

**MATERNAL ROLE ON DAUGHTERS' SEXUAL HEALTH
DEVELOPMENT: KHOMAS REGION IN NAMIBIA**

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FUNMILAYO S. E. AKPOKINIOVO

200639684

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SUPERVISOR : PROF. M. L. MOSTERT

CO-SUPERVISOR : DR. L. N. LUKOLO

ABSTRACT

A continuum of prevention that provides information and support to very young adolescent girls throughout their lifecycles is central to their healthy sexual development. Crucial to this continuum is the family, especially the mothers. Hence, this study explored maternal role on daughters' sexual health development in Khomas region, Namibia. In addressing this phenomenon, the study was carried out in four phases namely; needs assessment, programme development, programme implementation and programme evaluation. The findings from the needs assessment showed that there was still a paucity of attention to this issue by some mothers for various reasons, such as not knowing what to say, as well as when and how to initiate discussions about sex with their daughters. This necessitated the need to design an intervention programme for mothers and the before-and-after outcomes of the sexuality education training for mothers were evaluated in relation to mothers' beliefs, communication, knowledge and self-efficacy to engage in discussions about sex and sex-related topics with their daughters in timely and meaningful ways. The outcome of the study showed that when mothers' natural role as sexual health educators is supported through intervention programmes, it has the potential for improving mothers' beliefs, communication, knowledge and self-efficacy. Thus, they become effective in discussing sexual issues with their very young adolescent daughters and indirectly impacting on their very young adolescent girls' ability to delay sexual activity.

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LIST OF ACRONYMS

AGYW	-	Adolescent Girls and Young Women
AIDS	-	Acquired Immune Deficiencies
ASRH	-	Adolescent Sexual Reproductive Health
CDC	-	Centre for Disease and Control
EMIS	-	Education Management Information System
GRN	-	Government of the Republic of Namibia
HIV	-	Human Immunodeficiency Virus
HPV	-	Human Papilloma Virus
ICPD	-	International Conference on Population and Development
NSF	-	National Strategic Framework
PCSC	-	Parent-Child Sexual Communication
PID	-	Pelvic Inflammatory Disease
QUAL	-	Qualitative
QUAN	-	Quantitative
SBCC	-	Social and Behavioural Communication Change
SCT	-	Social Cognitive Theory
SE	-	Sexuality Education
SIECUS	-	Sexuality Information and Education Council of the United States
SPSS	-	Statistical Package for Social Sciences
SRH	-	Sexual Reproductive Health
STI	-	Sexually Transmitted Infections
UNESCO	-	United Nations Educational Scientific Cultural Organisation
UNFPA	-	United Nations Population Fund

UNICEF	-	United Nations Children Fund
VYA	-	Very Young Adolescent
YLL	-	Years of Life Lost

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DEDICATION

This dissertation is dedicated to the only ONE who is faithful, the God of Awesome Wonders. To You alone belong the glory, honour and praise! I could not have accomplished this without You. Indeed, You are faithful. Thank You for meeting all my needs, the unimaginable favour and countless blessings. I pray that I will have opportunities to use this for Your glory all the days of my life.

DECLARATIONS

I, Funmilayo Akpokiniovo, declare hereby that this study is a true reflection of my own research, and that this work, or part thereof has not been submitted for a degree in any other institution of higher education.

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Funmilayo S. E. Akpokiniovo

Date

CHAPTER 1

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

In global history, the population of adolescents is skyrocketing in the developing countries and will remain so for another 25 years (Gribble, 2010; Temim, Levine & Oomman, 2010). Presently, the world population of adolescents aged 10 to 19 years is about 1.2 billion and 90% of them are living in low- and middle-income countries; with half of them between the ages of 10-14 years old (Igras, Macieira, Murphy & Lundgren, 2014; Morris & Rushwan, 2015; Save the Children, 2015; United Nations Population Fund, 2011; World Health Organisation, 2007). Namibia is no exception as far as this demographic transition and adolescents' high-risk behaviours are concerned. Though sparsely populated, the population is steadily growing from 1.4 million in 1990 to 2.2 million in 2016 and possibly increase to 3.5 million by 2030 (National Population Commission, 2017). At the moment, 43% of the population is under the age of 18 years and the population of very young adolescents is estimated at 11.1% (Geoba, 2015; Ministry of Health and Social Services, 2014; National Population Commission, 2017).

In line with this exponential growth, global conferences have acknowledged that the adolescence period is an important phase of human development that marks the onset of long-term health issues that add to the rate of morbidity and mortality in adulthood (Dittus et al., 2015).

Concurrently, there is a segmentation of younger from older adolescents in relation to policies, programmes, research and evaluation so as to build a strong foundation in order to prepare them for a healthier later adolescence and adulthood (Igras et al., 2014, Institute for Reproductive Health, 2010; Patton et al., 2016; Save the Children, 2015).

Adolescence is a continuum characterised by different needs across the transitional stage to adulthood (Woog & Kågesten, 2017) and within this continuum is another distinctive group known as very young adolescents (VYAs) aged 10-14 years (Igras et al., 2014). The pubertal changes experienced within this age group are greater than for the older adolescents (Dessie, Berhane & Worku, 2015; Dixon-Mueller, 2011; Institute for Reproductive Health, 2010). Adolescents are developing considerably fast, with girls experiencing their first period on average at ~12 years and boys having their first wet dream at ~13 years (Goldman, 2011; Igras et al., 2014; Institute for Reproductive Health, 2010). Albeit, some adolescents are experiencing the onset of puberty even at much earlier ages; with the first signs of puberty as early as 8 or 9 years among girls (Goldman, 2011; Morris & Rushwan, 2015; Woog & Kågesten, 2017).

During this critical phase, VYAs undergo an increased capacity for abstract thought and a deepening of moral thinking. Sex hormones begin to increase in activity, and this triggers sexual arousal, sexual interests, and experimentation with sexual behaviours (Chandra-Mouli, Lane & Wong, 2015; Denno, Hoopes, & Chandra-Mouli, 2015, Dixon-Mueller, 2011;

Igras et al., 2014; Mutema, 2013; Thomas & Thomas, 2015). Pubertal period is therefore a significant process of life to reach young adolescents with support, information and resources so that they are able to correctly interpret the changes that are occurring in their bodies and to become sexually responsible (Goldman, 2011; Woog & Kågesten, 2017). Young adolescents will then be able to learn about the role of sex in life so that they can become aware of sexual or pre-sexual behaviours that are antecedent to the initiation of sexual intercourse (Lederman, 2003).

The way young adolescents respond to pubertal changes are largely influenced by how parents socialise them because sexuality is a life-long process that begins at birth (Dessie et al., 2015; Pop & Rusu, 2015; Shams, Parhizkar, Mousavizadeh & Majdpour, 2017; Titiloye & Ajuwon, 2017). Once young adolescents are unprepared for these changes, they furnish their own distortions by garnering sexual information from their own trial and error activity. Thus, they become vulnerable to preventable health problems even long before they have access to information, skills and experience needed to avoid or counteract those (Morris & Rushwan, 2015). As reported by the United Nations Children's Fund (2011), 11% of girls and 6% of boys age 15-19 experience sex before turning 15. Sexual intercourse at whatever age places an individual at risk with even far reaching consequences when it occurs at a younger age, especially for girls (Chandra-Mouli et al., 2015; Collins, Martino & Shaw, 2011; Denno et al., 2015). Globally, AIDS is the second leading cause of death among

adolescents and the leading cause of death among adolescents in Africa (Ministry of Health and Social Services, 2015).

A report by World Health Organisation (2007) advocates for the need to direct efforts on various risk and protective factors that can influence and positively guide decision making and behaviour among your people. The focus on protective factors is important because it recognizes positive influences in the environment that can be supported through programming efforts (World Health Organisation, 2007). One of the protective factors that have been identified for a range of adolescents' sexual behaviours including the delay of sexual initiation, particularly for females is parent-child communication about sex and sex-related issues (D'Cruz et al., 2015). The school, peers, media, internet, religious beliefs as well as the community may from time to time be more or less influential, but parents play a key role in the sexual health education of their adolescents and are steady component in most young people's lives notwithstanding fluctuations in their relative importance (Beckett et al., 2010; Johnson & Williams, 2015; World Health Organisation, 2007).

Parent-adolescent sexual communication is now being seen as an important primary mode for healthy sexuality development and sexual behaviour among adolescents (Davis, Gahagan & George, 2013; Harris, 2016; Malacane & Beckmeyer, 2016). Parents can influence their adolescents' sexual and reproductive health including safer sex behaviours through open communication about sex, warm relationship, behaviour

control and respect for individuality, modelling of appropriate behaviour and provision and protection (Beckett et al., 2010; Cherie & Berhanie, 2015; Manu, Mba, Asare, Odoi-Agyarko, & Asante, 2015; Mutema, 2013; Wamoyi, Fenwick, Urassa, Zaba & Stones, 2011; Widman, Choukas-Bradley, Noar, Nesi & Garrett, 2016).

Several studies have identified mothers as the more actively involved parent in the intentional sex education of their adolescents including being the primary source of caregiving and nurturance to their children (Davis et al., 2013; Harris, Sutherland & Hutchinson, 2013; Leser & Francis, 2014; Igras et al., 2014; Shams et al., 2017; Thomas & Thomas, 2015). Cherlin (2004) affirmed that even where a mother may have had her child outside of marriage, ended her relationship with the father of her child and moved on to another relationship, she still remains the only stable person in her child's life. In fact, younger adolescents, whether male or female, prefer to discuss sex with mothers because they are naturally more caring and understanding (Chandan et al., 2008). The question arises as to whether mothers are actually ready to provide the necessary platform for sexual discussions to their young adolescent girls.

Regrettably, based on literature, sex is relatively infrequently discussed in many homes because mothers tend to underrate their abilities to lay the foundation for an on-going-dialogue including timely and meaningful conversation on a large scale about sexual issues related to puberty, sexual and reproductive health (SRH), and gender roles (Albert, 2012;

Akpokiniovo, 2011; D’Cruz et al., 2015; Davis et al, 2013; Shams et al., 2017; Svanemyr, Amin, Robles, & Greene, 2015, Thomas & Thomas, 2015). Mothers are not certain about what to say, and how to introduce the discussions about sexual issues, as well as determine the appropriate topics to discuss with their daughters at this age (Burgess, Dziegielewski & Green, 2005).

For reasons such as stated above, the 1994 Cairo conference recommended that “programmes should involve and train all who are in a position to provide guidance to adolescents concerning responsible sexual and reproductive behaviour, particularly parents and families. Governments and non-governmental organisations should promote programmes directed to the education of parents, with the objective of improving the interaction of parents and children to enable parents comply better with their educational duties to support the process of maturation of their children, particularly in the areas of sexual behaviour and reproductive health” (United Nations Educational Scientific and Cultural Organisation, 2009, p. 32).

Studies have echoed this recommendation that when parents are provided with support and information, it improves the reach and timeliness of sexual education, raises parental self-efficacy along with skills regardless of their family composition, cultural background or other individual differences, thus resulting in improved parent-child communication (Akers, Holland & Bost, 2011; Gavin, Williams, Rivera & Lachance,

2015; D’Cruz et al., 2015; Widman et al., 2016; Phetla et al., 2008; Shams et al., 2017). Nevertheless, much attention has not been given to these requests and recommendations. The practical application of this research is rarely emphasised and there is little or no intervention tailored to focus on mothers of very young adolescent girls in Khomas region, Namibia. The intention of this study is to advance a practical application of this research by first assessing mothers’ efficacy at discussing sexual issues with their young adolescent girls. The findings will then be used to inform the development of an educational programme that is contextual and culturally relevant in improving outcomes for mothers and enhancing their key role in the intentional sex education of their adolescents. The focus on mothers is particularly critical for Namibia since most households (44%) are female-headed (Ministry of Health and Social Services, 2016).

1.2 **STATEMENT OF THE RESEARCH PROBLEM**

As the rates of early parenting, sexually transmitted infections, HIV/AIDS, and unintended pregnancy and school drop-out continue to increase among adolescents in Namibia, the ability to engage in an early open discussion with young adolescents about delaying sex becomes increasingly essential. More than twenty years after the recommendations advanced at the International Conference on Population and Development (ICPD) that Governments and non-governmental organisations should promote programmes directed to the education of parents so as to support the process of maturation of their children, particularly in the areas of sexual behaviour and reproductive health, parental involvement still remains the

weakest link in the prevention intervention continuum in Namibia. Yet, several studies have recognised parents as part of the comprehensive strategy for improving young adolescents' sexual beliefs and behaviours and thus be provided with education programmes that will help raise their self-efficacy and responsiveness in handling sensitive topics (Leeds, Gallagher, Wass, Leytem & Shlay, 2014; Malacane & Beckmeyer, 2016; Martin & Torres, 2014; Santa Maria, Markham, Bluethmann & Mullen, 2015; Villarruel, Cherry, Cabriaes, Ronis & Zhou, 2008).

Even though there have been recommendations to involve parents in the sexual health education of adolescents (Chandan et al., 2008; Ministry of Health and Social Services, 2015), none of these suggestions have been implemented. Parents are yet to be seen as out-of-class resources for their adolescents to reinforce and re-teach information obtained from formal programming (Dilworth, 2009). The teaching of Life Skills and Window of Hope are established school- and community-based sexuality education programmes focusing on the development of prevention programmes in elementary schools in Khomas region. These programmes could have provided a perfect opportunity to reach parents, especially mothers but neither of these programmes invites mothers into the learning process to be able to provide clear, well-informed and age-appropriate sex education to their daughters or help them strengthen and scaffold skills and information that their daughters explore at school.

Though the government is accelerating the implementation of a prevention intervention programme as a means to substantially reduce new HIV infections and risky sexual behaviours among adolescent girls and young women aged 10-24 years, but there is no inclusion of parents in this prevention intervention strategy. In addition, the geographic scope for the programme implementation excludes Khomas region that has been identified as one of the high burden regions for HIV and teenage pregnancy (Ministry of Health and Social Services, 2017a; Ministry of Health and Social Services, 2017b; Pazvakawambwa & Mumbango, 2015). The implication of this is that there will be no coverage for adolescent girls aged 10-14 years, and this will further worsen sexual health outcomes for young adolescent girls.

It has become necessary that prevention interventions begin to expand focus beyond school curricula-based programmes and other narrow health promotion approaches to strengthen protective factors such as parents. As young adolescent girls in Khomas region are disproportionately affected by teenage pregnancy and HIV, understanding and implementing an educational programme that are culturally appropriate around SRH health for mothers offers promising applications to create sustained changes for this priority population. This lack of attention may explain why changes in adolescents' knowledge, attitude, and skills have not always resulted in corresponding changes in their sexual health development and risk-taking sexual behaviours (Burgess et al., 2005).

Since the role of mothers as key socialisation agent has been documented in various studies (Igras et al., 2014; Shams et al., 2017, Thomas & Thomas, 2015; World Health Organisation, 2007), mothers have a lot to gain from the various studies of social scientists that have immersed themselves in the theories and dynamics of parent-child communication (Jaccard, Dittus & Gordon, 2000). Thus, this study seeks additional information to understand how best to help mothers improve communication around SRH with their young adolescent girls by measuring maternal receptiveness to the SRH communication programming and to assess changes in mothers' comfort, belief, level of preparedness and self-efficacy around SRH discussions with their young adolescent daughters.

1.3 **OBJECTIVES OF THE STUDY**

The overall objective of this study is to develop, and conduct a preliminary evaluation of a sexuality education programme for mothers in the Khomas region of Namibia. The specific objectives for this study are to:

1. Assess and describe mothers' perceptions of knowledge, values, comfort levels, and level of preparedness and needed support in providing sexuality education to their very young adolescent daughters.
2. Develop and describe an educational programme that will prepare, assist and support mothers during the early adolescence period.
3. Implement and evaluate the educational programme for mothers of young adolescents.

1.4 **SIGNIFICANCE OF THE STUDY**

The overall significance is that the developed educational programme could orient mothers with age-appropriate information on adolescents' sexual and reproductive health as well as provide mothers with skills to communicate more openly and honestly with their young adolescent daughters. Consequently, quieting their anxieties and supporting the schools' efforts in providing good quality sexuality education. The educational programme may improve outcomes from mothers and hence indirectly for adolescents.

Since the initial programme is developed in the Khomas region, the educational programme could be replicated to provide a base from which to diffuse intervention to other regions within the country. This could also positively affect the cycle of influence in communities, bearing in mind that the daughters of today will eventually grow up to become the mothers of tomorrow.

In addition, it will provide evidence-based, intervention strategies that could guide policy makers, health practitioners, schools, communities and faith-based organisations, as well as non-governmental organisations, in the education of Namibian mothers regarding the provision of age-appropriate sexual information to their very young adolescent daughters.

1.5 **LIMITATIONS OF THE STUDY**

This study was conducted in the Khomas region, Namibia and targeted mothers having daughters from the ages of 10 to 14. The sample for the intervention programme was small and was limited to one region. Applying these findings across all other regions in Namibia may not be possible because of the small sample size. The generated data gave a detailed perception of mothers' in relation to sexual discussion with their young adolescent daughters. Nevertheless, it provided a good representation of the mothers in that region and a vantage position for mothers to express their views and a number of the issues considered resonated with existing literature. It is, therefore, likely that the findings of this study and its implications may be transferable to other areas with similar characteristics.

Mothers in this study were provided were provided with resources for further reading. Web-based information may have been more relevant for mothers who might have internet access, which can be included for future implementation. The study was also limited in that it explored only the perception of mothers on sexual discussion. The experiences of their young adolescent daughters may have provided a different dimension to the study. Therefore, research related to mother-daughter sexual communication should be considered. Furthermore, it may have been necessary to consider the parenting style of mothers as it relates to sexual communication with their young daughters.

In addition, mothers who participated wanted topics that they would have liked to discuss, which were not covered in the training guide. The training guide could be elaborated to incorporate the topics of interest in the future.

1.6 **METHODOLOGY**

The methodology of this research is explained comprehensively in chapter 3 of this report. However, in a nutshell, one can refer to this study as a mixed methods research, because it allows the mixing of qualitative and quantitative approaches throughout the research process (Creswell, 2014). It, thus, means that both qualitative and quantitative data are collected and analysed by merging, connecting or embedding the data in such way that both approaches maximise the strengths and minimise the weakness of each other. The mixed methods design also includes the timing of the data collection (concurrent or sequential) as well as the emphasis (equal or unequal) for each database (Creswell, 2014).

The mixed methods research can also be informed by a philosophical worldview or a theory (Creswell, 2014), in this case, pragmatic paradigm. This philosophical view is relevant to my study in that it is characterised by an emphasis on communication and shared meaning-making in order to create practical solutions to social problems. It is useful for programmatic or intervention-based studies (Shannon-Baker, 2016). The theoretical framework is discussed in detail in chapter 2 and the research process in chapter 3.

1.7 **CONCEPT CLARIFICATION**

1.7.1 *MOTHERS*

Mothers in the context of this study are defined to encompass “all those who provide significant and/or primary care over a significant period of the adolescent’s life, without being paid as an employee,” including biological mothers, foster mothers, adoptive mothers, grandmothers’ other relatives and fictive kin such as godmothers (World Health Organisation, 2007).

1.7.2 *EARLY ADOLESCENCE*

Early adolescence is defined as ages 10 to 14 years (Morris & Rushwan, 2015).

1.7.3 *EARLY SEXUAL INITIATION*

Early sexual initiation is defined as an adolescent having first consensual sexual experience prior to reaching the age of 15 (Baumgartner, Geary, Tucker, & Wedderburn, 2009; Guttmacher, 2015).

1.7.4 *SEXUAL COMMUNICATION*

Sexual communication is defined as mothers’ self-reported discussions about sex and sex-related issues with their young adolescent daughters (DiIorio, Pluhar, & Belcher, 2003).

1.7.5 *SELF-EFFICACY*

Self-efficacy is defined as mothers' confidence in their ability to discuss sex and sex-related issues with their very young adolescent daughters (DiIorio et al., 2003).

1.7.6 *SEXUAL HEALTH*

Sexual health should be understood as "...a state of physical, emotional, mental and social well-being in relation to sexuality; it is not merely the absence of disease, dysfunction or infirmity. Sexual health requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence. For sexual health to be attained and maintained, the sexual rights of all persons must be respected, protected and fulfilled" (World Health Organisation, 2015).

1.7.7 *INTERVENTION*

Intervention refers to any combination of strategies designed to produce desirable behavioural or health outcomes at the individual, group or population level (Heath, Cooke & Cameron, 2015).

