARCH IN THE KZN DoE INSTITUTIONS

Your application to conduct research entitled: **"PARENTAL INVOLVEMENT AND A SUPPORTIVE SCHOOL CLIMATE FOR SEXUALITY EDUCATION IN SECONDARY SCHOOLS, KWAZULU-NATAL",** in the KwaZulu-Natal Department of Education Institutions has been approved. The conditions of the approval are as follows:

1.   The researcher will make all the arrangements concerning the research and interviews.
2.   The researcher must ensure that Educator and learning programmes are not interrupted.
3.   Interviews are not conducted during the time of writing examinations in schools.
4.   Learners, Educators, Schools and Institutions are not identifiable in any way from the results of the research.
5.   A copy of this letter is submitted to District Managers, Principals and Heads of Institutions   where the intended research and interviews are to be conducted.
6.   The period of investigation is limited to the period from 05 June 2015 to 31 July 2016.
7.   Your research and interviews will be limited to the schools you have proposed and approved by the Head of Department. Please note that Principals, Educators, Departmental Officials and Learners are under no obligation to participate or assist you in your investigation.
8.   Should you wish to extend the period of your survey at the school(s), please contact Miss Connie Kehologile at the contact numbers below.
9.   Upon completion of the research, a brief summary of the findings, recommendations or a full report / dissertation / thesis must be submitted to the research office of the Department. Please address it to The Office of the HOD, Private Bag X9137, Pietermaritzburg, 3200.
10.   Please note that your research and interviews will be limited to schools and institutions in KwaZulu-Natal Department of Education.

(See list attached)

Nkosinathi S.P. Sishi, PhD
Head of Department: Education
Date: 09 June 2015
KWAZULU-NATAL DEPARTMENT OF EDUCATION
POSTAL: Private Bag X 9137, Pietermaritzburg, 3200, KwaZulu-Natal, Republic of South Africa   ...dedicated to service and performance
PHYSICAL: 247 Burger Street, Anton Lembede House, Pietermaritzburg, 3201. Tel. 033 392 1004**beyond the call of duty**
EMAIL ADDRESS: kehologile.connie@kzndoe.gov.za / Nomangisi.Ngubane@kzndoe.gov.za

Appendix N: Ethical Clearance from the University of KwaZulu-Natal

UNIVERSITY OF ™
KWAZULU-NATAL
─────────────────
INYUVESI
YAKWAZULU-NATALI

19 November 2015

Ms Candice A Jimmyns 208525636
School of Applied Human Sciences-Psychology
Howard College Campus

Dear Ms Jimmyns

Protocol Reference Number: HSS/1112/015D
Project Title: Parental involvement and a supportive school climate for sexuality education in Secondary Schools, KwaZulu-Natal

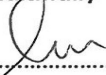**Full Approval – Committee Reviewed Protocol**

With regard to your response received on 13 November 2015 to our letter 9 October 2015, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol have been granted **FULL APPROVAL**

Any alterations to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project; Location of the Study, Research Approach/Methods must be reviewed and approved through an amendment /modification prior to its implementation. Please quote the above reference number for all queries relating to this study. Please note: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

Best wishes for the successful completion of your research protocol.

Yours faithfully

....
Dr Shenuka Singh (Chair)
Humanities & Social Sciences Research Ethics Committee

/pm

cc Supervisor: Professor Ann Meyer-Weitz
cc Academic Leader Research: Dr Jean Steyn
cc School Administrators: Ms Ayanda Ntuli

Humanities & Social Sciences Research Ethics Committee
Dr Shenuka Singh (Chair)
Westville Campus, Govan Mbeki Building
Postal Address: Private Bag X54001, Durban 4000
Telephone: +27 (0) 31 260 3587/8350/4557 Facsimile: +27 (0) 31 260 4609 Email: ximbap@ukzn.ac.za / snymanm@ukzn.ac.za / mohunp@ukzn.ac.za
Website: www.ukzn.ac.za

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