1.8 **SUMMARY**

This chapter provided the introduction by contextualizing this study. The purpose was to appraise the extent of the problem and to derive a deeper understanding into the consequences of early sexual initiation and how mothers could close the gap. The statement of the problem, objectives, significance of the study, methodology, and concept clarification were discussed. The next chapter focuses on literature review.

CHAPTER 2

LITERATURE REVIEW

2.0 INTRODUCTION

The chapter details the context of the study and the theoretical framework. It also presents a review of adolescents' sexual and reproductive health (ASRH), factors that influence ASRH and different scholarly disciplines on parental involvement in ASRH as well as the challenges that mothers experience regarding engagement of such conversations. Following this is a review of the various intervention approaches that have been developed and implemented to improve parent-child communication with their children about sex.

2.1 THE CONTEXT OF THE STUDY: NAMIBIA

Namibia is a land of unique beauty, whose name derives from the Namib Desert and its capital city is Windhoek. Namibia is an independent, democratically governed republic, located in south-western Africa, and is bordered by South Africa in the south, Botswana in the east, the Atlantic Ocean in the west, Angola in the north and Zambia in the north-east. Namibia covers approximately 824,418 square kilometres (Geoba se, 2015), and the climate varies from arid in the west through to semi-arid to sub-humid in the central and north-eastern regions, with temperatures between 25°C and 40°C during the summer months (October to April). During the winter period, which is from May to September, temperatures range between 3°C to 23°C. It can be quite cold, with frost occurring over

large parts of the country (Namibia Climate, n.d.). Namibia is divided into 14 administrative regions (Figure 1), of which nine have been identified as high burden regions for teenage pregnancies and HIV; with Khomas region (with a population of 340,900) being one of the regions (Ministry of Health and Social Services, 2017a; Pazvakawambwa & Mumbango, 2015). Namibia has a wide and rich diversity of ethnic groups, which include Basters (2%), Caprivians (4%), Damaras (7%), Hereros (7%), Kavangos (9%), Namas (5%), Oshiwambos (50%), and Sans (5%) and Tswanas (0.5%). There are 13 recognised national languages, 10 indigenous African languages and 3 Indo-European languages (IndexMundi, 2015), with English as the official language.

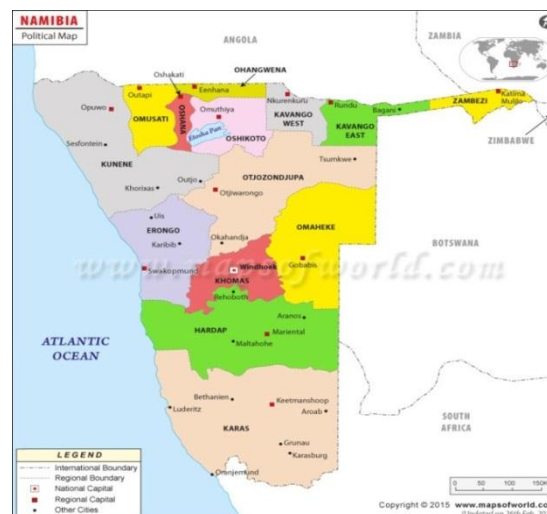


Figure 1: A map of Namibia showing neighbouring countries including the 14 administrative regions

In order to identify an effective behaviour change method, the intervention mapping (IM) approach adapted by Kok et al., (2015) was applied in determining the appropriate theoretical framework applicable to the study.

According to Kok et al. (2015), for a behaviour change method to be effective, it must target a determinant that predicts behaviour; it must be able to change the determinant and must be translated into a practical application in a way that preserves the parameters for effectiveness and fits with the target population, culture and context. For the purpose of this study, Social Cognitive Theory provides a useful exemplar. This theory has been employed in the development of parent-based adolescent sexual health interventions to enhance mothers' self-efficacy at discussing sexual issues with their young adolescent (O'Donnell et al., 2007; Leeds et al., 2014) and since the education programme focused on adult learners (mothers), the experiential learning theory was applied.

2.2.1 *SOCIAL COGNITIVE THEORY*

Social Cognitive Theory embraces a number of topics such as moral judgment and physiological arousal however research has primarily focused on self-efficacy and outcome expectations (Bandura, 1997). The concept of self-efficacy refers to the beliefs regarding one's capabilities to successfully complete tasks or goals (Bandura, 1997; Kok et al., 2015; Locke & Latham, 2002). In other words, self-efficacy is what an individual believes he or she can accomplish using his or her skills in a given situation (Snyder & Lopez, 2007). On the other hand, outcome expectations relates to beliefs whether a particular behaviour will result in a given outcomes (Bandura, 1997). Thus, it is not the actual capabilities but the perceptions that influence behaviour.

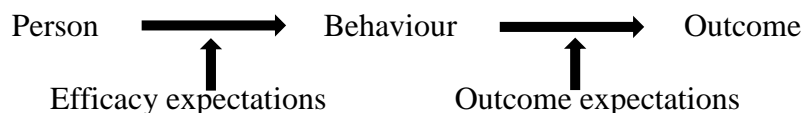


Figure 2: Graphic illustration of self-efficacy and outcome expectations

Self-efficacy does not denote an individual’s personality trait that operates outside of contextual factors. It simply means that an individual’s efficacy expectations depend on a particular task as well as the context which confronts an individual. It is therefore out of place to label a person as having a high or low self-efficacy without reference to the particular behaviour and the circumstance with which the efficacy judgment is linked.

Self-efficacy sets the foundation for action. Simply put, people are not motivated to act or endure when confronted with challenges or setbacks, unless they believe that they have the power to produce the desired changes by their actions (Van der Bijl & Shortridge-Baggett, 2002). For example, mothers may not confront or endure the challenges of discussing sexual issues with their daughters unless they believe that discussing sexual issues will produce the desired changes. Malacane and Beckmeyer (2016) reported that when parents have confidence in their knowledge and believe that they have the skills to communicate effectively, they are more likely to engage their adolescents in discussions about sex and sex-related matters with their adolescents.

Self-efficacy also drives motivation, which helps to determine what goals people set for themselves, how passionately committed they are to the goals and the expectations for their efforts. Belief in the power to produce effects determines how long people will endure when they are faced with challenges and repeated experiences of failure, whether the way they think is self-hindering or self-aiding and how much stress and depression they are able to endure while dealing with challenges. The beliefs that people have about their abilities, thus their self-efficacy, affect whether they make good or poor use of their skills (Bandura, 1977).

Self-efficacy can be developed through four main sources of influence, namely: mastery of experience, verbal persuasion, vicarious learning and a person's physiological state. These elements help individuals to ascertain if they believe that they have the ability to accomplish given tasks. Williams and Williams (2010) state that "individuals with high levels of self-efficacy approach difficult tasks as challenges to master rather than as threats to be avoided" (p. 455) and the interest and motivation to master the task become the driving force to succeed in spite of the challenges encountered in accomplishing the goal (Pajares & Schunk, 2001).

Mastery of experience means to learn through personal experience. When an individual gains mastery over a challenging task, this helps the individual to develop and refine skills (Bandura, 1977). Experiences of accomplishment and success produce a strong belief in an individual's personal efficacy. This is a powerful source of self-efficacy. This assertion

was affirmed by Ballard and Gross (2009) when they reported that parental comfort and confidence increases as parents experience success with sexual discussion with their younger children. Ballard and Gross (2009) went further to state that when parents experience success early with easier topics such as proper name for body parts, it makes it much easier to talk about more difficult topics later on. A strong sense of efficacy requires experience in conquering stressful situations through sustained effort (Bandura, 1997).

Verbal or similar forms of social persuasion are further ways of strengthening the beliefs that people have about what it requires to succeed. According to Redmond (2010), self-efficacy is induced by encouragement and discouragement relating to an individual's performance or ability to perform. When people are verbally encouraged that they have the abilities to master given activities, they are more likely to exert and sustain their efforts than if they nurse self-doubts and focus on personal inadequacies when confronted with setbacks. Beyond the positive appraisals of abilities, situations should be structured in ways that inspires success and avoid situations that may set people up for premature failure. Self-improvement should be the rule for measuring success (Bandura, 1997).

Vicarious learning, which is learning through the observation of events and/or other people, is another way by which an individual can develop and strengthen self-efficacy. When an individual sees someone similar to

them succeed in a difficult situation through sustained effort, it stirs that person's belief that he or she also possesses the abilities to master similar activities to succeed. Social models do not only serve as a benchmark by which to measure one's abilities, they also allow for knowledge sharing and the teaching of skills and strategies for coping with everyday life demands and challenges through their behaviour and ways of thinking (Bandura, 1997). A platform, such as training, provides a perfect opportunity for experiential sharing and cross-pollination of knowledge, transfer of skills and methods to help mothers cope with the demands and challenges of engaging in sexual communication with their young adolescent daughters. In other words, mothers will have the opportunity to learn from one another.

People judge their abilities based on their physiological state and generally expect failure when they are tensed and agitated because of high physiological arousal, which undermines performance. As a result, people tend to misinterpret their reactions to stress and tension as signs of inefficacy. For example, activities that require energy, such as talking, may make mothers judge their moment of fatigue, pains and mild aches as signs of physical inefficacy. People often experience mood swings, and this may also determine how mothers assess their personal efficacy. Perceived self-efficacy is heightened by a positive mood while a low mood weakens it. It is important to help people understand how to deal with their response to stress, change their negative emotional tendencies, as well as understand their physical state and correctly interpret it (Bandura, 1997). It is crucial

to note that if mothers feel at ease when discussing with their daughters about sex, they will experience higher beliefs of self-efficacy and feel more capable.

Another important construct in Bandura's theory is outcome expectations and this refers to an individual's belief that to engage in certain behaviour will lead to given outcomes. In other words, it is what one believes will happen if one takes a certain action. An individual may believe that certain actions may culminate in specific outcome (outcome expectations), but may doubt his or her ability to perform the action (self-efficacy). People tend to perform certain behaviours only when efficacy expectations are high. Thus, self-efficacy and outcome expectations work in a complimentary manner to determine behaviour. This is consistent with the Hutchinson and Wood (2007) report that parents' intentions to communicate and their personal beliefs that they possess the skills to communicate will positively impact their child's behaviour, which other important others would approve.

With regards to communication about sexuality, mothers should believe that they have the ability to talk effectively about sex with their daughters and to explain to them the importance of delaying sexual initiation. In addition, mothers should have outcome-expectations that talking to their daughters will lead to delayed sexual activity and have long-term social and health benefits for them (Bandura, 1997).

2.2.2 *EXPERIENTIAL LEARNING THEORY*

For the development of the intervention programme as was used for this study, the experiential approach to learning within the paradigm of adult learning was applied (Kolb, 1984; Smith, 2002). Kolb (1984) viewed “learning as the process whereby knowledge is created through transformation of experience” (p. 38). This view corroborates the standpoint of Dewey that learning takes place through the reconstruction of experience. Experiential learning, therefore, suggests learning opportunities were participants experience multiplicity of perspectives through interaction in personal and group settings and by actively participating in the learning process and reflecting on what has been learnt as well as the sharing of ideas (Kirby, 2002; Matey & Fickell, 2014; Neill, 2006; Smith 2002). Matey and Fickell (2014) and Moon (2004) explained experiential learning as learning through reflection on doing that which requires self-initiative, that is, an intention to learn and an active phase of learning. The core of experiential learning is simply learning from experience, which allows a learner to manage and share responsibility for his or her own learning. The focus is to make mothers have awareness of the content in a way that positions them in the role of power so that the burden of the problem feels real to them. Mothers’ lives will be used as examples, although with much respect. The Kolb’s (1984) experiential learning theory is characterised by a four-stage learning cycle.

The four-stage learning cycle includes four elements namely; concrete experience, reflective observation, abstract conceptualisation and active experimentation. Concrete experience and abstract conceptualisation describe ways of grasping experience while reflective observation and active experimentation describe ways of transforming experience. Each stage is reinforced and feeds into the next. Effective learning is said to occur when a learner has progressed through all the four stages of the model, that is, the cycle of experiencing, reflecting, thinking and acting. Within the experience cycle, a new experience or situation is encountered, or a reinterpretation of an existing experience occurs. The key learning in this domain is involvement and learning is not accomplished by watching or reading about it but by actively participating in order to learn effectively. It is, therefore, crucial that all the steps in the cycle are implemented if the learning is to be productive (Kolb, 1984). The steps are depicted in figure 3 and then explained.

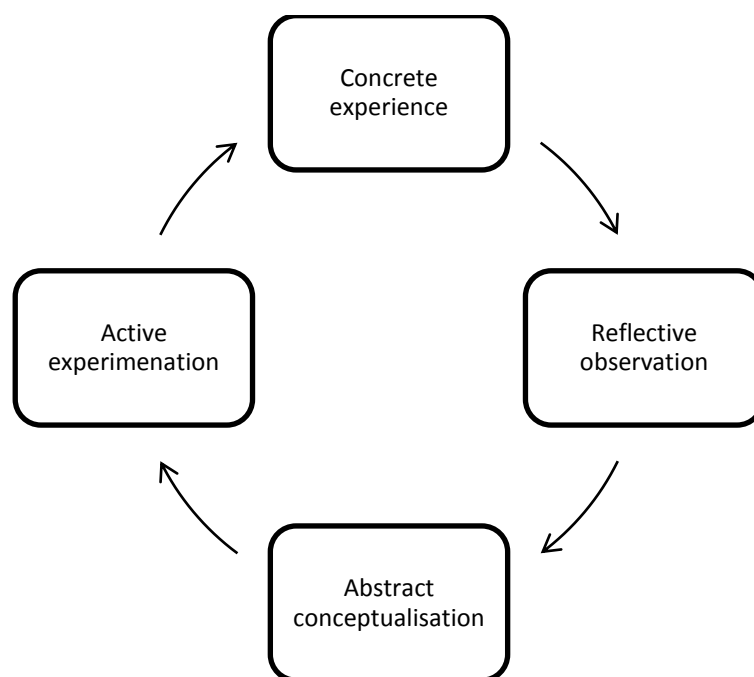


Figure 3: Kolb's Experiential Learning Cycle (1984)

2.2.2.1 *Concrete Experience*

The individual encounters a new experience that provides an opportunity for learning. The goal of experiential learning is for the individual to actively participate in the experience so that they learn from it (Kolb, 1984). Adults enlarges the reservoir of experience and mistakes also become an continuous resource for learning (Kearsley, 2010) and this consequently influences how and why they participate in learning and are thus able to relate new knowledge to past experiences and apply it as well. The researcher intends to draw on mothers' experiences in such a way that they are able to transport it. For example, asking questions of how they experienced their menstrual cycle and then take their stories to introduce the subject matter to them. Mothers will, therefore, be able to describe their own sexual and reproductive health development experiences and relate it to how they want their daughters who have not started their menstrual cycle to experience it and what they can do better in relation to their daughters who may have started and lost out on the opportunity to be guided.

2.2.2.2 *Reflective Observation*

Reflection is an important part of the experiential learning process. Reflective observation allows individuals to reflect or review a situation and find meaning behind the experience (Bandura, 1997). It is of importance for individuals to observe if there are any inconsistencies between their experience and understanding. According to Fidishun (2000), reflective learning opportunities help learners to question their

prejudices based on life experiences and “move them toward a new understanding of information presented” (p. 4). Mothers have established values, beliefs and opinions through a variety of life experiences and over time. These values, beliefs and opinions cannot be set aside but will be considered and in doing this, the researcher intends to provide opportunities for reflections on long-held values, beliefs and opinions through open discussion as well as the expression of ideas, and reasoning. Mothers will be able to re-examine their views, values and beliefs regarding discussions about sex and sex related issues and understand the possible need to reconstruct them in light of how it is impacting on their abilities to engage in effective sexual communication with their daughters. Thus, mothers will be able to identify if there are ways that these elements are hurting or protecting their SRH development of their daughters. Instructions will be organised by task and opportunity will be given for simulation in order to enhance their efficacy at discussing sexual issues with their daughters.

2.2.2.3 *Abstract Conceptualisation*

Abstract conceptualisation provides the time for planning and brainstorming for strategies for success, which individuals can apply in the future. During abstract conceptualization, individuals try to make sense of what has happened, and this involves interpreting the events, as well as understanding the relationships between them (Bandura, 1997). An adult’s interest in a subject matter is directly corresponding to how much responsibility they have over the subject (Kearsley, 2010). Adults’

readiness to learn becomes geared towards the developmental tasks of their social roles and as such is ready to learn things that they need to learn in order to be able to effectively deal with their real-life situation. Thus, learning for adults is problem-centered and the inspiration to learn is internal (Smith, 2002). They become involved in new learning situations when learning is contextual, and are internally convinced of its relevance to their personal life, especially if it would provide direct, practical application to relevant problems (Kearsley, 2010; Fidishun, 2000). Mothers will have the opportunity to understand the importance of the concept to be learned in order for them to stay motivated.

2.2.2.4 *Active Experimentation*

Active experimentation, which is the last phase of the cycle, is the time to test the real world. Mothers contemplate how they are going to put what they have learnt into actual practice. The goal is for individuals to assess concepts in different and new situations in order to find ways to improve. Mothers are expected to engage in practical application of the new experience with their daughters. By using the programme strategies, mothers are expected to engage in activities that will help to improve their relationships with their daughter; thus enhancing communication about sexual issues (Kolb, 1984).

2.3 **REVIEW OF ADOLESCENTS' SEXUAL AND REPRODUCTIVE HEALTH**

Out of the 1.2 billion adolescents in the world, half of them are very young adolescents aged 10 to 14 years (Igras et al., 2014; Woog & Kågesten, 2017). The age group 10 to 14 years marks the onset of puberty, which presents a unique opportunity to shape young girls' health behaviour through the provision of essential health information. This unique group of adolescents is falling through the cracks when it comes to sexual and reproductive health information. Adolescents are initiating sex at earlier ages (Igras et al., 2014) with multiple partners (Ministry of Health and Social Services, 2015) and people that they are unfamiliar with as well as experimenting with diverse sexual behaviours (Centers for Disease Control and Prevention, 2012).

Early sexual activity among adolescents is rife, and varies widely across countries. Globally, 11% of adolescent girls aged 15 to 19 are reported to have had sex before age 15 (United Nations Children's Fund, 2011). The Centre for Disease Control and Prevention (2012) reported that before the age of 13, approximately 6% of adolescents report having engaged in sexual intercourse and by age 19, approximately 85% of all adolescents are sexually active. In Latin America countries, the age of sexual initiation among Mexican adolescents is decreasing, with a mean age of 12 years; this has put them at an almost 50% risk, with new HIV cases being diagnosed among young people aged 15 to 24 years (Villarruel et al., 2008). In sub-Saharan Africa, up to 25% of adolescents 15-19 year olds

reported sex before age 15 (Doyle, Mavedzenge, Plummer & Ross, 2012). A closer look at Namibia reveals that early sexual initiation is a national trend with nearly half (45%) of all females aged 15-19 having had sex (Ministry of Health and Social Services, 2015). This finding was further confirmed in a study conducted by Ozimede (2015) among high school students, which revealed the mean age of sexual debut to be 15 years among sexually active adolescents. Similarly, the cross-sectional survey that was conducted in Katima Mulilo district in Namibia among 339 female in-school and out-of-school adolescents aged 15-19 years showed that 50.8% had their first sex between 6-15 years and 49.2% between 16-19 years (Madiba, 2014). These statistics indicate that a key period of intervention with respect to adolescents' sexual behaviour should be before late adolescence, presumably between the ages of 10 to 14 years. Thus, United Nations Educational Scientific Cultural Organisation (2009) concluded that educating adolescents before the onset of sexual activity is the most effective approaches to sexuality education.

Delaying sexual initiation among adolescents is a major public health priority because early initiation of sexual activity has long-lasting consequences into adulthood and into the subsequent generation, especially for girls (Chandra-Mouli et al., 2015; Denno et al., 2015). Early sexual activity is a significant risk factor for human immunodeficiency virus (HIV) infection, sexually transmitted infections (STIs), unintended pregnancies, unsafe abortions, and sexual exploitation, (Chandra-Mouli et al., 2015; Denno et al., 2015; Doyle et al., 2012; Gribble, 2010; Iivula-

Ithana, 2014; Morris & Rushwan, 2015; Motsomi, Makanjee, Baera & Nyasulu, 2016; Salam et al., 2016). These implications of early sexual activity are discussed in detail under the next heading.

2.3.1 *IMPLICATIONS OF EARLY SEXUAL ACTIVITY*

2.3.1.1 *Unplanned pregnancy*

Pregnancy among adolescents is a trend common all over the world; however, the phenomenon is much greater in developing countries. Studies have shown that 16 million girls aged 15 to 19 years and approximately 2.5 million births occur annually among girls under age 16 years in low-income countries (United Nations Population Fund, 2013). With the growing population of adolescents, projections indicate that a concurrent growth is expected in adolescent pregnancies globally by 2030 and the greatest proportional increase in West and Central Africa as well as Eastern and Southern Africa (Chandra-Mouli et al., 2015; Denno et al., 2015; Iivula-Ithana, 2014; Morris & Rushwan, 2015; Motsomi et al., 2016; Salam et al., 2016; United Nations Population Fund, 2013).

Teenage pregnancy has a very high risk of medical complications as well as negative consequence on the health of teenagers, the well-being of the children born to them and their educational achievement. The leading cause of maternal and infant mortality among young women ages 15 to 19 in developing countries arises as a result of complications from pregnancies (Gribble, 2010; World Health Organisation, 2016). Adolescent girls aged 15 to 19 are twice as likely as women in their

twenties to die in childbirth, whereas those under 15 are five times more likely to die in childbirth (World Health Organisation, 2007).

In Namibia, one out of five adolescent girls aged 15-19 surveyed in 2013 were either pregnant or had given birth. In other words, at the time of survey, 19% of young women in that age band had begun childbearing, of which 14% had given birth and 5% were pregnant. A total of 121,820 girls aged 15 to 19 were reported in the 2011 population census. When the 19% finding from the DHS is applied to the 121,820 girls, it translated to 23,000 pregnancies or births in 2013 with an average of 63 pregnancies per day. Adolescents aged 10 to 14 are equally at risk of pregnancy and by applying the 19% to the total adolescent girl population aged 10-19, using the 2011 census figures, the overall number of pregnancies would rise steeply to 46,000 pregnancies or births that year; giving an average of 127 pregnant adolescents per day (Smith, 2016; Ministry of Health and Social Services, 2014). Furthermore, the 2016 national HIV Sentinel Survey, which surveys pregnant women highlights a similar trend, reporting that out of 8,117 women tested, 2,247 (27.7%) were prima-gravida (first pregnancy). The greatest age-specific percentage of women (81.0%) who were prima-gravida was observed within the 15-19 age groups (Ministry of Health and Social Services, 2016). These statistics on adolescent pregnancy are a grim reminder that adolescents are initiating sex at an early age.

Pregnancy and child-bearing may also shorten an adolescent's education and worsen her economic prospects, employment opportunities and overall well-being. Adolescent mothers tend to pass on to their children a legacy of poor health, substandard education and subsistence living, thereby creating an intergenerational cycle of poverty that may be challenging to break (World Bank, 2017; World Health Organisation, 2007).

2.3.1.2 *Abortion*

Adolescents experience disproportionate share of deaths and health problems from risky abortion practices. It is estimated that 3.9 million unsafe abortions occur among girls aged 15 to 19 every year (Darroch, Woog Bankole & Ashford, 2016); the majority of which are unsafe (Guttmacher, 2015) and contribute to maternal mortality and lasting health problems. It is estimated that about 80 women die each day in Africa from procedures they adopt to terminate unplanned pregnancies (Desert Soul, 2011; World Health Organisation, 2012). In Namibia, it was reported that between April and December 2016, 7,335 women were treated at different public health centres for complications related to illegal abortions, since abortion is legally not permitted in Namibia (Tjihenuna, 2017).

2.3.1.3 *Human Immunodeficiency Virus (HIV)*

The HIV/AIDS epidemic is a worrisome health issue for young people. Approximately 36.7 million people world-wide are living with HIV/AIDS; and an estimated 25.5 million people living in sub-Saharan Africa. Among this group, 19.4 million are living in East and Southern Africa (United

Nations AIDS, 2017). Young women are disproportionately affected by HIV infection; with 59% of new infections occurring among young people aged 15-24 (United Nations AIDS, 2017). In 2015, 450,000 new infections occurred among adolescent girls and young women aged 15-24 years and this translates to 8600 new infections per week (United Nations AIDS, 2016).

Namibia is among the countries in sub-Saharan Africa with the highest HIV prevalence (Somda et al., 2013). HIV continues to rank first in the Burden of Disease list ranking of the top causes of years of life lost (YLL) and this has had a major impact on the country's life expectancy (Ministry of Health and Social Services, 2017a). Namibia has a generalized HIV epidemic and most infections are through heterosexual sex and mother-to-child-transmission (Ministry of Health and Social Services, 2017a). Even though there had been a long-term decline in the HIV prevalence rate in Namibia, from 22% in 2002 to 16.9% in 2014, there was a slight increase to 17.2% in 2016. The epidemic in Namibia has had a gender bias as prevalence is higher among women (19.8%) compared to men (14.9%) in the same age group (Ministry of Health and Social Services, 2017a). The HIV Sentinel Survey 2016 equally revealed a subtle increase in infection from 5.4% in 2012 to 5.7% in 2016 among women aged 15 to 19 (Ministry of Health and Social Service, 2016).

The 2016 Spectrum Model equally affirmed that a large proportion of estimated new infections is among women ages 15-24 and are estimated to account for 21% of new infections while within the same age group men are estimated to account for 12% of the new infections (Ministry of Health and Social Service, 2016). This statistics is closely related to the South African data that suggest that new infections are occurring among adolescent girls below 15 years of age even though HIV incidence is substantially higher in the 15-24 age groups. Accordingly, this will require different programmatic strategies for adolescent girls in the 10-14 age group, the 15-19 age group and young adult women aged 20-24 (United Nations AIDS, 2016).

This data reflects the sexual and reproductive health needs of young people as a significant individual and equally as a public health issue that require a reviewed focus in Namibia. Therefore, as part of the country's HIV prevention plan, the Government of the Republic of Namibia (GRN) developed a five-year National Strategic Framework (NSF 2017/18-2021/22) to scale-up HIV combination prevention interventions over a five year period. This framework prioritises adolescent girls and young women (ages 10 to 24 years) as one of the priority populations to be reached with cost effective combination prevention interventions to reduce HIV infections (Ministry of Health and Social Services, 2017b). The total spending for HIV in 2014/15 was over N\$1.2 billion, while spending for reproductive health in 2012/13 totalled over N\$3.5billion but decreased to 21% in 2014/15. An equivalent of N\$13 billion was expended on

HIV/AIDS mass media, community mobilization and interpersonal communications campaigns (Somda et al., 2013). Social and behavioural communication change (SBCC) has been one of the priority strategies to disseminate behavioural messages designed to encourage people to reduce behaviours that increase risk of HIV and increase protective factors (Somda et al., 2013). In spite of the progress made in the understanding the extent of the HIV epidemic in Namibia, risky sexual behaviour still continues (Ministry of Health and Social Services, 2017b).

2.3.1.4 *Sexually transmitted infections*

Apart from the risk of HIV infection, more than 340 million new cases of curable STIs occur each year worldwide; with adolescents having the highest rate (Centers for Disease Control and Prevention, 2008). Adolescents aged 15-19 years account for about 3 million cases of STI infection each year; accordingly one in four sexually active adolescent females contracts an STI such as chlamydia, gonorrhoea, herpes, and the human papillomavirus (HPV) because their tissues and organs are still developing. (Centers for Disease Control and Prevention, 2016; Chinsebu, 2009). These STIs are a public health concern for adolescents and are cofactors in the transmission of HIV infection (Chinsebu, 2009). STIs also predispose teenagers to genital and fallopian tube damage, cervical cancer, infertility, infant blindness, perinatal death as well as pelvic inflammatory disease (PID) (Centers for Disease Control and Prevention, 2008).

Comprehensive age and sex-specific data on STIs among adolescents in the developing countries are selective and rare because most surveys are done at health facilities such as family planning and ante-natal clinics where adolescents are inadequately represented (Chinsembu, 2009). However, going by the 2013 Namibia Demographic Health Survey, 10% of the sexually active females and 5% of the sexually active males reported having had an STI or STI symptoms in the preceding 12 months; these rates being five times higher than the national STI rate. Corroborating this report is the findings of a study by Ozimede (2015) where 47% of the adolescent respondents had experienced symptoms suggestive of STI.

2.3.1.5 *Sexual abuse*

Adolescent girls experience extreme violence including rape, sexual harassment, sexual assault, sexual molestation and incest. Sexual abuse cuts across cultural and socio-economic lines, and it occurs in homes, schools and other public places. Globally, the prevalence of forced first sex among women is about 30% and the percentage is between 45% and 48% among adolescent girls who were under 15 at the time of their sexual initiation (Desert Soul, 2011). In Namibia, unwanted non-consensual sex was common occurrences as reported by Madiba (2014) in a study that showed that first time sexual experience for 48% of the respondent was unintentional, 34% were coerced into having sex while 11.2% were tricked to have sex by the sexual partners. Similarly, 19.7% of the adolescent respondent in a study by Ozimede (2015) reported sexual intercourse by

coercion. Aside from physical health consequences, there are also emotional consequences related to sexual abuse.

2.3.1.6 *Psychological and emotional effects*

Casual sex has been associated with psychological distress among young people (Bersamin et al., 2013). Adolescents that have first sexual intercourse before the age of 15 have higher rates of mental illness because they lack the emotional and neurological maturity necessary for making independent and well-informed sexual choices (Mota, Cox, Katz & Sareen, 2010; O'Connell, 2005). A longitudinal study of adolescent health acknowledges a relationship between teenage sexual abstinence and mental health, and that girls in particular experience higher levels of stress and depression (Bogart, Collins, Ellickson & Klein, 2007; Hallfors, Waller, Bauer, Ford & Halpern, 2005), serious thoughts about suicide and suicide attempts when they engage in premarital sex (Hallfors et al., 2004; Sandberg-Thoma & Kamp Dush, 2013). The foundations of sexual issues confronting adults often date back to regrettable teenage experiences. According to Kristen (2001), 74% of senior high school girls surveyed regretted the sexual experiences that they had had. Teenage girls often feel exploited as a result of engaging in casual sex, and habitual cutting becomes a way of managing intense emotional distress (Foreman, 2009).

2.3.1.7 *Increased risk of promiscuity and divorce*

According to Paik (2011), the occurrence of behaviours or beliefs that promote divorce and promiscuity is connected with early sexual experience. A study of over 1,000 sexually experienced, high school learners found that females, who initiated sex before age 15, were five times more likely to have multiple sexual partners than those who delayed having sex (Yarber, 2002). Women who first initiated sex as teenagers were also more likely to divorce, especially when their first time was unintentional if they were sceptical about it (Paik, 2011). This was also true for women who lost their virginity before the age of 16 than those who lose it later (Paik, 2011). Furthermore, 30% of women who had sex for the first time as teens divorce within 5 years, and 47% divorce within 10 years of getting married while the divorce rate for women who delayed sex until adulthood was 15% within 5 years and 27% at 10 years (Paik, 2011).

2.3.1.8 *School drop-outs*

Sexual intercourse has far-reaching consequences that extend beyond unplanned pregnancy or contracting STIs or HIV. In the United States, 30% of girls cite pregnancy or parenthood as a key reason they left school and 51% of adolescent moms earn a high school diploma compared to 89% of female students who did not give birth as a teen while only 38% of teen girls who have a child before turning 18 years earn a high school diploma (Albert, 2012). For these teens, the task of balancing their education and a baby proved impracticable (Marshall, 2011). The

seriousness of pregnancies among school girls is shown by the high numbers of girls dropping out of school due to pregnancy. Based on the Namibian Education Management Information System (EMIS) 2012 report, a total of 2896 girls dropped out of school between 2011 and 2012 and of these, 1406 were girls due to pregnancy (Kangootui, 2016).

2.3.1.9 *Baby Dumping*

Even though there is dearth of statistics or anecdotal information on baby dumping, the problem remains a significant one in Namibia. There are reports of infants being dumped in rivers, dustbins and plastic bags. This may not be unrelated to the problem of unplanned and unwanted pregnancies. Young mothers who feel burdened by the responsibility of nursing and caring for a baby may end up dumping their babies. The desperation, fear of rejection by their families and the society, and a feeling of hopelessness may force them into dumping their babies. Lewis (2013) reported that an average of 13 dead babies is found every month at the sewage works in Windhoek. It is, however, challenging to attribute this figure to only adolescent girls as there may be other women who may be dumping their babies for unknown reasons.

All these negative health outcomes have stirred up research attention regarding measures to improve sexual health outcomes for adolescent girls. The media, school systems, peer networks, and parental figures all try to influence how adolescents view about sex and sexuality.

2.3.2 **FACTORS INFLUENCING ADOLESCENT SEXUAL BEHAVIOUR**

Many factors influence an adolescent's sexual health and sexual behaviour. As previously indicated, literature clearly shows that parents have considerable influence over the choices their sons and daughters make in terms of sexual behaviour. In order to understand the context of an adolescents' sexual behaviour, it is necessary to highlight the other factors that affect adolescents on a daily basis.

2.3.2.1 *Peer Influence*

Peer norms and influences are central in adolescents' development of health-related behaviours. Peers do influence one another either positively or negatively (Svanemyr et al., 2015) and adolescents are prone to indulge in sexual behaviours than abstain if they sense such behaviours among peers (Hampton, McWatters, Jeffrey & Smith, 2005; Peçi, 2017; Dixon-Mueller, 2011). When adolescents are connected to a group that expresses permissive attitudes towards casual sex or actually engage in sex, they are more likely to engage in sex, have sex frequently and with multiple partners (Kirby, 2001; Peçi, 2017). The converse is also the case when adolescents are linked to groups that disapprove of casual sex; they were less likely to engage in such behaviour. Adolescents who experience intense pressure towards peer conformity are more likely to imbibe the norms of their peers. Rather than suffer rejection, they embrace behaviours that they perceive are norms in their environment in order to feel accepted and gain respect from their peers (Peçi, 2017; Shoveller, Johnson, Langille & Mitchell, 2004).

2.3.2.2 *Influence of the Media*

The media can be likened to a double-edge sword with potential to positively or negatively influence adolescents' sexual attitudes, beliefs, and behaviours (Gruber & Grube, 2000). The media scene is growing at an alarming rate and is filled with a variety of sexual content. These sexual contents are portrayed through the internet, games, music, television, and films and they can now even be viewed on computers, MP3 players, handheld video players and cell phones (Collins et al., 2011). As a result, adolescents have limitless access to media use in a variety of new settings throughout the day (Collins et al., 2011). This unrestrained access puts adolescents at risk, especially, when exposed to sexual content during the developmental phase at a time when they are forming their gender roles, sexual attitudes and sexual behaviours. They also lack the cognitive skills to critically analyse messages so as to make informed decisions during this phase (Gruber & Grube, 2000). The findings of a national longitudinal survey of 1,792 adolescents, 12 to 17 years of age by Collins et al. (2004) revealed that adolescents who watch more sexual content at baseline were more likely to involve in sexual intercourse and progress to non-coital sexual activities during the subsequent year.

The implication of this finding is that if adolescents are not properly guided, exposure to sexual content on traditional media or new media may hasten adolescent sexual initiation among adolescents. Reducing adolescents' exposure to sexual content and consecutively increasing depictions of possible negative consequences of sexual activity could

considerably help to delay the initiation of coital and non-coital activities (Collin et al., 2004). Although, there is no research to date on the influence of the Internet and mobile access on adolescents' sexual health development in Namibia, the Namibia Demographic Health Survey (NDHS) reported that 69% of girls and 65% of boys are exposed to newspapers and television. This assessment, however, did not include Internet and mobile access, which adolescents reported to be their main sources of information (Ministry of Health and Social Services, 2015).

2.3.2.3 *School Systems Influence*

There are two major approaches to sexuality education (SE) programmes in schools namely the *abstinence-only* and *comprehensive sexuality education programmes*. The abstinence-only SE programme encourages adolescents to abstain from engaging in premarital sexual activity and it is viewed as the safest way to avoid negative health consequences. However, it is viewed as limited in the depth of information regarding relationships and other sexuality related aspects and as such inefficient in preventing sexual risk behaviour (Goldman, 2011; Pop & Rusu, 2015). The comprehensive SE programme is a multi-focal programme that views sexuality education as a life-long process. The programme describes abstinence as the safest method in preventing negative and unwanted consequences associated with sexual activity but the key concepts are human development, personal skills, relationships, sexual behaviour, sexual health and society and culture (Goldman, 2011; Pop & Rusu, 2015; Sexuality Information and Education Council of the United States, 2004).

Regardless of the type of sexuality education programme that a school adopts, it may provide technically accurate information but may not accommodate diverse cultural and religious traditions (O'Connell, 2004). Even where SE programmes have been integrated into the school curriculum, they are infrequently delivered and implemented with caution (Goldman, 2011). In Namibia, the inclusion of Life Skills subject into the curriculum provides a platform for reaching very young adolescent at the elementary level of schooling (Grade 4 to 7) with age-appropriate information (Ministry of Education, 2016).

The Life Skills curriculum recommends puberty, HIV/AIDS, personal hygiene, sexual reproductive health, friendship, child pornography, peer pressures and values, abstinence, risky sexual behaviour and pregnancy as topics to be taught from Grade 4 to Grade 7 (Ministry of Education, 2016). The curriculum is intended to be behaviour-change driven and teaching and learning is based on a paradigm of learner-centered education. The starting point for this approach to teaching and learning is based on the premise that learners bring to school a wealth of knowledge and social experience gained continually from the family, the community and through interaction with the environment (Ministry of Education, 2016). However, studies have revealed that little or no sexuality education occurs in most homes (Nambambi & Mufune, 2011). It is, therefore, not an improbable conjecture to assert that the Life Skills education that is taking place in schools is being built on a very weak or no foundation at all.

Even though Life Skills is compulsory, it is not an examinable subject. As such, it is not always enforced or taken seriously by some teachers and learners (Chandan et al., 2008; Ministry of Health and Social Services, 2015; Nambambi & Mufune, 2011). This could be the reason why the teaching of sexuality education in schools is viewed by some adolescents as a matter of status quo that gives no room for expression of ideas and leaves little or no interaction between them and their teachers. Adolescents are equally of the opinion that some teachers are afraid to introduce certain topics and that this fear creates an uncomfortable environment (Chandan et al., 2008; Goldman, 2011; Ministry of Health and Social Services, 2015). Tradition also does not allow teachers to discuss sexual matters with learners (Chandan et al., 2008; Igras et al., 2014). Consequently, most teachers are of the opinion that sexual health education for young adolescents is the responsibility of parents and should be initiated by parents (Ministry of Health and Social Services, 2015; Shams et al., 2017), thus strengthening the necessity of sexuality education basics being laid out from early childhood and through the influence of families (Pop & Rusu, 2015).

Window of Hope, a complement to the State's effort, is a prevention intervention sexuality education programme aimed to contribute to positive behaviour formation through equipping young adolescents with self-esteem, knowledge, attitudes and skills to be able to protect themselves against HIV infection by not engaging in early sexual activity (Chandan et al., 2008). This programme is being implemented as an extra-

curricular activity after school hours, which means not all learners benefit from the programme. One of the findings from the evaluation study done on the Window of Hope programme revealed that children were embarrassed to talk to their friends about sex because of cultural taboos and lack of confidentiality but that they were increasingly willing to talk to older persons, particularly their mothers (Chandan et al., 2008). As part of the recommendations advanced, the evaluators advocated that education sessions be provided to parents to help them support their children (Chandan et al., 2008). These issues could be the reason that adolescents consider the sex education they receive at school as inadequate and desire an open discussion on the topic of sex with their parents (Fay & Yanoff, 2000).

2.3.2.4 *Religious Influence*

Religion has been cited as having a strong influence in young people's lives, particularly in delaying or constraining premarital adolescent sexual activity and reducing risky sexual behaviour (Manlove, Logan, Moore & Ikramullah, 2008). Adolescents who are religious are more inclined to gravitate with peers who disapprove of permissive sexual behaviour and such association is linked to reduced risky sexual behaviour. Adamczyk and Felson (2006) found that teenagers who are connected to families and communities with strong religious background tend to associate with religious peers who reinforce moral directives against sexual behaviour and exhibit fewer problem behaviours than other teenagers. However, Zaleski and Schiaffino (2000) reported lower rates of condom use among

religious adolescents than their less religious counterparts. Parents' religious commitment has also been positively related to adolescents' religious commitment (Smith, Kippax, Aggleton & Tyrer, 2003). Religiosity cements family relationships and encourages communication between parents and adolescents, thereby leading to greater awareness of sexual activity.

2.3.2.5 *Parental Influence*

The way adolescents understand their sexual and social identities is largely shaped by parents. Various studies acknowledge the major responsibility of parents as a spring of information, support and care in shaping adolescents' healthy approach to sexuality and relationships (Davis et al., 2013; Johnson & Williams, 2015; Thomas & Thomas, 2015). Parents, as key proximal determinants in adolescence sexual and health development, are in a position to provide appropriate, skills-based learning as well as time-sensitive prevention messages to their pre-adolescents in a way that agrees with their values and beliefs (D'Cruz et al., 2013; Malacane & Beckmeyer, 2016; Miller et al., 2011; Widman et al., 2016; Wyckoff et al., 2008). It, therefore, means that information on sex-related topics can be introduced early and designed to meet adolescents' physical, emotional, and psychological level such that it forms a foundation for future knowledge (Hutchinson, Jemmot, Jemmot, Braverman & Fong, 2003).

Parents can influence adolescence sexual behaviours in a number of ways, through modelling, maintaining warm and close relationships that encourage open communication, monitoring adolescent activities and encouraging religious beliefs and practices that influence morality and sexual behaviour (Dilworth, 2009). These components play a major role in adolescents delaying sexual initiation. Parents can help to ensure that the health information they provide to their adolescents at home are consistent with school-based information, especially when information is properly and comprehensively delivered. This will reinforce messages that aid risk prevention among adolescents who are not yet sexually active as well as behaviour change among those who are already sexually active (Beckett et al., 2010; Davis et al., 2013; Downing, Jones, Bates, Sunnall & Bellis, 2011; Manu et al., 2015). Parents have also been acknowledged by adolescents as their preferred source of sexual health education (Downing et al., 2011; Guilamo-Ramos, Jaccard, Dittus, Bouris & Holloway, 2007; Motsomi et al., 2016). Adolescents who received sex education from their parents were reported to hold practical information and more traditional attitudes towards sexual activity similar to those of their parents (Whitaker & Miller, 2000).

2.4 **REVIEW OF PARENT-CHILD SEXUAL COMMUNICATION**

Studies have shown that parent-child sexual communication (PCSC) fosters adolescents' sexual health knowledge, safer sex behaviours, attitudes and decision-making (Coffelt, 2010; Manu et al., 2015; Widman et al., 2016; Wight & Fullerton, 2013). Parents who set clear dating rules

and convey their expectations about the importance of delaying sexual initiation, are more likely to have adolescents who postpone initiation (Lemieux, Frappier & McDuff, 2010; O'Donnell et al., 2007). Although the term 'parents' is often used in parent-child sexual communication literature, it is evident that mothers are more likely to discuss sex with their adolescents as compared to fathers (Mutema, 2013).

Sexual communication, particularly between mothers and daughters is vital in nurturing sexually health behaviours and reducing risk-taking sexual behaviours. Maternal talk about their beliefs and values was found to be associated with daughters abstaining from or delaying sexual involvement when compared to other sources of information (Bleakley, Hennessy, Fishbein, & Jordan 2009), whereas receiving sexual information from friends, cousins, and media was related with beliefs that increased the chance of engaging in sexual intercourse (Peci, 2017; Dixon-Mueller, 2011).

Adolescents, equally, tend to talk to mothers more than their fathers about nearly all topics because mothers are believed to have more contact with their adolescents and naturally adolescents feel closer and would rather discuss personal problems with their mothers (Coffelt, 2010). In addition, mothers have the ability to monitor their children's activities and have the capability to provide the continuing support that time-bound adolescent programmes can rarely offer (Drioane, 2014; Eastman, Corona & Schuster, 2006) .

The findings of a study done by Thomas and Thomas (2015) affirmed mothers as major educators to their adolescents. Similarly, in a study done by Shams et al. (2017), most of the participants believe that sexual health education for adolescent girls should be initiated by mothers at home although they were concerned about the depth of information to be provided. Several studies have linked mother-daughter communication about sex to a daughter's decision to stay sexually abstinent (Miller, Benson & Galbraith, 2001), delay sexual initiation (Harris et al., 2013; Mutema, 2013), less likely to engage in unsafe sexual behaviours (Dessie et al., 2015; Motsomi et al., 2016), and have few sexual partners and fewer incidences of unprotected sexual intercourse (Hadley et al., 2009; Hyde et al., 2013; Mutema, 2013). Shiferaw, Gatahun and Asres (2014) confirmed this assertion through a cross-sectional study on junior high students in Malaysia, which revealed that most girls agree that their mothers should be the first person to provide information on puberty and sexual issues. A review of literature showed that there are five dimensions to parent-child sexual communication: the content, the style, the timing, the frequency and parent-child relationship (Akers et al., 2011) and these dimensions are discussed in detail below.

2.4.1 *CONTENT OF COMMUNICATION*

Even though the content of sexual matters that are discussed varies across families, studies have shown that parents hardly discuss many sexual topics and among parents who have provided sexual health education to their children, many report not providing a lot of detail and not covering a

variety of topics relating to adolescent sexual health (Beckett et al., 2010; Malacane & Beckmeyer, 2016; Namisi et al., 2009; Weaver, Byers, Sears, Cohen & Randall, 2002). Reports have also shown that many parents desire their children to be knowledgeable about topics like abstinence, contraception and how to prevent STIs, they often do not know how to communicate these topics, especially more sensitive topics like sexual coercion and assault (Advocates for Youth, 2010; Byers, Sears & Weaver, 2008; D’Cruz et al., 2015; Weaver et al., 2002). Parents find it challenging to talk about private topics such as masturbation, orgasm, access to and correct use of condoms and sexual decision-making (El-Shaieb & Wurtele, 2009; Martin & Torres, 2014).

Manu et al. (2015) reported abstinence, consequences of premarital sex, STIs, HIV/AIDS, physical development, puberty, menstruation and substance use as the topics often discussed. They asserted that parents and adolescents reported sexual abstinence as the most discussed topic. This finding is consistent with the findings of Tesso, Fantahun and Enquasselassie (2012) when they reported that 84.6% of young people in West Ethiopia had also discussed abstinence.

Similarly, Bastien, Kajula and Muhwezi (2011) reported topics such as abstinence, HIV/AIDS and unplanned pregnancy as topics of discussion in many families but topics such as contraceptives and condoms were rarely discussed among families in Kenya because of fear of possible side effects resulting in infertility, not wanting to compromise their stand on

abstinence as well as shyness and lack of knowledge. As reported by Muhammad and Mamdouh (2012) reported in their study on mother-daughter communication about sexual and reproductive health in rural areas of Alexandria, Egypt that a number of mothers and daughters had not discussed puberty and menstruations and a number of girls had experienced the onset of menstruation without any prior preparation. Further findings from the study showed that even among mothers and daughters who had good relationships; there were still taboo topics that were avoided such as sexuality, marriage, pregnancy, and STIs. This finding suggests a huge gap in the information that adolescent girls need and what they are actually receiving.

Parent-child sexual communication should entail topics such as puberty, pregnancy, contraception, STI, HIV prevention and healthy relationships (Beckett et al., 2010; Sneed, Somoza, Jones & Alfaro, 2013). Ballard and Gross (2009) recommended the inclusion of topics such as body image, dating, love, and gender roles. On the other hand, Dyson and Smith (2012) advanced the inclusion of comprehensive information that provides opportunity for adolescents to develop skills.

The findings from a focus group study with adolescents indicated that the respondents desired that their parents would talk to them about topics as anatomy and physiology, sexually transmitted infections, contraception, facts and myths about sex, consequences of early sexual activity, peer pressure, self-concept including the responsibilities that come with sexual

activity (Fitzharris & Werner-Wilson, 2004). Morawska, Walsh, Grabski and Fletcher (2015) and Wilson, Dalberth, Koo and Gard (2010) suggested that parents use every day teachable moments to make the talk about sensitive topics easy and flexible. In agreeing with this assertion, Malacane and Beckmeyer (2016) suggested talking when watching romantic moments in a television series, listening to song lyrics and discussing what they mean.

2.4.2 *STYLE OF COMMUNICATION*

Parental communication styles may affect adolescent sexual behaviour. A systematic review of studies on communication about reproductive health issues in sub-Saharan Africa reported that parent-child sexual communication tend to be authoritarian and unidirectional, unclear warnings rather than direct, open discussion (Bastien et al., 2011). Parental communication about sex, if it occurs at all, often consists of parents waiting for children to ask questions, providing brief answers and closing the door to future conversations (Martin & Torres, 2014; Stone, Ingham & Gibbins, 2013). Parents tend to resort to using euphemism warnings, threats and some parents are negative, proscriptive and judgmental as way of discouraging early sexual intercourse among adolescents (Izugbara, 2007; Titiloye & Ajuwon, 2017). The use of euphemism frequently leads to confusion for adolescent girls who often discover that mere physical interactions with boys do not result in pregnancy as depicted by their parents. In other instances, the information mothers provide is ambiguous, full of reprimand, laced with fear, lacked chance for meaningful dialogue,

dwelt on the negative effects of sexual intercourse and sexuality and low on what adolescents should know in order to fully comprehend how they are growing and developing (Titiloye & Ajuwon, 2017).

Afifi, Joseph and Aldeis (2008) asserted that parental receptiveness to their adolescents' opinions and ideas, keeping discussion informal and being composed during conversation lead to a decrease in adolescents' anxiety and avoidance. This finding is consistent with the report of Boone and Lefkowitz (2007) and Foster, Byers and Sears (2011) that when mothers use questioning tactics, their adolescents perceived them as being open and supportive and this increases the effectiveness of sexual discussions.

Adolescents desire that their parents will initiate an interactive or open dialogue with them rather than be preached to or given unsolicited advice (Dilworth, 2009; Edwards & Reis, 2014; Rogers, Ha, Stormshak & Dishion, 2015). In fact, where there is a perceived openness, responsiveness, comfort and confidence with parents regarding discussions on sexuality, it is often associated with lower levels of adolescence sexual behaviour (Howell, 2001).

2.4.3 *TIMING OF COMMUNICATION*

One of the consistent findings in research is the importance of starting parent-child conversations about issues related to sexual health early. Many parents struggle with deciding the appropriate time to begin talking with their adolescents about issues of sexuality. Research suggests that the

ideal time for parents to start talking to their adolescents about sex, love and relationships is when they are of elementary school age (5 to 11 years old) and before they become romantically and sexually active (Foster et al., 2011; Newby, Bayley & Wallace, 2011; O'Donnell et al., 2007). However, Wamoyi et al. (2010) reported that parents were more inclined to initiate discussions about sexuality with their daughters when they start secondary school. Opara, Eke and Akani (2010) echoed similar report in a study conducted among women in Nigeria, where 41% suggested that sexuality education should commence between the ages of 6 to 10 years and 32% proffer the initiation of such discussions with adolescents between the ages of 11-15 years.

Studies have shown that encouraging open communication with adolescents from a much earlier age increases the comfort with which parents can maintain conversations about sexual health with their young adolescents as they mature (Davis et al., 2013; Wilson et al., 2010) and adolescents also tend to be more receptive and positive about sexual communication at this age (Foster et al., 2011). After this time, they may become more private in their discussions, thinking that their parents are trying to find out about their sexual activity (Saskatchewan Prevention Institute, 2017).

Malacane and Beckmeyer (2016) suggest that this discussion should begin early because children need to understand risky behaviours and how to reduce before they begin participating in these behaviours. Initiating

sexual discussions early and teaching young adolescents the appropriate terminology for their genitals have been identified to increase young adolescents' abilities to resist abuse and to disclose abuse if it has occurred (Kenny, 2009; Wurtele & Kenny, 2009). Kenny (2009) emphasised that adolescents are taught from an early age about good and bad touch including how to say 'no' to bad touches so as to prevent sexual abuse. Notwithstanding, some parents believe that the high school phase is an ideal time to initiate discussions about sex but sexual behaviour begins in early adolescence, before high school (Guilamo-Ramos et al., 2007).

2.4.4 *FREQUENCY OF COMMUNICATION*

The frequency and the extent of conversation between parents and their young adolescents is a reflection of the sexual socialisation that adolescents receive from parents (Boyas, Stauss & Murphy-Erby, 2012; Mastro & Zimmer-Gemback, 2015). Adolescents whose sexual communication with their parents involves more repetition tend to report feeling closer to their parents, more able to communicate with their parents about sex and greater openness in their communications with their parents about sex (Boyas et al., 2012; Davis et al., 2013). Such communication patterns have also been linked to delay of intercourse and use of contraception and fewer sexual partners among those having intercourse (D'Cruz et al., 2015; Miller et al., 2009).

One approach that researchers have used in measuring frequency is to ascertain the effects of conversations on sexual behaviour. The results of these studies varied showing no correlation, negative effects, and positive effects. For example, studies done among Latino young people showed that the more parents talked about specific sexuality-related topics, the more likely it was that their adolescents would share similar viewpoints (Guilamo-Ramos et al., 2007). Clawson and Reese-Weber (2003) equally found negative effects of sexual communication. They found that teenagers had early sexual initiation and more sexual partners because of the frequency of sexual conversations with fathers or mothers. This finding was however in contrast with their hypothesis that more communication would result in fewer risk taking behaviours. The reason for this inconsistency could be because the sample consisted of late adolescents (18 to 21 years). Data from respondents who reported no sexual communication with parents or reported being virgins were omitted. Not having sex is also a sexual behaviour and potential outcome of parent-adolescent sexual communication. Thus, frequency of communication is believed to have relevance to the study of sexual communication.

2.4.5 PARENT-CHILD RELATIONSHIP

Although it is challenging to define parent-child connectedness, factors such as parental nurturance, warmth, closeness, support and structure, mutual trust, refraining from critiquing, and openness have been found to be characteristics of parent-child connectedness (Guilamo-Ramos & Bouris, 2008; Kesterton & Coleman, 2010; Malacane & Beckmeyer,

2016). According to Siriarunrat, Lapvongwatana, Powwattana and Leerapan, (2010), learning to express love, understanding and trust are key factors in building a relationship and parent-child relationship has been identified as an important predictor of sexual discussion (Boyas et al., 2012; Malacane & Beckmeyer, 2016). Studies have reported that parent-child relationship as one of the strongest factors protecting teens from not having sex or delaying onset of sexual intercourse and pregnancy (Harris et al., 2013; Kirby & Miller, 2002; Wight & Fullerton, 2013). The strength and closeness of the parent-child relationship defines the impact that parents' communication about sex will have on their adolescents' sexual health outcomes (Hicks, McRee & Eisenberg, 2013; Nielsen, Latty & Angera, 2013; Wilson et al., 2010). Adolescents who report high levels of parent connectedness are less likely to engage in risky sexual behaviours and experience positive sexual and reproductive health development (Advocates for Youth, 2010; Boyas et al., 2012; Harris et al., 2013; Hicks et al., 2013; Kirby & Miller, 2002; Wight & Fullerton, 2013). Conversely, adolescents who experience absence of warmth, love or care are more likely to report sexual risk behaviours (Karofsky, Zeng & Kosorok, 2000). A closed relationship encourages openness and honesty, thus self-disclosure was found to be a powerful communication tool between mothers and their adolescents, particularly daughters. Mothers who share their personal experiences with their daughters felt an increase in honesty in their relationships (Sisneros, 2009). When one considers that relationships constantly change and evolve, and that challenging moments

may occur, mothers must be able to sustain their efforts in discussing sexual issues with their daughters even during such challenging moments.

2.5 **REVIEW OF CHALLENGES TO PARENT-CHILD SEXUAL COMMUNICATION**

Despite that parent-child sexual communication is associated with positive sexual behaviour, there are a number of parent-child relationship that are experiencing challenges discussing sexual issues for different reasons. Sex is still been considered a taboo topic and thus infrequently discussed within families and preserved for adults (Siriaronrat et al., 2010). The cultural situation in many African countries is such that parents are not directly responsible for discussing sex and sex-related issues with their youngsters. For example, a study done by Nambambi and Mufune (2011) in Namibia showed that both parents and children experience challenges discussing sex because it is a taboo subject, embarrassing, a private matter and against tradition. The majority of parents maintained that it was unconventional for parents to discuss sex with their offspring as it was within aunts, uncles and grandparents' jurisdiction. The matter of sex and sex-related issues were only discussed when people are considering marriage. For example, one of the participants in the study stressed that in the 'Oshiwambo culture', the grandmother is the one who may talk freely with the grandchildren and not the parent.

Mothers consider discussion about sex with young adolescents to be quite challenging and this may be linked to the uniqueness of the adolescent phase of child development (Coffelt, 2010). Tesso et al. (2012) reported that sexual and reproductive health communication hardly occur with younger age adolescents, which may be as a result of parents trying to protect their adolescents' innocence (Hyde et al., 2013; Martin & Torres, 2014). Most often, mothers think it is inappropriate to talk about sex at a very young age with their adolescents for fear of stimulating curiosity and to avoid the temptation to engage in early and irresponsible sexual activities (Guilamo-Ramos & Bouris, 2008; Hyde et al., 2013; Morawska et al., 2015; Motsomi et al., 2016). On the other hand, some mothers do not want to embarrass their young adolescents because they are unable to ascertain age- and developmentally appropriate sexual information, determine the right time and place as well as being able to explain ideas clearly (Coffelt, 2010; Marques & Ressa, 2013; Thomas & Thomas, 2015). The consequence of this perception is that young adolescents become exposed to sexual activity quite early because they do not receive necessary sexual information at the required time (Dessie et al., 2015).

Parents are also reluctant to engage in sexual discussion because they often feel inadequate about their sexual knowledge (Kamangu, John & Nyakoki, 2017) and thus fear losing face in front of their children (Davis et al., 2013). According to Crichton, Ibisomi and Gyimah (2012), the level of parental knowledge is associated with the presence of sexual and reproductive health communication and Ortega, Huang and Prado (2012)

affirmed that if mothers believed they had the knowledge and skills set to answer questions and explain matters clearly, they were more likely to talk to their young adolescents about sexual topics.

Furthermore, many parents generally feel uncomfortable, embarrassed or unprepared for this responsibility. Even though parental sex communication can lead to positive sexual health and decreased adolescent risk-taking sexual behaviours (Burgess et al., 2005), discomfort experienced in speaking may prevent effective sex education from occurring. A review of the literature on parent-child communication about sexuality shows that some parents report discomfort in addressing certain topics with their adolescents (Martin & Torres, 2014; O'Sullivan, Meyer-Bahlburg & Watkins, 2001) and this may stem from cultural norms and beliefs including taboos around open discussion of sexual issues (Nolitha, 2014). In many African countries, sexual discussions often do not include sensitive and emotional topics and only authorised persons are allowed to discuss the subject with adolescents, particularly during ceremonial rites; thus weakening parents position to actively engage themselves in their adolescents sexuality issues (Mutema, 2013, Nambambi & Mufune, 2011).

The foregoing is obviously a reflection of parents' need for accurate information and support in order to feel more comfortable and confident that they have the skills to effectively engage in discussing sexual health and risk-taking sexual behaviours with their adolescents. This assertion was confirmed by Muhammad and Mamdouh (2012), when mothers in

their study stated that they did not have sufficient knowledge and therefore did not know what to tell their daughters about sexual issues and desired to be taught so that they could teach their daughters and to talk with them.

2.6 **REVIEW OF PARENT-CHILD SEXUAL COMMUNICATION INTERVENTIONS**

One of the key premises behind the development of interventions targeting parents is that it promotes positive health behaviours through relationship building, supporting child/adolescent development, increasing parent and child well-being and increasing health-related skills with the aim of preventing behaviour which can negatively impact both individual and general public health (Downing et al., 2011; Lagus, Bernat, Bearinger, Resnick & Eisenberg, 2011; Santa Maria et al., 2015; Villarruel et al., 2008). Ballard and Gross (2009) stated that parents prefer to have a formal approach to learning about adolescent sexual health than gathering information from other sources.

Studies have shown a significant difference between parents who were exposed to intervention programmes when compared to those who had not (Akers et al., 2011; Leeds et al., 2014; Villarruel et al., 2008). Parents have also affirmed the importance of face-to-face programmes because it allows them to hear what other parents are doing, share experiences, and share concerns (Johnson, 2012). However, other studies have reported challenges of having parents attend meetings of multi-session programmes (Schuster, et al., 2008). In addressing this, professionals have developed

different models and curricula on sexuality programmes targeting parents only, children only and parents with their children through community organisations, parents' workplace, at home, and children's schools.

2.6.1 *MULTI-SESSION PROGRAMMES FOR PARENTS AND THEIR ADOLESCENTS*

Multi-session programmes for adolescents together with their parents involve presenting information on communication about sexuality to parents and their adolescents together, thereby increasing the knowledge of both simultaneously. It models discussions of sexual topics in order to increase comfort around such discussions. It also provides an atmosphere of comfort for parents and adolescents to talk to one another about sexual topics during group sessions and afterwards. Results from these programmes have shown increases both in the frequency of parent-child communication, as well as comfort with communication; however, these lessened over time. Results also showed that the programme increased knowledge and perceived importance of birth control among adolescents and the clarity of personal sexual values, and decreased permissive attitudes toward having sex (Kirby & Miller, 2002).

Leeds et al. (2014) evaluated the effect of implementing a parent-child connectedness curriculum with parents and youth among Latino population with high rates of adolescent pregnancy. They implemented a five two-hour workshop sessions with parents (n = 65) on reproductive health, parenting style, adolescent development, positive reinforcement

and active listening to promote emotional support. The parents responded to a before and after programming test, as well as to a three and six months post-programming to assess how self-reported behaviours changed. After intervention, parents reported significant improvements in ability to discuss with their adolescents about health, $p < .001$; enhancement of knowledge about reproductive health topics, $p < .01$; frequency of discussion on reproductive health conversations increased, $p < .05$; more reproductive health topics discussed, $p < .001$; and improvements in parent-adolescent connectedness, $p < .05$. The findings suggest that using a five-week (10 hours) parent training programme improved parent-child sexual communication and can potentially produce meaningful improvement in parents' skills, knowledge, and confidence to talk to their children about reproductive health.

Villarruel et al. (2008) designed an intervention for parents and children in Mexico. The intervention, which was implemented across two consecutive Saturdays, consisted of six 60-minute modules comprising of role-playing, small group discussion and skill-building exercises to help parents overcome the discomfort surrounding discussions about sex. Parents were randomly assigned to an HIV risk reduction or health promotion intervention. The measurements were administered at pre-test, post-test, and 6- and 12-month follow-ups. The findings showed that parents in the HIV risk reduction intervention reported more general and sexual risk communication in their families, and more comfort with communicating with their children about sex. It, thus clearly indicated that the intervention

increased the quantity and quality of parent–adolescent communication about sex, regardless of parents’ age, gender, marital status, or number of children.

Forehand et al. (2007) designed an intervention programme designed for parents of 9 to 12 year olds. Parent-child dyads participated in a sexual risk reduction programme including group sessions that focused on increasing parents’ communication about sexual topics. The enhanced programme (n = 378) was implemented over five 2.5-hour sessions using enhanced communication. The single session intervention (n = 371) was delivered in 2.5-hour session covering the same topics as the enhanced intervention. Based on parent and adolescent reports, the enhanced intervention (2 sessions) showed improved parental self-efficacy when compared to the single-session intervention or control group. The extent of change between pre- and immediate post-intervention assessments was greater among adolescents than parents but at subsequent follow-up visits, the magnitude of change was reportedly greater among parents than adolescent; with the means difference declining in magnitude over time.

Similarly, Burgess et al. (2005) employed time-limited psycho-educational practiced-based group sessions for six court-ordered adolescents between the ages of 14 and 18 together with their parents. The psycho-educational group sessions were held for 2 hours twice a week for two consecutive weeks to improve familial comfort in communication about sex. The psycho-educational group applied the traditional social-learning technique

and used role-plays and modelling to teach teen sexuality, communication, decision-making and negotiation skills as well as to reinforce pro-social values that discourage premature sexual activity and unprotected sex. At the end of the sessions, significant improvements were recorded in communication comfort levels among participants.

2.6.2 *MULTI-SESSION PROGRAMMES FOR PARENTS ONLY*

Multi-session programmes for parents only attempt to improve parents' knowledge, attitudes and skills in order to be effective when talking with their children about sex (Kirby & Miller, 2002). A study which focused on general communication skills and talking about dating and sexuality, reported improvement in the mothers' communication style over a period of seven weeks. DiIorio et al. (2006) designed a seven 2-hour sessions over 14 weeks for mothers (n = 201) of 11 to 14 year olds. Participants were exposed to a life skills or a social cognitive theory-based intervention that aimed to delay sexual initiation and increase condom use. Mothers in the SCT group reported discussing a greater proportion of topics when compared to those in the control group. However, there was no difference in the amounts of topics discussed between mothers in the life skills group compared to the control group. The findings revealed that self-efficacy and outcome expectations were significantly related to sex-based communication.

DiIorio et al. (2007) equally designed an intervention for fathers (n = 141) of 13 to 14 year olds; where fathers received seven 2-hour sessions and their sons received one (final) session. The intervention made use of lectures, role-plays, discussions, games, videotapes and homework as well as weekly goals. The outcomes were intimate behaviours, sexual abstinence, ever had sexual intercourse without condom, and discussion of sex-related topics. The result showed a significant increase in sex-related discussions at 6 and 12 months follow-ups among fathers but no significant difference was reported at all follow-up times among their sons.

Schuster et al. (2008) developed, implemented, and evaluated an eight weekly, 1-hour worksite-based intervention sessions for parents only to improve their communications skills. The intervention included the watching of videos and discussing their content, as well as engaging in practice activities, such as games and role-plays. In addition, parents were also taught how to identify teachable moments, initiate conversations, and engage in active listening. At nine months post-intervention, parents and adolescents in the intervention group reported more openness and a greater ability to communicate with each other about sex.

2.6.3 *HOME-BASED PROGRAMMES FOR TEENS AND PARENTS*

Another approach is a home-based programme for teens and parents to engage parents in their children's sexuality education through video or written materials in their various homes. Miller et al. (1993) utilized home video as a means of accommodating families that could not participate in

the evening or weekend sessions. The programme, which was divided into six units, consisted of a short 20-minute video. The videos were on separate tapes to reduce the chances of families watching all six units in one viewing session. The content of the videos target 10 to 14 year olds and was centered on abstinence message. The videos had two hosts including a series of dramatic scenes that depicted the given topics such as choices in family, school, or peer situations. At the end of each video, the hosts would focus on key issues, and also raise questions that families could discuss once the video had ended. The results indicated that in the three months post-intervention, parent-child sex communication increased when compared to the control group. However, the effect decreased by the one-year mark once the families no longer had access to the videotapes.

Burgess and Wurtele (1998) applied protection motivation theory in their study in which they evaluated the effect of a one-time 1-hour session for parents through video watching on child sex abuse and this was followed by a discussion with a facilitator. The underlying belief is that parents will increase their communication with their children and will be more motivated to take action to protect them if they fear that their children will be in danger (Rogers, 1983). During the 2 to 8 weeks post-intervention, the intention to talk with their children about child sex abuse was greater among parents in the intervention group compared to parents in the control group. Burgess and Wurtele (1998) advocated for more programs that increase parents' self-efficacy regarding communicating with their

children about sex and also offer opportunities to parents opportunities to practice such conversations.

The advantage of this programme is that parents can borrow materials through health clinics, schools or libraries and watch in the comfort of their homes. They also teach skills that can be practiced in the home. Parents are able to judge the content of the programme and ensure that they are at ease with the values and the activities it presents (Kirby & Miller, 2002). Home-based programmes can be comprehensive because they involve a series of activities including role-playing and skill practice. However, developing a video that both parents and their children will consider as practical may be quite challenging.

2.6.4 *SCHOOL ORIENTATION PROGRAMMES FOR PARENTS OF LEARNERS IN SEX AND HIV EDUCATION CLASSES*

Providing school orientation programmes in sex and HIV education classes for parents of learners is another possible means of getting parents to participate in sex and HIV education programmes (Kirby & Miller, 2002). An example of this programme is “*Managing the Pressure before Marriage*” (Blake, Smith, Ledsky, Perkins & Calabrese, 2001). The programme included five homework assignments for parents and children to do together at home at a time when the children were taking a sex education programme in school. The study showed that students who completed the homework reported greater self-efficacy for refusing high-risk sex behaviours, less intention to have sex in high school, and more

frequent parent–child sex prevention-and-consequence communication compared to those who did not. Nonetheless, the study did not acknowledge parents’ previous knowledge about sex and it assumed that parents have the skills, time, and/or desire to facilitate conversations with their children about sex. The study also ignored any potential discomfort that parents or children may have had that might have prevented them from completing the assignments. Additionally, this program puts the responsibility for initiating discussions on children rather than on parents, which seems problematic because, as noted previously, children, typically, turn to friends and the internet for such information when parents do not initiate it (Kirkman, Rosenthal & Feldman, 2002; Wright, 2009).

2.6.5 *GRASSROOTS, COMMUNITY-ORGANISING PROGRAMMES*

The grassroots, community-organising programme are developed in an effort to encourage parent-child sexual communication throughout the community and also to arouse other changes in the community (Kirby & Miller, 2002). An example of such a programme was the “*Plain Talk initiative*”. The programme focused on a variety of community activities to increase adult-youth communication about sexuality and contraception among sexually active youth and also to increase access to contraceptive services. It provides adults with the knowledge and skills to discuss sexual behaviour and contraception effectively with teens.

O'Donnell et al. (2005) designed a programme called '*Saving Sex for Later*' for parents in communities where children were at risk of early sexual initiation. The intervention consisted of a set of audio compact disks that contained dramatic role-model stories to help parents (n = 337) seize 'teachable moments' to talk with their sons and daughters (n = 423) about their values and expectations, set household rules and adequately respond positive changes in their adolescents' development as well as warning signs of trouble. The findings revealed that children whose parents participated in the intervention reported higher family support and rules, and fewer behavioural risks, regarding sex and relationships, compared to children in control families. Parents were also likely to receive high scores on indexes of communication with their children about sexual risk behaviours and to report increased self-efficacy to have conversations with their children about puberty and sexuality. Parents also perceived having influence over their children's sexual behaviour.

A wide range of media can be used to increase parent-child sexual communication and these include television broadcasts radio announcements, outdoor billboards, posters, guidebooks, booklets, brochures and fliers. The '*Parents Speak up National Campaign*' in the United States targeted parents of children 10 to 14 in order to empower them to talk early and often with their children about sex and to share their sex-related values and expectations with their adolescents. An evaluation showed this campaign was linked to increase in parent-child communication, particularly among mothers. Correspondingly, children of

parents who participated in this campaign were more likely to report having discussions about sex with their parents (Davis, Evans & Kamyab, 2013).

2.7 **REVIEW OF EVALUATION OF INTERVENTIONS ON PARENT-CHILD SEXUAL COMMUNICATION**

Santa Maria et al. (2015) conducted a systematic review and meta-analyses of 28 parent-based adolescent sexual health intervention trials between 1998 and 2013. The review included all adolescent sexual health intervention trials that targeted parent-child communication. The findings showed that the intervention programmes resulted in increased communication and increased parental comfort with communication. Even though the size of the increases differed between programmes, positive effects were recorded regardless of the delivery mode or the intervention dose.

Akers et al. (2011) reviewed the effectiveness results from 12 interventions to improve parent-child communication about sex. Even though many different measurement instruments were used across the studies, Akers et al. (2011) found that parents who participated in the interventions experienced improvements in frequency, quality, intentions, comfort and self-efficacy for communicating when compared to the control group. However, no effect was reported on parental attitudes toward communicating or the expected outcomes as a result of communicating.

A similar review by Gavin et al. (2015) showed a positive impact on one short-term outcome, with the majority showing an increase in parent-child communication about sexual health. Wight and Fullerton (2013) found that interventions were linked to improvements in parent-child interaction and adolescents' sexual knowledge and attitudes and about half of the 44 studies they reviewed reported improvements in adolescent sexual behaviour outcomes. The findings of Bastien et al. (2011) based on the review of 23 African-based trials, showed large increases in the frequency of communication and parental comfort with sexual health discussions. However, the review of 17 studies by Downing et al. (2011) found no improvements in parental attitudes toward communication, and also reported inconsistent association with adolescent sexual risk behaviours; no association was found between increased parent-child communication and a decline in sexual risk behaviours.

Kirby and Miller (2002) also assessed the effectiveness of various types of sexual communication education programmes, including educating parents and children together vs. educating parents only. They used five criteria to evaluate whether the programmes (a) reached a substantial number of parents; (b) advanced objectives of most other programs (such as increasing parents' knowledge, increasing their belief that communication about sexuality will not increase chances that their teens will engage in sex, and increasing their knowledge about sex and sex-related topics); (c) increased the amount of parent-child communication about sex; (d)

reduced factors associated with children's sexual risk taking or improved protective factors; and (e) delayed children's sexual onset or increased the use of condoms or other contraceptives, and, thereby, reduced their sexual risk taking. Although programmes for adolescents together with their parents and children were very successful, parent-only classes were more effective, largely, because parents were able to make adjustments based on age, whereas parent-child interventions were tailored for specific age levels. This finding suggests offering workshops for parents that do not include their children.

Most of these interventions applied different methods such as modelling and discussion, guided practice, verbal persuasion and message tailoring to meet stated objectives. These methods were delivered through face-to-face interactions, videos, CDs and homework and most theory-driven methods were based in social cognitive theory. Research has shown that interventions designed for parents can effectively help parents build their knowledge, comfort, skills and confidence through education, role play, and other interactive exercises (Byers et al., 2008; Downing et al., 2011; Kesterton & Coleman, 2010; Leeds et al., 2014; Miller et al., 2009; Turnbull, 2012; Villarruel et al., 2008) and have also been shown to increase parent-child relationship (Harris, 2016; Leeds et al., 2014).

2.8 **SUMMARY**

The literature review revealed what is known about adolescent sexual and reproductive health including influences on adolescents SRH including the several models that have been developed to increase parent-child communication about sexuality as well as a review of evaluation of interventions done on parent-child sexual communication. This chapter also presented the theoretical framework underpinning the study. The next chapter discusses the methodology followed in this study.

CHAPTER 3

METHODOLOGY

3.0 INTRODUCTION

This chapter provides a description of the research design, the different phases followed in the study, population, sample and sampling, techniques, data collection and analysis, and ethical consideration as well as the strategies that were applied to ensure the trustworthiness of the data.

3.1 RESEARCH DESIGN

According to Durrheim (2002) a research design is a “strategic framework for action that serves as a bridge between research questions and the execution or implementation of the research” (p. 29). There are different research methods namely qualitative, quantitative and mixed methods and these are viewed from different philosophical paradigms. Therefore, to determine a suitable design for this study, a distinction is first made of these approaches.

The quantitative research is regarded as a deductive approach towards research. It is associated with the post-positivist paradigm and knowledge is generated through experiments and surveys while data collection is based on pre-determined instruments resulting in statistical data (Ansari, Panhwar & Mahesar, 2016; Creswell, 2014). The quantitative approach, however, does not offer an in-depth understanding of the social phenomenon because of the use of simple data sets, which were often too

broad for direct application to specific contexts and individuals (Ansari et al., 2016).

By contrast, qualitative research is based on the constructivist perspectives and follows an inductive approach to establish the meaning of a phenomenon from the perspectives of participants, that is, the meaning that individuals or group of individuals ascribe to a social or human problem (Creswell, 2014). Even though, not all aspects of the design can be management and controlled by the researcher, the approach allows the generation of rich data. However, the qualitative approach may create an issue regarding the generalisation of the research findings to the larger population due to its small size (Ansari et al., 2016) and may also potentially create bias associated with personal interpretation (Creswell & Plano Clark, 2007).

The mixed method approach is viewed as a pragmatic paradigm and it involves the intentional collection, analyses and interpretation of qualitative (QUAL) and quantitative (QUAN) data in a single study or multiple studies that investigate the same underlying phenomenon (Creswell, Klassen, Plano Clark & Smith, 2010; Onwuegbuzie, 2008). Creswell and Plano Clark (2007) and Doyle, Brady and Byrne (2009) opined that this approach provides a clearer picture of the research problems than either approach alone thus allowing stronger and more accurate inferences to be generated.

The etymological meaning sees pragmatism as a practical approach to finding solutions to prevailing problems and issues (Kalolo, 2015). Pragmatic paradigm has been defined as outcome-oriented and interested in determining the meaning of things or draws on employing what works, using various approaches, without having to neglect the importance of the research problem and question, and valuing both objective and subjective knowledge (Creswell, Klassen, Plano Clark & Smith 2010; Johnson & Onwuegbuzie, 2006; Tashakkori & Teddlie, 2003).

According to Shannon-Baker (2016), pragmatism is characterised by an emphasis on communication and shared meaning-making in order to create practical solutions to social problems and is equally useful for programmatic or intervention-based studies. In other words, pragmatism is what work best in proffering solutions to an immediate problem in the simplest way possible (Delputte, 2013; Kalolo, 2015). Pragmatism aims to create useful knowledge by addressing the pressing contemporary issues and transferring acquired knowledge into action; thereby creating a connection between knowledge, experience and practice (Kalolo, 2015).

Considering that sexual communication within the familial space has been reported to be quite challenging, the researcher considered using more than one method in exploring this phenomenon. The concerns that participants may have regarding sexual discussion with their young adolescent girls may not easily be captured using one method. Although the numeric data gathered through a quantitative approach is helpful to understand the

broader background, it may not provide insight as to the uneasiness that participants' experience. The researcher, therefore, considered the mixed method approach as an appropriate design that is practical enough to guide this study. It is the researcher's intention that this approach can help provide a satisfactory answer to the research questions that cannot be answered by quantitative or qualitative methods alone and can provide complementary data that will allow the researcher to understand the issues under consideration in depth (Tashakkori & Teddlie, 2003).

The study entailed different phases and a convergent parallel mixed methods design was used to address the research problem, specifically, phase one (needs assessment) and phase three (programme implementation). In each phase, the researcher collected both quantitative and qualitative data simultaneously, analysed them separately, and then triangulated the results from the separate QUAN and QUAL components of the study in order to “confirm, cross-validate, or corroborate findings (Creswell, 2014; Creswell, Plano Clark, Gutmann & Hanson, 2003, p. 229). The triangulation of both methods can make the eventual conclusions applicable to a wider population and help to limit the influence of bias of each method (Risjord, Moloney & Dunbar, 2001).

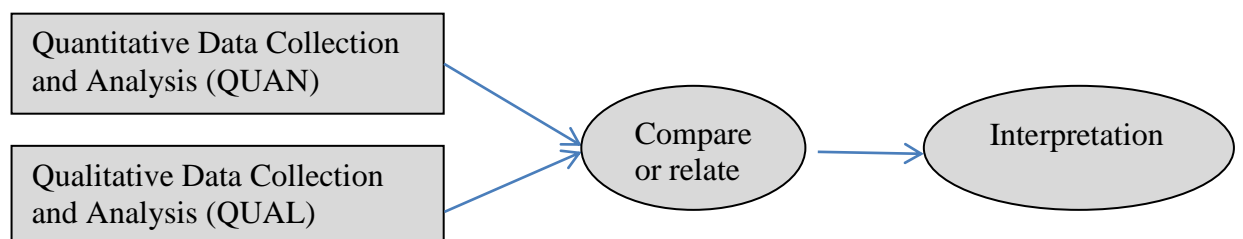


Figure 4: Convergent parallel mixed methods

The first phase of the study was the needs assessment and Creswell (2014) suggested that a needs assessment be conducted in order to address a research problem that will benefit participants. A needs assessment survey was carried out to identify and plan for participants' needs in relation to knowledge, skills, and/or abilities to discuss sexual issues with their young daughters in a timely and meaningful manner. The descriptive survey design was applied because a descriptive survey design explains the conditions of the present by using many subjects and questionnaires to describe a phenomenon fully. It then organises, tabulates, depicts and describes the data using visual aids such as graphs and charts to aid the reader in understanding the data distribution including the drawing of inferences (Association for Educational Communications and Technology, 2001; Spriestersbach, Röhrig, du Prel, Gerhold-Ay & Blettner, 2009). The descriptive survey design also provided a knowledge base in order to design the envisaged programme. In order to effectively address this issue, the following questions were formulated:

- What are mothers' perception and beliefs regarding discussion of sexual issues with their young adolescent girls?
- To what extent do mothers communicate with their adolescent girls about sexual and reproductive health issues?
- What are the possible sexual topics were mothers likely to discuss in with their daughters?
- How comfortable are mothers regarding sexual communication with their young adolescent girls?

- How prepared are mothers regarding sexual communication with their young adolescent girls?
- What barriers do mothers face that limit their abilities to effectively perform their roles?
- What concerns do mothers have regarding sexual communication with their young adolescent girls?
- In what areas do mothers need support?

The second phase of the study involved the development of the programme content and the goal was to develop a training guide and to ensure that the content of the training programme was needs-driven, that is, based on the mothers' needs as identified through the needs assessment survey. In addition to the outcome of the needs assessment, the researcher also relied on existing literature on parent-child sexual communication in designing the training manual. For this phase, a desktop study design was utilised. The results of the needs assessment survey, together with the literature review, were used to inform the content of the guide for the training programme.

The third phase was the programme implementation phase. The goal of this phase was to provide assistance and guidance to enable mothers to provide sexual instruction as well as communicate their values to their very young adolescents in a timely and meaningful manner. The multi-session programme for parents only was employed for this phase. This phase was based on an experimental design which involved the

implementation of the developed training guide through various training sessions.

The final phase involved the evaluation of the training programme. A paired sample t-test was applied for this phase of the study to compare the means of two samples of related data. The results from the pre- and post-test were employed as the comparative data.

3.2 **POPULATION AND SETTING**

The target population of the study was mothers whose daughters were between the ages of 10 to 14 and who were in Grade 4 to 7 in elementary school in the Khomas region, in Namibia. The setting for the study is Windhoek in the Khomas region and the region has been identified as one of high burden regions for teenage pregnancy and HIV burden. Khomas region is also known to represent much of Namibia's social, demographic, geographic and economic heterogeneity (Somda et al., 2013).

3.3 **SAMPLE AND SAMPLING TECHNIQUES**

Sample is a process of selecting a number of individuals for a study in such a way that the individuals represent the larger group from which they were selected. All the individuals in the overall sample were mothers having daughters aged 10 to 14 and the most effective way of recruiting mothers was through schools. In order to achieve this, the study utilised a simple random sampling technique to select the schools. A simple random sampling is one in which each unit (e.g. persons, cases) in a clearly defined

population has an equal chance of being included in the sample and probability of a unit being selected is not affected by the selection of other units from the accessible population (Teddlie & Yu, 2007). Using a hat-and-draw technique, three public and three private schools were randomly selected as an avenue to recruit mothers for the needs assessment survey. However, only four of the selected schools (one public and three private schools) agreed to participate in the study. Two of the public schools could not be reached because it was quite challenging to obtain cooperation from the school principals due to bureaucratic procedures. In each of the four schools, mothers of all Grade 4 to Grade 7 girls from the ages of 10 to 14 years who completed the questionnaires were included in the sample.

Purposive sampling involves the identification and selection of individuals or groups of individuals that are knowledgeable about or experienced with a phenomenon of interest (Creswell & Plano Clark, 2011; Palinkas, Wisdom, Green & Hoagwood, 2013). Bernard (2002) and Spradley (1979) added the importance of participants' availability and willingness to participate, including the ability to share experiences and opinions in an articulate, expressive, and reflective manner. Maxwell (1997) on the other hand described purposive sampling as a type of sampling in which "particular settings, persons, or events are deliberately selected for the important information they can provide that cannot be gotten as well from other choices" (p. 87). Mothers were selected based on purposive criterion sampling because mothers met the set criterion as identified in the description above.

3.4 **RESEARCH INSTRUMENTS**

For the needs assessment, a researcher-designed questionnaire was used. Data were collected by means of a self-administered questionnaire (see Appendix A). The items in the questionnaires were developed based on selected themes and topics. Section A of the questionnaire measured mothers' characteristics and demographics and section B assessed mothers' knowledge, values, comfort, openness and self-efficacy regarding communication about sexuality. The questions selected for this assessment contained both closed and open-ended items. The closed items used the five point Likert-type scales, which allowed the participants to express how much they agreed or disagreed with a particular statement, with 1 being the lowest rate and 5 the highest. The open-ended questions elicited qualitative information in relation to the concerns that mothers have regarding discussion about sex and sex related issues as well as the benefits derivable from such discussions. The researcher sent out 400 self-administered questionnaires and 104 were returned.

During the programme implementation phase, mothers completed both a pre-test and post-test (see Appendix B). The content of the pre- and post-tests were the same, in order to assess participants' capacity in the given areas before the training and how the training might have changed this capacity. The pre-test questionnaire served as a baseline to assess the effectiveness and impact of the programme. The post-test questionnaire, which used the same test as the pre-test, was administered one month after the mothers' exposure to the training. This was to afford mothers the

opportunity to implement the content of the training programme with their daughters at home.

The questions elicited information on mothers' beliefs, communication, knowledge and self-efficacy relating to sexual issues. The items relating to mothers' beliefs, communication and knowledge consisted of five-point, Likert-type questions. The scales ranged from strongly disagree to strongly agree. The questions therefore allowed mothers to express how much they agreed or disagreed with a particular statement, with 1 being the lowest and 5 the highest rate. In measuring self-efficacy, the items were phrased in terms of 'Can do', which comprised a statement of judgment of capability to execute a given type of performance.

Mothers were presented with items representing different levels of task demands, and they rated the strength of their ability to execute the required activities at the time of the survey and not their potential abilities or expected future capabilities. Mothers recorded the strength of their efficacy beliefs on a 100-point scale, ranging from 0 ('cannot do'); through intermediate degrees of assurance, 50 ('moderately certain can do'); to complete assurance, 100 ('highly certain can do'). An efficacy scale with a 0 – 100 response is a stronger predictor of performance than one with a five-interval scale (Pajares, Hartley & Valiante, 2001).

In order to match pre- and post-test results, each participant generated a unique identifier code using the first two letters of their mothers' name, the first two letters of their fathers' name, and the first letter of their gender and the last two digits of their year of birth on both the pre- and post-test questionnaires. The unique identifier code helped to ensure confidentiality and to facilitate the ease of matching sample pairs. The researcher maintained the master copy of the codes and the names of the participants.

3.5 **RESEARCH PROCEDURES**

This section explains the procedures that were followed in relation to the four different phases and are discussed in detail below.

3.5.1 *PHASE 1 - NEEDS ASSESSMENT*

In order to achieve this objective, an approval to conduct the study was given by the University of Namibia (see Appendix C), which was presented to the Ministry of Education. The Ministry of Education consented and a letter was issued to that effect (see Appendix D). A visit was then made to the selected schools to explain the rationale and importance of the study to the school principals. After agreeing on the modalities with the school principals, questionnaires for the needs assessment were sent to the schools to be forwarded to mothers through daughters. Mothers completed and sent back the questionnaires, through their daughters in sealed envelopes that were provided by the researcher, to school. The different class teachers collected the envelopes and then forwarded them to the school principals for pick up by the researcher.

3.5.2 *PHASE 2 - PROGRAMME DEVELOPMENT*

The training guide was developed by the researcher for mothers with daughters aged 10 to 14. This allowed the content to be relevant and age-appropriate for very young adolescent girls. Topics, such as pubertal changes, menstruation, personal hygiene, self-acceptance and delayed gratification, were included in the guide. Since the purpose was to enable mothers to initiate discussions before sexual behaviours started, topics were designed around issues considered of significance to mothers, such as how to initiate sexual talks, what to say and when to start. The training guide also included topics related to dealing with limiting beliefs, sexual challenges peculiar to very young adolescent girls and strategies to support lifelong, healthy sexuality and delay early, sexual activities, clarifying and imparting sexual values, handling indecent influences, as well as relationships, as an intervention to curb early sexual initiation (Dessie et al., 2015; Motsomi et al., 2016; Mutema, 2013). A list of resource materials (see Appendix E) was compiled for mothers who were interested in reading more on the topic.

The topics were structured around four different sessions, and an outline was created for all the different sessions. Each of the sessions started with session objectives followed by key topics necessary for mothers and their very young adolescent daughters. After outlining the content of each session, a script was then written for each session.

3.5.3 *PHASE 3 - PROGRAMME IMPLEMENTATION*

As previously justified in the literature review that parent-only classes, without including their children were more largely effective, the multi-session for parents only approach was then adopted for this phase. A note of interest to participate in the workshop was sent to the four, randomly selected primary schools (see Appendix F). The note of interest detailed the purpose of the training. The same protocol as that of the needs assessment questionnaire was followed. Interested mothers, who met the selection criteria, filled out the note of interest and the researcher picked up the notes of interest from the school principals. This was followed up with emails, phone calls and text messages to interested mothers notifying them of the workshop date, time and venue of the training.

In order to facilitate the workshop, the boardroom for the Society for Family Health (a non-governmental organisation) was used. The Finance and Administration Director was approached informally and duly briefed on the rationale and importance of the study. Verbal permission was obtained from the Country Director through the Director of Finance and Administration. The one-day workshop took place in Windhoek, Khomas region, over a 6 month period (October, 2015 – April, 2016). It was expected that 50 mothers would be involved in the programme implementation phase however only thirty (60% of the intended sample size) mothers were able to attend the training. The workshop started at 08h30 and ended at 17h30.

The researcher conceded to a one-day workshop because it was more feasible and attainable for mothers to commit to because of their busy schedules, rather than splitting sessions into multiple days. This helped to curtail attrition, lack of interest and low motivation from the participants. The training programme was divided into six different sessions. Fifteen minutes were scheduled for the first break and an hour for lunch. All the mothers, who attended the training, participated in all the sessions.

3.5.4 *PHASE 4 - PROGRAMME EVALUATION*

Programme evaluation entails the collection of information in order to make decisions about the programme. It was carried out mainly to evaluate the effectiveness of the programme and to determine whether the programme was appropriate for mothers. This was ascertained through the interpretation of findings from the pre- and post-test results. A training evaluation questionnaire (see Appendix G), which included both closed and open-ended items, was administered immediately after the training programme to determine whether the training content was relevant and helpful, whether the training sessions enhanced participants' knowledge and skills and whether there were improvements that could be made to the training, as well as other topics of relevance for future training. The programme evaluation was also to evaluate the effectiveness of the programme.

3.6 **DATA ANALYSIS**

The quantitative and qualitative databases were analysed separately and then brought together. This approach is called side-by-side comparison because the researcher makes the comparison within the discussion, presenting the quantitative statistical result and then discusses the qualitative findings that can either confirm or disconfirm the statistical results and this can be done vice-versa (Creswell, 2014). The interpretation in the convergent approach is typically written into a discussion section of the study. Whereas the results section report on the findings from the analysis of both the quantitative and qualitative databases, the discussion section includes a report comparing the results from the two databases and notes whether there is convergence or divergence between the two sources of information (Creswell, 2014).

3.6.1 *QUANTITATIVE DATA ANALYSIS*

Numeric value was assigned to all the questionnaires that were sent back before the commencement data entry into the Statistical Package for Social Sciences Programme (SPSS). The quantitative data from the needs assessment was analysed using descriptive statistics for percentage, mean and standard deviation and the bar graph was used for graphic presentation. Parametric statistics was used for the analysis of the pre- and post-test data. The fourth sub-scale of the pre- and post-test questionnaires was re-coded during analysis. This re-coding was considered necessary to ensure consistency in the mean scores of the subscales and to avoid confusion. Percentage ratings from 0 to 20 were assigned a value of 1, 30

to 40 a value of 2, 50 to 60 a value of 3, 70 to 80 a value of 4 and 90 to 100 a value of 5. The paired sample t-test was used to compare pre- and post-test results. The paired samples t-test compares two means that are from the same sample members, at two different times (for example, pre-test and post-test with an intervention between the two test-time points) (Hedberg & Ayers, 2015). Analysis of the mean scores from the pre- and post-test questionnaires determined the degree of difference in mothers' responses at the .05 level of significance.

3.6.2 *QUALITATIVE DATA ANALYSIS*

Thematic analysis is one of the methods used in a qualitative approach for identifying, analysing, and reporting themes within data (Braun & Clarke, 2006) and it allows for rich description of the data set. Creswell and Plano Clark (2007) presented five steps to analyse qualitative data namely; preparing the data for analysis, exploring the data, analysing the data, representing the data analysis, and validating the data. Braun and Clarke (2006) on the other hand, described six phases to create meaningful patterns in qualitative analysis and these patterns are familiarisation with data, generating initial codes, searching for themes among codes, reviewing themes, defining and naming themes, and producing the final report.

The thematic analysis was used for the needs analyses open questions and also the pre- and post-test open questions. The purpose of this was to understand the phenomenon being studied and to enable the researcher to

focus on the participants' perceptions and experiences as the paramount object of the study. The research objectives did not influence the codes but rather codes were created from the data. This is an inductive approach to thematic analysis where themes are strongly linked to the data because assumptions are data driven (Boyatzis, 1998). The researcher established key themes on the basis of thematic analysis methods using Braun and Clarkes (2006) steps.

The initial phase involved reading through participants' responses to the open-ended questions and creating a list of potential codes. The materials were read and re-read until the researcher became comfortable. The second phase involved generating an initial list of items that have a recurring pattern from the data set. This involves a back and forth process to search for meanings and patterns (Braun & Clarke, 2006) and refining of codes until the researcher was satisfied with the final themes. During the next phase of the analysis, the researcher combined codes to form themes in the data. Following to this, connections between overlapping themes were made so as to establish coherent patterns and that patterns connect to the data set. The researcher went on to define and name themes by explaining each theme in a few sentences. After defining what current themes consist of, the researcher began the process of writing the final report by deciding on themes that make meaningful contributions to answering research questions. This process was quite tedious and challenging.

3.6.3 *DATA ANALYSIS WITHIN THE TRIANGULATION MIXED METHODS DESIGN*

Triangulation involves bringing together two data sets, quantitative and qualitative data and how the two data flows complement each other is the unique aspect of triangulation in mixed methods research (Creswell, 2014). Triangulation helps to develop a complete understanding and to determine which data support a certain finding and which contradicts each other. Creswell and Plano Clark (2007) suggested two strategies for merging the quantitative and qualitative data, that is, data transformation and comparisons through discussion. The researcher compared and discussed the similarities and differences of both results by focusing on how the qualitative data ‘quotations’ linked together with the quantitative ‘numeric’ results and providing mutual confirmation of results (Creswell & Planor Clark, 2007). For example, in some instances, the questionnaire data sometimes gave the impression that mothers were quite confident to discuss matters with their daughters but in the open-ended questions and group sessions their comments indicated otherwise. In other instances the information from QUAN and QUAL data supported one another. Thus the advantage of having different methods is that the researcher could triangulate data to get a clearer picture of reality, which further increases the reliability and validity of the study.

3.7 **RELIABILITY AND VALIDITY**

An important aspect of a mixed method design involves the trustworthiness of the data. Steps were taken by the researcher to ensure validity and reliability as parameters of trustworthiness. The issue of validity was addressed by determining the relevant theory and reviewing existing literature on similar studies already conducted. The researcher ensured reliability by means of a pilot study. A pilot study is an investigation of the feasibility of the planned study, which helps to bring possible deficiencies in the measure procedure to the fore (Styrdom, 2000). The researcher ensured reliability of research instrument by piloting the instrument. The data collection tool for the needs assessment was piloted on mothers who had daughters aged 10 to 14 through one of the primary schools in Windhoek. It assisted the researcher in determining the usefulness and feasibility of the questionnaires in terms of the clarity of the terminology and instructions, specific focus of each question, the relevance and applicability of the content, the format of the questionnaires, the ease of coding and the time required for completion. The results of the pilot study were then used to refine the questionnaire.

The training guide including the pre- and post-test questionnaires and the training evaluation form were piloted on three mothers, who had daughters aged between 10 and 14, from one primary school site. This also helped to evaluate the clarity of each question, the significance and applicability of the content, the clearness of the instructions, the structure of the questionnaire and the sessions, the time needed for completing the

questionnaire, as well as the approaches for data analysis and reporting. The results of the pilot study were then utilised to refine and finalise the data collection tools, as well as the training guide.

The rigour of the pre- and post-test design was established by considering and taking care of a number of threats. Several circumstances may arise over time to mask the effects of an intervention. These circumstances are referred to as threats to internal validity and the researcher curbed the threats in the following ways:

A history threat occurs when events that are not part of an intervention affect the outcome between the pre and post measurements. It thus means that the longer the time between the pre- and post- measurements, the more chance for an extraneous interfering event to take place (Fife-Schaw, 2012). The researcher ensured that there were no significant national events occurring in the community or school environment within the period of measurement and that the time-frame between the pre- and post-measurement was not unduly long – 1 month.

An instrumentation threat to validity occurs when there is a change in the method of measuring outcomes between the pre- and post-measurements (Fife-Schaw, 2012). In order to deal with this threat, the researcher used the same instrument for the pretest and posttest measures.

Selection threat occurs when participants are selected based on certain characteristics that predispose them to have certain outcomes (Creswell, 2014). The researcher ensured that participants in this study met the eligibility criteria. For example, all participants were mothers having daughters from the ages of 10-14.

The dropout threat to internal validity happens when participants drop out between an experiment due to a number of reasons and the outcomes are unknown for those participants (Creswell, 2014). The researcher ensured that the duration of the intervention was not long and it was a one full-day programme so as to prevent drop out of participants from the study.

A testing threat can occur when participants become familiar with the outcome measure and remember responses for later testing (Creswell, 2014). The researcher, therefore, ensured a time interval of one month between administrations of the pre- and post-tests to curb this threat.

3.8 **ETHICAL CONSIDERATIONS**

Research entails collecting data from people and about people (Punch, 2005) and thus ethical measures are essential to protect participants throughout the research process.

3.8.1 *AUTHORISATION*

Prior to conducting the study, permission to conduct the study was granted by the Postgraduate Studies Committee of the University of Namibia when the proposed research study was approved (see Appendix C). Approval to collect data was requested of the Permanent Secretary, Ministry of Education, which was granted (see Appendix D). Copies of the approval letter were taken to the selected schools and verbal agreements were concluded with the School Principals and the researcher was introduced to the Life Skills teachers to coordinate the process to minimise disruption to school activities.

3.8.2 *INFORMED CONSENT*

For the purpose of the needs assessment, the consent form formed the cover page of the self-administered questionnaire and it detailed the rationale behind the study and the rights to which the participants were entitled. Participants were informed that participation was voluntary and that they could stop answering the questionnaire at any point or withdraw from the study if they felt uncomfortable without any repercussion. The researcher and main supervisor's contact details were also provided to participants on the consent form in case of questions and for clarification purposes. Having provided this information, participants who were willing to participate in the study were required to append their signature on the questionnaire. For the implementation phase, a note of interest was sent to mothers and those who were willing to participate in the training gave a verbal consent.

3.8.3 *CONFIDENTIALITY*

An effort was made to protect participating individuals' identity by maintaining confidentiality (Polit & Beck, 2006). There was no identification of the participants or the selected schools on the data collection tools. No personal identifying information was appended on the data collection tools. Each participant generated a unique identifier code and pseudonyms have been used in reporting the findings. No unauthorized person was allowed to gain access to the raw data. After the dissertation and any publications arising from the work have been completed, all research documentations will be stored in an electronic format for 5 years after which it will be destroyed. According to Privacy Technical Assistance Centre (2014), data destruction is the process of removing information in a way that renders it unreadable (for paper records) and irretrievable (for digital records). With regards to data relating to this study, an IT (information technology) person will be consulted to assist in the proper deletion of records in way that is consistent with technology and best practice standards.

3.8.4 *BENEFICENCE AND FREEDOM FROM HARM*

The principles of respect for persons and beneficence were taken into consideration. All effort was made throughout the study to minimise any potential harm resulting from participation. The researcher anticipated emotional discomfort on the part of the participants because of the sensitive nature of the phenomenon being studied. Providing participants with the opportunity to ask questions and to receive adequate information

such that they were able to make informed decisions was a way of protecting participants from harm.

3.9 **SUMMARY**

This chapter described the methodology that was used to determine mothers' needs regarding communication about sexuality with their daughters, programme development and implementation, as well as programme evaluation. In the next chapter, the researcher presents the research results.

CHAPTER 4

FINDINGS

4.0 INTRODUCTION

This chapter presents the results from the quantitative and qualitative analyses of data gathered during the needs assessment and programme implementation phases as they relate to the following research questions.

The specific objectives for this study are to:

1. Assess and describe mothers' perceptions of knowledge, values, comfort levels, and level of preparedness and needed support in providing sexuality education to their very young adolescent daughters.
2. Develop and describe an educational programme that will prepare, assist and support mothers during the early adolescence period.
3. Implement and evaluate the educational programme for mothers of young adolescents.

As part of maintaining participants' anonymity, codes were applied to their quotes. Codes given for all participants begin with M, and followed by the number such as 1, 2, and 3 (up to 104) to indicate individual participants for the needs assessment phase and 1 to 30 for the implementation phase.

4.1 **RESULTS BASED ON THE NEEDS ASSESSMENT**

This section reflects mothers' demographic information, their perceptions regarding discussions about sex with their daughters, the implications of the needs assessment findings on programme development, pre- and post-test results, training evaluation results, as well as the conclusion. Frequencies and percentages were used for categorical variable of response. In the percentage Table, missing values were not included; therefore, the total N for some sub-scales may not add up to 100%.

4.1.1 *DEMOGRAPHIC INFORMATION OF MOTHERS*

The study sample included 104 mothers in the Khomas region. Of these respondents, 31.7% were Whites, followed by 27.9% Oshiwambos, 15.4% Coloureds, 5.8% Hereros, 1.9% Caprivians, and others comprised 10.6%. With regards to the participants' ages, 37.5% were between the ages of 40 to 44, 25% between the ages of 35 to 39, 20.2% between the ages of 45 and 49, 9.6% were between 30 and 34; 6.7% were 50 and older, and 1% of them were between the ages of 25 to 29.

The study established the marital status of mothers. As indicated in the Table, the majority of the mothers (76%) were married, 9.6% were never married, 7.7% were divorced, and 3.8% were widowed while 2.9% were separated. A further distribution of the mothers by their education levels revealed that a substantial percentage (80.8%) had tertiary education, 10.6% had senior secondary (Grade 12) and 7.7% had junior secondary (Grade 10) education.

When the researcher looked at the mother and daughter relationships, it was found that 95.2% of mothers were with their biological daughters, 1.9% of mothers' relationships were with their step-daughters, 1.9% were adoptive mothers, and 3.9% had dual relationship with their daughters (biological mother/aunt and biological/adoptive mother). The majority of mothers (99%) lived with their daughters and 42.9% indicated that they had daughters who were 10 years old, 26.8% had daughters who were 11 years old, 17% had daughters who were 12 years old, 9% had daughters who were 13 years old and 4.5% had daughters who were 14 years old (see Table 1).

Table 1

Demographic Information of Mothers included in the Needs Assessment

	<i>Mothers (N=104)</i>	
	<i>Frequency</i>	<i>Percent</i>
Ethnicity		
White	33.0	31.7
Oshiwambo	29.0	27.9
Coloured	16.0	15.4
Others	11.0	10.6
Damara>Nama	7.0	6.7
Herero	6.0	5.8
Caprivian	2.0	1.9
Age in years		
35 – 39	39.0	37.5
40 – 44	26.0	25.0
45 – 49	21.0	20.2
30 – 34	10.0	9.6
50 and older	7.0	6.7
25 – 29	1.0	1.0
Less than 25	0.0	0.0
Marital status		
Currently married	79.0	76.0
Never married	10.0	9.6
Separated	8.0	7.7
Divorced	4.0	3.8
Widowed	3.0	2.9
Educational level		
Tertiary (Grade 12 above and above)	84.0	80.8
Senior secondary (Grade 10)	11.0	10.6
Junior secondary (Grade 12)	8.0	7.7
No response	1.0	1.0
Never went to school	0.0	0.0
Number of daughters between ages 10 to 14		
One	89.0	85.6
Two	11.0	10.6
Three	4.0	3.8
Daughters' ages		
10 years	48.0	42.9
11 years	30.0	26.8
12 years	19.0	17.0
13 years	10.0	9.0
14 years	5.0	4.5

4.1.2 *MOTHERS' PERCEPTIONS REGARDING DISCUSSIONS ABOUT SEX WITH THEIR DAUGHTERS*

The quantitative results revealed mothers' perception regarding their preparedness to discuss sexual issues, actual discussions taking place, reasons for such discussions, mothers' perception of risk and/or comfort-levels regarding these discussions, timing of, and training needs as well as other issues of importance to mothers.

4.1.2.1 **Preparedness for discussions regarding sexuality**

In order to gain a better understanding of the nature of communication about sexuality, mothers were requested to respond to how well prepared they were to discuss sexual topics with their daughters. The results showed that slightly over half of the mothers (54.8%) felt well prepared to talk about friendships. About 42.3% indicated they were well prepared to talk about puberty (womanhood), consequences of initiating sex early (42.3%), benefits of delaying sexual intercourse and activities till marriage (40.4%), dating (39.4%) and sexual intercourse (29.8%). A smaller percentage of mother respondents (16.3%) felt that they were well prepared to talk about oral and anal sex. On the average, only 40% of mothers felt well prepared to discuss sexuality issues (see Table 2).

Table 2

Preparedness to Discuss Sexual Topics

	Not well prepared	Somewhat prepared	Not sure	Sufficiently prepared	Well prepared
	%	%	%	%	%
Puberty/ womanhood	11.5	7.7	6.7	26	42.3
Friendships	1.9	8.7	5.8	24	54.8
Sexual intercourse	12.5	8.7	19.2	26	29.8
Dating	10.6	4.8	8.7	30.8	39.4
Oral and anal sex	36.5	9.6	17.3	13.5	16.3
Benefits of delaying sexual intercourse	8.7	3.8	8.7	33.7	40.4
Consequence of initiating sex early	8.7	5.8	10.6	27.9	42.3
Total on preparedness	13.0	7.0	11.0	26.0	40.0

N=104

Based on the qualitative data, some mothers expressed lack of knowledge about what should form the content of sexual information for their very young daughters. Mothers wanted to know what topic to be discussed first and how to structure the discussion in a way that will appeal to their daughters' relative young age.

'Should puberty be discussed first?' (M29)

'What to say and how to say it!' (M38)

'To talk to her age appropriately is the main challenge.' (M55)

'Not yet ready to talk to her about it ... don't know how to start (M66)

Some mothers requested reference materials to enhance their knowledge.

'I would like to know of good reading material(s) for both mothers and daughters on this subject.' (M14)

Mothers wanted to help their daughters make informed decisions regarding sexual issues. Some mothers wanted to be able to assess the contents of the internet and YouTube with their daughters. They also wanted to know how to handle some issues, such as helping their daughters discern between bad and good friends.

'Let my daughter know that what they see on the internet and YouTube is not reality. Women are often not treated with respect in these movies.' (M1)

'How to tell between bad and good friends' (M13)

'I want my daughter to be well-informed so that she will not live with regrets' (M62)

4.1.2.2 *Actual discussion taking place*

How much mothers have talked with their daughters on sex and sex-related topic is a direct measure of the sexual education that daughters receive from mothers. Mothers were thus asked to respond in terms of a 5-point scale, ranging from 'Have not talked yet' (1) to 'Everything' (5). A small proportion (4.8%) of mothers did not respond while 20.2% of mothers indicated that they had not talked to their daughters yet. Another 12.5% of mothers indicated that they had not talked much, while 33.7% of mothers indicated that they had had some talk about sex with their daughters. Slightly less than a quarter (24%) of mothers indicated that they had had much discussion with their daughters about sex. Another 4.8% of mothers indicated that they had told their daughters everything about sex (see Figure 5). Thus, only 28.8% indicated sufficient talk about sexual matters.

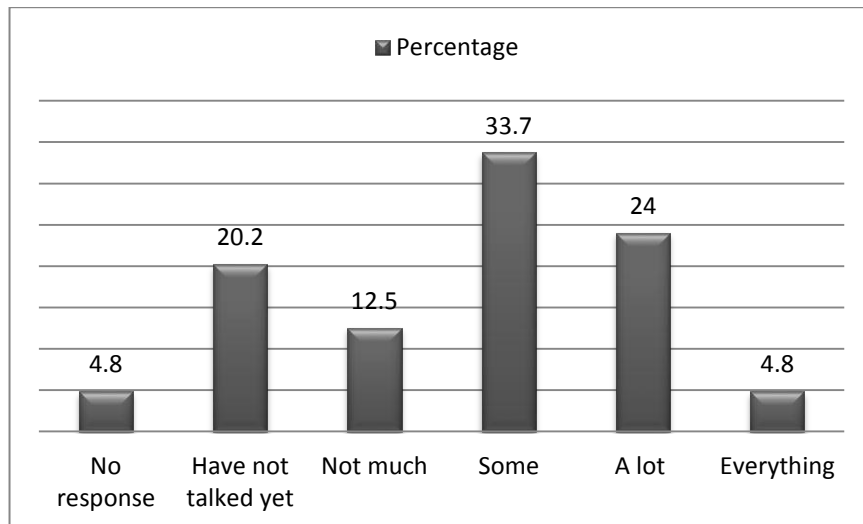


Figure 5: Mothers' perception of how much they had talked about sex

The qualitative results revealed that some mothers feared that they might provide their daughters with more sexual information than needed, coupled with the fact that their cultures did not encourage open discussions about sex.

'Providing too much information that may put her off or overwhelm her ... fearing that I may be exposing her to too much information that she is not ready to handle.' (M23)

'I am afraid to discuss about sex. Sex is taboo among Oshiwambo people especially to kids – it is only meant for adults.' (M94)

4.1.2.3 **Reasons for discussions about sexual issues**

The researcher went further to ask mothers what influenced them to talk to their daughters about sex. When combining the two positive responses, the results showed that 57.7% of mothers were motivated by the fear of boys/men taking advantage of their daughters. Another 45.2% of mothers were motivated by religious values, 42.4% and 42.3% of mothers were motivated by fear of contracting sexually transmitted infections and HIV/AIDS, respectively, 41.4% of mothers were motivated by fear of

pregnancy, 40.3% of mothers were motivated by family expectations and 20.2% of mothers were motivated by personal, past negative experiences. A quarter (25.0%) of mothers indicated that they had not talked to their daughters yet (see Table 3).

Table 3

Factors Influencing Mothers' Decision to Talk about Sex

	Strongly disagree	Disagree	Not sure	Agree	Strongly agree
	%	%	%	%	%
Fear of pregnancy	10.6	7.7	1.9	13.5	27.9
Fear of HIV/AIDS	8.7	7.7	1.9	7.7	34.6
Fear of sexually transmitted infections	7.7	5.8	2.9	8.7	33.7
Fear of boys/men taking advantage of daughters	6.7	2.9	1.9	12.5	45.2
Personal past negative experience	17.3	10.6	7.7	6.7	13.5
Family expectations	6.7	7.7	7.7	11.5	28.8
Religious values	8.7	6.7	5.8	15.4	29.8
I have not talked to her yet	18.3	9.6	3.8	6.7	18.3

N = 104

4.1.2.4 **Perception of risk**

When combining the two negative and the two positive responses, 61.5% of mothers believed that their daughters were at risk of all the issues listed, 48.1% of mothers perceived their daughters to be at risk of being raped, 48.0% of mothers identified daughters to be at risk of being pressured into having sex and 40.4% of mothers felt their daughters were at risk of sexually transmitted infections. Some mothers (40.3%) perceived their

daughters to be at risk of pregnancy and 38.5% of mothers believed their daughters to be at risk of HIV infection (see Table 4).

Table 4

Mothers' Perception of Daughters' Exposure to Risk

	Strongly disagree	Disagree	Not sure	Agree	Strongly agree
	%	%	%	%	%
The risk of HIV infection	15.4	3.8	2.9	17.3	21.2
The risk of STIs	14.4	5.8	2.9	17.3	23.1
The risk of pregnancy	13.5	2.9	4.8	16.3	24.0
The risk of being pressured into having sex	8.7	4.8	4.8	19.2	28.8
The risk of being raped	10.6	3.8	6.7	14.4	33.7
She is not at risk of any of the above	42.3	19.2	2.9	4.8	18.3
Total on risk	18.0	7.0	4.2	15.0	25.0

N = 104

Based on perceptions gathered from the qualitative data, some mothers wanted to be able to discuss the risks associated with early sexual initiation with their daughters, as well as help their daughters identify situations that could lead to rape and explain what is rape.

'How to approach the whole sex issue - trying to explain what rape is.' (M20)

'She gets to know about sex and be able to identify situations that can lead to rape.' (M21)

'To forewarn her about the risks that come with early sex and the benefits of delaying sex' (M23)

'How to inform children from young age about how to protect themselves against strangers and abnormal acts' (M29)

'Risk of being hurt or sleeping with a wrong guy' (M80)

Risk of HIV infection because some of the kids are born and growing up with the virus - they will not even think about testing at that age.'
(M84)

4.1.2.5 **Comfort levels regarding discussions about sexual issues**

The study also sought to find out how comfortable mothers were at discussing the 8 topics on sex and other sex-related issues as indicated in Table 7. The result showed that mothers (55.8%) felt very comfortable talking about puberty, 65.4% felt very comfortable talking about friendships; 48.1% felt very comfortable talking about the benefits of delaying sexual intercourse and activities till marriage and 45.2% would feel comfortable talking about dating; 43.3% would feel comfortable talking about the consequences of initiating sex, while less than half (19.2%) indicated their comfort at discussing sexual intercourse. In addition, only 12.5% and 11.5% of mothers indicated that they would feel comfortable talking about anal and oral sex respectively. On the average, only 37.6 of mothers felt comfortable to discuss sexuality issues (see Table 5). Note that 37.6% felt very comfortable and 26.6% were comfortable. Thus about 64.0% were comfortable to talk about sex but the comfort levels were substantially less when it came to the more sensitive topics such as anal and oral sex and intercourse.

Table 5

Comfort level at discussing sex and sex-related issues

	Not at all %	Slightly %	Not sure %	Comfortable %	Very %
Puberty/womanhood	1.0	4.8	4.8	29.8	55.8
Friendships	0.0	1.0	3.8	22.1	65.4
Sexual intercourse	12.5	18.3	11.5	26.0	19.2
Dating	5.8	6.7	5.8	26.9	45.2
Oral sex	37.5	11.5	18.3	7.7	12.5
Anal sex	46.2	7.7	17.3	5.8	11.5
Benefits of delaying sexual intercourse	4.8	1.0	7.7	27.9	48.1
Consequences of initiating sex early	9.6	1.9	7.7	26.9	43.3
Total for all sex-related issues	14.7	6.6	9.6	21.6	37.6

N = 104

Although several mothers, based on the quantitative data, seemed comfortable to talk about a number of topics to their daughters, this was not well supported by the qualitative data. The findings from the qualitative data clearly showed that some mothers were uncomfortable and actually feel embarrassed regarding discussions about sex.

'Feeling embarrassed to discuss some details'. (M23)

'I have no concerns with this topic. I just need to feel more comfortable' (M37)

'I am just not comfortable!' (M97)

Furthermore, findings based on the open-ended statements, revealed that mothers' past lifestyles and familial structures was an attributing factor for this state of discomfort.

'Being a single mother, I truly have to admit that I do struggle a bit with setting my sexual values right thus making it a bit difficult for me to help my daughter set sexual morals and values.' (M30)

'It is difficult to talk about sex as her father flaunts his girlfriend. She is aware of when they have had sex ... She has witnessed a lot with her parents' problems and her father is very verbal and crude about sex. (M50)

4.1.2.6 **Timing discussions about sexual issues**

The study also probed for mothers' perception about the appropriate time to initiate discussions about sex with their daughters. In their response, 37.5% of mothers indicated the appropriate time to be before puberty, 24.0% indicated that it should occur at the onset of puberty, and 16.3% indicated that it should occur when their daughters start asking questions about sex and sex-related issues. Some (10.6%) of the mothers considered the appropriate time to be when their daughters enter high school, another 7.8% indicated the appropriate time to be when their daughters start dating while 3.8% of mothers did not respond to this question (see Table 6).

Table 6

Appropriate Time to Discuss Sex

	Frequency	Percentage
Before puberty	39	37.5
Onset of puberty	25	24.0
When she starts asking questions about sex	17	16.3
When she enters high school	11	10.6
When she starts dating	8	7.7
No response	4	3.8
Total	104	100

N=104

The findings from the qualitative data revealed that mothers varied in their beliefs about the appropriate time to discuss sex. Some mothers considered their daughters too young to begin discussions about sex.

'Fear/uncertainty of the impact it may have on her and her subsequent behaviour around boys/men ... may be traumatising.' (M44)

'She is still too young and I feel she is still innocent and I need to move with her development.' (M51)

'When is the right time? Think under 13 is too young or before menstruation ... must be comfortable with topic.' (M64)

'She is still too young. We raise our children protectively. Talk should wait until she is older.' (M85)

'I will do so when she gets to high school.' (M93)

'It's difficult to talk to an 11 year old about some issues as they are not yet age-appropriate. Yet the children are already exposed to too much through the media and peer pressure.' (M101)

'I think she is still young and has never come up with any sexual related question yet.' (M104)

4.1.2.7 **Values about sexual initiation**

The study also revealed that there were values that mothers expected of their daughters, which mothers might not have communicated to their daughters. The majority of mothers (71.2%) would actually desire their daughters to wait until marriage to begin having sex, and 20.2% of the mothers indicated that their daughters could initiate sex from age 21. Another 3.8% of mothers considered age 18 as an appropriate time, 1.0% of mothers felt age 16 was appropriate and 3.8% of mothers did not respond to the question (see Figure 6).

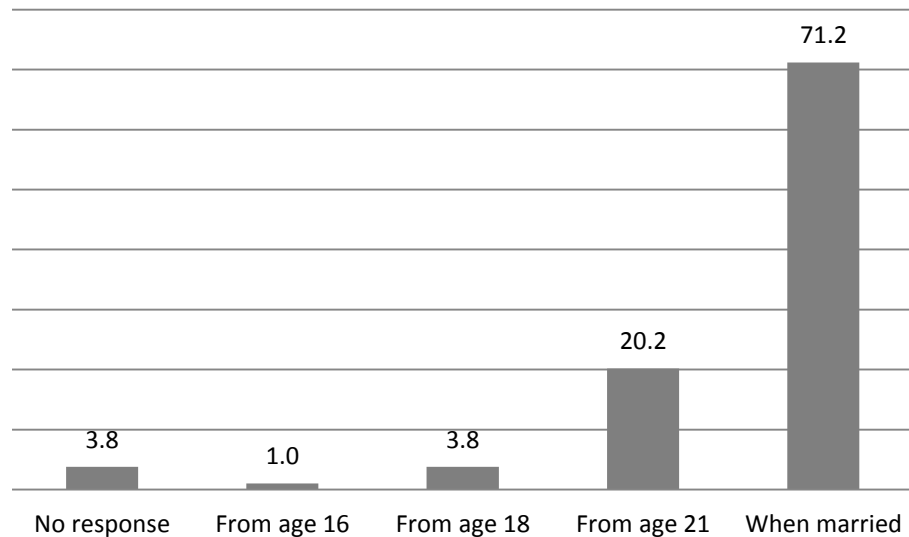


Figure 6: Appropriate time for daughters to initiate sex

The qualitative data strongly supported the quantitative data, in that, mothers clearly demonstrated the desire for their daughters to delay sex until marriage or until they were emotionally mature.

‘I hope she will have time (more) to mature emotionally before such a commitment.’ (M4)

‘That she waits until she is emotionally mature to handle sex issues and she is not taken for granted’ (M27)

‘I hope to teach my daughters to delay having sex until they are married. It is something special with your life long partner to enjoy within marriage. I want them to have special values – to feel good about whom they are and treasured – not being used by men.’ (M41)

‘Saving self for one person as God intended.’ (M57)

‘Having children at the right time with the right partner’ (M69)

‘That she will think about it responsibly, remember that God already chose her husband and that she will be able to stand pure before God and her groom on her wedding day.’ (M86)

Mothers (72.1%) strongly disapprove of their daughters initiating sex during their adolescent years, 18.3% of mothers disapproved and only 2.9% of mothers were liberal about their daughters having sex during their adolescent years. Another 5.0% of mothers were not sure and 1.9% of mothers did not respond (see Figure 7).

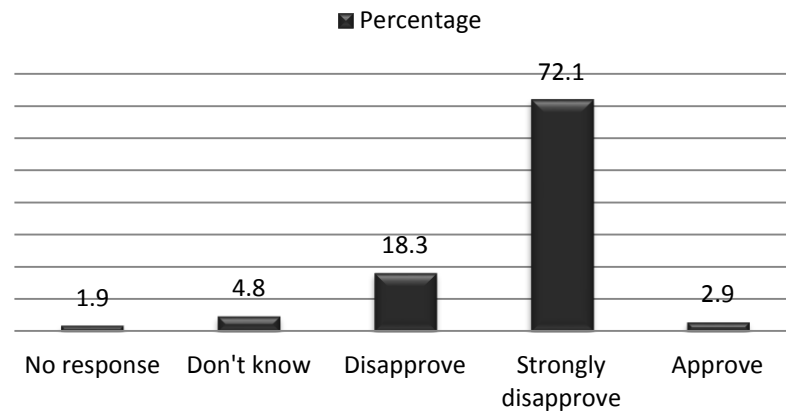


Figure 7: Attitude towards early sexual initiation

In addition, the majority of mothers (84.6%) indicated that it was very important to them that their daughters delay sex and 10.6% thought it was important. A small percentage of mothers (2.9%) did not think it was important and 1.0% of mothers did not know whether it was important or not while another 1.0% of mothers did not respond (see Figure 8).

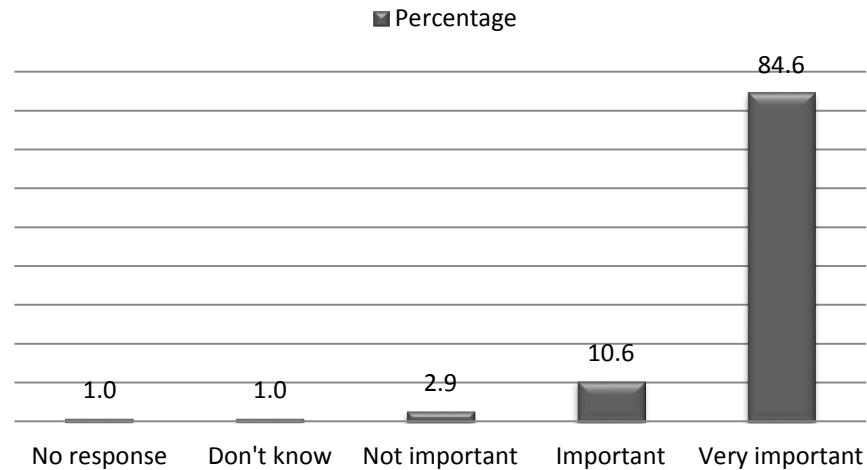


Figure 8: Attitudes to delaying sexual initiation

4.1.2.8 *Training needs for discussions about sexual issues*

Mothers were asked to prioritise those areas where they felt they lacked knowledge or skills for effective communication with their daughters, assuming they were to receive information. Most mothers (31.8%) stated that they needed knowledge on all issues listed, 25.9% of mothers indicated that their priority was to know ‘how to listen actively to my daughter during a conversation’ and 11.5% indicated their training need to be ‘how to make my daughter comfortable’. Another 11.5% of mothers’ prioritised their need to be how to initiate sexual conversations with their daughters and being consistent, 10.6% of mothers’ need was on how to teach daughters to say ‘No’ to sexual pressure without fear of rejection and 8.7% of mothers prioritised how to find the right moment to provide information (see Table 7).

Table 7

Mothers' Priority Training Needs

Training needs	Frequency	Percentage
All issues listed, were <ul style="list-style-type: none"> • How to initiate sexual conversation with daughter and be consistent; • How to communicate my sexual values; • How to listen actively to my daughter during a conversation; • How to be comfortable talking about sex; • How to find the right moment to provide information; • How to make my daughter comfortable; • About the changes that are taking place in her body; • About HIV/AIDS; • About STIs; • About the importance of waiting to have sex; • Teaching daughter how to say "NO" to sexual pressure and not be afraid of rejection; • Consequences that come with having sex (such as HIV/AIDS, STIs, pregnancy, among others) 	33	31.8
How to listen actively to my daughter during a conversation,	27	25.9
How to make my daughter comfortable,	12	11.5
How to initiate sexual conversation with my daughter and be consistent,	12	11.5
Teaching daughter to say 'No' to sexual pressure without fear of rejection.	11	10.6
How to find the right moment to provide information	9	8.7
Total	104	100

N = 104

4.1.2.9 *Other issues of importance to mothers*

The researcher was mindful of mothers' busy schedules; hence it was necessary to ask mothers how they would prefer the training sessions to be scheduled if they were to be part of training. There was more preference for 2 sessions of 1 hour each over two days, followed by 4 sessions of 1 hour each over one day, and 1 session of 1 hour each over four weekends. In addition, there were mothers who suggested 1 hour per week over 4 weeks in the evenings, 3 sessions of 1 hour each during weekends, 4

sessions of 1 hour on a Saturday, while some indicated that it all depended on their availability (see Table 8).

Table 8

Preference for Training Sessions

	Frequency	Percentage
4 sessions of 1 hour each over one day	24	23.1
2 sessions of 1 hour each over two days	26	25.0
2 sessions of 1 hour each over two weekends	15	14.4
1 session of 1 hour each over four weekends	20	19.2
Others	10	9.6
No response	9	8.6
Total	104	100

N = 104

Of importance to mothers was the involvement of fathers in the communication with daughters about sexuality. Some mothers opined that incorporating fathers into this continuum of protection would also help to provide the needed anchors for daughters.

'I feel both parents should be involved in the discussion.' (M6)

'How to involve fathers in this conversation' (M18)

'Fathers' role must be increased through activism, advocacy and active participation. Fathers know about men's intentions and should educate their daughters. My father did talk to me about sex and it saved my life.' (M80)

Some mothers thought that greater involvement by schools would also help to cement the foundation about sexual issues for very young adolescent girls.

'Sex education should formally start in primary school. I once heard the saying that waiting till age 8 is too late.' (M48)

'I think sex education should be encouraged as a topic at school ... about abstinence until marriage and not about protective sex which is a big mistake and sin.' (M49)

'Schools to also include more topics about sexual activities – encourage the programme of true love waits until such time to come. Sometimes, kids trust teachers more than parents.' (M69)

'Children sex education in schools must be supported.' (M80)

On the other hand, some mothers considered sex education as more of a parental responsibility, which should not be shifted to school. Schools should only complement parental efforts.

'I think this topic is the parents' duty and not of any school or the government - the way the Grade 6 textbook display the sex organs is terrible. We do not know the teachers and what they teach our children. Being a Christian, I would like this issue to be addressed very sensitively and would prefer to do so myself. God gave parents the mandate over their children and not the government.' (M86)

4.2 **IMPLICATIONS OF THE NEEDS ASSESSMENT FINDINGS ON PROGRAMME DEVELOPMENT**

The needs assessment was not only to identify the necessity of an intervention programme but also to have a programme that is contextualised towards the needs of Namibian mothers. The findings based on the needs assessment would also help to determine what should form the content and nature of the intervention programme as a way of providing a guide that is culturally relevant to the needs of Namibian mothers. The following elements stood out as crucial to be addressed in the training programme.

4.2.1 *BELIEFS AROUND SEXUAL ISSUES*

Even though mothers were aware of the importance of their role and concurred that it was their primary responsibility to provide sexual health education to their adolescent girls, their beliefs and values were strong determining factors influencing the provision of sex health education or not. For many of the mothers, there were a number of fears and concerns underpinning some of their beliefs. For example, mothers were deliberately delaying the provision of sexual information in a bid not to compromise and preserve their daughter's sexual innocence. It was pretty clear that some mothers were unaware that the onset of puberty has broken the status quo as puberty now sets in much earlier for some girls.

4.2.2 *COMMUNICATION ABOUT SEXUAL ISSUES*

Daughters' decisions to stay sexually abstinent and delay the onset of sexual intercourse have been linked to consistent mother-daughter communication. The findings showed that sexual discussion was distressing for mothers in that they had difficulties matching their daughters' developmental phase with the appropriate amount and type of information. They strongly desired to know what constituted age-appropriate sexual information and how to accurately transmit such information. Consequently, the majority of mothers had not discussed many of the topics related to adolescent sexual health with their daughters. Even among mothers who seem to have provided sexual health education to their daughters at one time or another, reported not being detailed and not including sensitive, yet critical, topics such as sexual intercourse, oral

and anal sex as well as sexual coercion and assault. Concurrently, they indicated their need for more information on how to relate this information to their young girls. The undertone here can still partially be linked to the belief that the provision of inappropriate sexual information might have negative psychological effect or predisposes their young girls to early experimentation with sex, which may actually expose them to risky sexual behaviours.

4.2.3 *KNOWLEDGE ABOUT SEXUAL ISSUES*

The findings, based on the needs assessment, revealed mothers limited sexual health knowledge and the need for accurate information and support in order to feel more comfortable and confident to have open discussions about sexual health with their adolescent girls. Mothers' embarrassment and discomfort proved to be strong barriers to discussions about sexual issues with their adolescents, thus, stressing the importance of increasing maternal knowledge so as to increase mothers' comfort levels. In addition, the level of mothers' sexual health education is greatly affected by their sexual health knowledge. Mothers' own experiences of sex education and the fact that they had to find their own way as a sexual adult affected their attitudes towards their daughters' sexuality education. Most mothers reported that they had no, or very limited, sex education as children and their lack of education had increased their feelings of uncertainty about the best way to educate their adolescent girls. This is an affirmation of the existing deficiencies that exist in the discussion about sexual issues with their young girls and expression of a strong feeling that they wanted sex

education for their daughters to be better than what they had with their own parents.

4.2.4 *ABILITY TO ENGAGE IN DISCUSSIONS ABOUT SEXUAL ISSUES*

Only a few mothers felt able to engage in actual communication about sexual issues and to influence their young daughters' sexual behaviours. Mothers indicated their need for skills to provide assistance to their daughters. Maternal values were important to them but it was quite challenging for mothers to communicate them to their children. A number of fears and concerns affirmed some of the values, for example, the effects of exposure to too much sexually explicit information on the Internet, television, songs and music videos, which are contrary to their values. Mothers wanted to be able to forewarn their daughters about the threat of sexual predators and vulnerability to sexual risks such as rape, pregnancy, and pressure from peers to initiate early sexual intercourse as well as the risk of contracting sexually transmitted diseases/HIV infection. Mothers also wanted to be able to communicate the value of waiting until marriage to have sex and commitment to one sexual partner. Sex, they said, was something special and to be enjoyed in marriage.

4.2.5 *PROCESS OF PROGRAMME DEVELOPMENT*

The findings as discussed above clearly reflected the need for a programme that will assist mothers with the tools and support their need in order to play an effective role in their daughters' sexual health education, thereby helping their daughters to navigate negative sexual health

outcomes. Addressing the lack of skills, information, misconceptions and the barriers to effective communication with mothers may increase their knowledge, enhance intentions towards communicating, and provide skills needed to become more effective communicators, which may indirectly lead to improved knowledge for adolescent girls. In order to achieve this task, it is necessary to plan an educational programme that would provide mothers with clear, practical instructions and help to optimize the timing and language used in their conversations.

In order to effectively develop and implement such a programme, the research had to rely on existing literature on parent-adolescent sexual communication and age-appropriate sexual information for young adolescents such as puberty, including menstruation, personal hygiene, delaying gratification, self-acceptance, recognise inappropriate influences to have premature sex, and how to discern and respond to unsafe situations (sexual abuse or sexual coercion), how to identify teachable moments, use appropriate anatomical words for genitals, and how to validate their values into the training guide as suggested in previous studies (Ballard & Gross, 2009; Beckett et al., 2010; Dyson & Smith, 2012; Sneed et al., 2013).

Since the purpose was to also enhance mothers' skills, topics were designed around issues that were considered significant to mothers, such as how to initiate sexual talks, what to say and when to start. The training guide also included topics related to dealing with limiting beliefs, sexual challenges peculiar to very young adolescent girls and strategies to support

lifelong, healthy sexuality and delaying early sexual activities, clarifying and imparting sexual values, as well as building a strong bond with their daughters. Thus, the topics were structured around four different sessions, and an outline was created for all the different sessions (see Table 9). Each of the session started with session objectives followed by key topics necessary for mothers and their very young adolescent daughters. After outlining the content of each session, a script was then written for each session. A list of resource materials (see Appendix E) was compiled for mothers who were interested in reading more on the topic.

Table 9

Outline of Sessions

Sessions	Topic	Objectives
	Starting the workshop <ul style="list-style-type: none"> • Introduction • Expectations/guidelines • Completing pre-test tool • Understanding the terms 	<ul style="list-style-type: none"> ▪ To have facilitator and participants introduce themselves to one another; ▪ To review purpose of the workshop; ▪ To conduct pre-test assessment; ▪ To review the meanings of some of the terminology.
1	Dealing with self-limiting beliefs about discussions about sex <ul style="list-style-type: none"> • Reflection and discussions around self-limiting beliefs 	<ul style="list-style-type: none"> ▪ Identify self-limiting beliefs about discussions about sex; ▪ Identify sources of self-limiting beliefs about sexual discussion; ▪ Develop self-empowering beliefs regarding discussions about sexual issues.
2	Building moments <ul style="list-style-type: none"> • Purpose of friendship 	<ul style="list-style-type: none"> ▪ Foster a bond of friendship with daughters; ▪ Express affection in appropriate ways.
3	Laying solid foundation <ul style="list-style-type: none"> • Discuss pubertal changes, menstruation, personal hygiene, self-acceptance and delaying gratification 	<ul style="list-style-type: none"> ▪ Describe the changes that take place in girls 10 to 14 years old; ▪ Explain the need to focus on supporting daughters to develop basic, personal hygiene, self-acceptance and delayed gratification.
4	Paddling the pool <ul style="list-style-type: none"> • Brainstorm on early sexual initiation, strategies to support lifelong healthy sexuality and delay early sexual activities, clarify and impart values about sex and how to handle indecent influences 	<ul style="list-style-type: none"> ▪ Identify the various sources of pressure on adolescent girls to initiate sexual activity;; ▪ Identify the scenarios that provide opportunity to educate daughters; ▪ Clarify and impart sexual values; ▪ Examine strategies to help daughters postpone sexual activity.
	Closing the workshop <ul style="list-style-type: none"> • Action planning • Reflection and sharing 	<ul style="list-style-type: none"> ▪ Discuss lessons learnt throughout the sessions; ▪ Commit to taking personal action.

When the content and scripts were written, appropriate training methods had to be identified. A range of learning delivery and assessment methodologies were employed to allow the training to be participatory and interactive, and to also allow participants to internalise new ideas and learning.

- **Role play**

Role play allowed mothers to use drama to have a simulation of real life situations in an interesting manner and also to explore alternative approaches to some situations. Role play provided a safe environment where mothers were able to open up communication channels to let go of whatever reservations that hindered open and relaxed discussions on problems that might be embarrassing if discussed in real life. It was effective for communication skills and attitude training, lasted between 10-15 minutes and focused on skills-building and practise. Mothers had opportunities to simulate different possible scenarios that young adolescent girls may encounter and how to circumvent possible negative experiences.

- **Questions and answers**

Questions and answers helped to maintain participants' interest in a topic, check their understanding and experiences regarding the topics.

- **Case study**

A case study depicting real-life situations was put in the form of a story so that mothers could identify the issues in it and suggest appropriate courses of action.

- **Small group discussion**

This method was used to ask for group opinions, solving problems, exchanging opinions and experiences as well as generating mothers' interest. It enabled mothers to learn from each other while trying to express their own ideas in a friendly scenario before presenting them publicly. This technique was used to explore topics such as attitudes, communication skills, and knowledge. The researcher was mindful of the fact that discussions about sex may pose stressful situations for mothers. Therefore, in order to help mothers sustain their efforts in initiating and maintaining discussions about sexual issues with their VYAs, the training programme was structured to allow time for reflection by the mothers. For example, mothers were provided with opportunities to reflect on past tasks in which they had experienced success and how their sense of self-efficacy was firmly established as a result of the success they had achieved. The idea was to help mothers draw from past-achieved success, and to transfer mastery of the same into conquering stressful situations, such as discussions about sexuality through sustained efforts. It is believed that as mastery is achieved, a strong sense of self-efficacy is developed, which will further enhance mothers' capabilities to approach emerging, sensitive

discussions relating to sexual issues with their daughters. Mothers may then become motivated to set more challenging goals and commit to achieving them.

The training programme was also designed to provide a platform for experience-sharing among mothers. It was the researcher's hope that mothers' self-efficacy would be bolstered as they share and listen to the experiences of one another. The intention was that the interaction and exchange of ideas and the feeling of 'I am not alone in this situation' would stir up the confidence in mothers that they also possess the abilities to master similar activities and succeed. It was expected that persuasion would come from the facilitator and even from fellow mothers to sink self-doubts and help mothers dwell less on their perceived, personal deficiencies or on the obstacles that they are encountering. The training would not only dwell on positive appraisals of abilities but, rather, it would structure situations for mothers in ways that would bring success and prevent placing them prematurely in situations where they were likely to fail. Mothers would be encouraged to measure their successes in terms of self-improvement.

In addition, the training activities were structured to help mothers understand and become aware of their physical state, to interpret it correctly, and respond appropriately. Mothers tend to enervate when they are tensed and agitated because of high physiological arousal. As

a result, they misjudge their stress reactions and tension as signs of inefficacy. For example, activities that require energy, such as talking, may make mothers assess their moments of fatigue, feeling down and emotional imbalanced as signs of personal inefficacy.

- **Brainstorming**

The technique allowed mothers to come up with ideas in the shortest possible time on the different topics. The points generated by mothers were first listed without discussion and afterwards arranged, categorized and prioritized. The training programme was structured to create an opportunity for cross-pollination of knowledge, transfer of skills and strategies for coping with the demands and challenges of engaging in discussions about sex with their daughters. For example, one of the tasks at group level was to have mothers work together on a problem tree. Mothers brainstormed on the sexual challenges that very young adolescent girls face. On the roots of the tree, they listed the reasons why young girls engaged in early sexual activities. On the trunk, they listed the consequences of early sexual activities, while on the branches and leaves, they listed all the possible solutions or strategies to help their daughters delay sexual activities and avoid negative sexual consequences.

Furthermore, practical exercises were incorporated into the training programme. One of such exercise was for mothers to come up with ideas regarding how to become intentional and purposeful in initiating

discussions with their daughters. Waiting for the perfect moment to have the ‘big talk’ may never happen. Mothers should, therefore, become sensitive to teachable moments and these derivable from everyday scenarios, such as listening to music, watching television and movies together, surfing the internet, talking about personal experiences and/or other people’s experiences (family members, friends, and the like), reading the newspaper or magazines or listening to news stories on HIV or teen pregnancy, attending a community event together, as well as evaluating inappropriate and false messages from the media and peers. These teaching moments would provide perfect openings for mothers to discern their daughters’ views and impart desired sexual values.

- **Lecture/presentation**

Thought this technique was dependent on the facilitator, it was used mainly when introducing a new topic to mothers. It provided an overall image of the topic by including facts and statistics. Since it was a one-way communication and allows for no experiential approach, the technique was brief when used.

- **Games**

Using a game-based approach, mothers were exposed to different scenarios about possible unsafe situations. The purpose of this approach was so that mothers could help their daughters develop critical thinking and problem-solving skills should they find

themselves in unsafe situations. This game was tagged ‘what will you do’. For example, you are an eight year-old girl spending some days at your grandparents’ house and you innocently go into the ‘boys’ room’. A distant uncle tries to take advantage of you by touching your breasts. What will you do? Mothers were expected to confer and generate valuable responses with minimal guidance from the researcher. Mothers were also encouraged to play out these scenarios and others that they could think of with their daughters. These were considered helpful life skills that could help young girls become discerning and avoid being taken advantage of or abused.

4.3 **PRE- AND POST-TEST RESULTS**

The 30 mothers, who participated in the training, filled out the 29-item questionnaire before and after the training (see Appendix C). The aim of the pre- and post-test was to determine if any changes took place in regards to mothers’ perceptions about discussions about sex with their daughters before and after the training programme. The four main areas that were tested were (i) mothers’ beliefs around discussions about sex; (ii) their actual communication with their daughters on sexual issues; (iii) their knowledge about sexual matters; (iv) their efficacy beliefs to discuss these matters with their VYA daughters. The analysis of the mean scores from the pre- and post-test questionnaires determined the degree of difference and whether any differences were statistically significant or not.

The pre- and post-test questionnaires consisted of statements and mothers could respond to these statements based on a five-point Likert scale, ranging from 'strongly disagree' to 'strongly agree'. A point from 1 to 5 was then assigned based on the response given. The maximum mean score can thus be 5 and the minimum mean score 1 and any mean score should thus be understood based on a maximum score of 5 points.

4.3.1 *BELIEFS ABOUT THE DISCUSSION OF SEXUAL ISSUES*

The first sub-scale of the pre- and post-test questionnaires addressed mothers' beliefs about the discussion of sexual issues. For all questions in this sub-scale, 1 point reflected a more positive outcome and 5 points reflected a more negative outcome. Thus a lower mean score indicated a more positive outcome than a larger mean score.

For the statement whether mothers believed that talking about sex might encourage the act of sexual intercourse, the pre-test mean score was 2.53 while the post-test score was 1.77. The mean difference was 0.77 points. This result thus shows that, in general, mothers were more convinced that talking about sex would not encourage the act of sexual intercourse. There was thus a stronger leaning towards disagreeing with the given statement. However, the difference was not statistically significant ($p > 0.05$), and the results cannot be generalised to a population with similar characteristics as the sampled mothers.

For the statement that mothers might not know the answers to some questions once they started talking with their daughters, the pre-test mean score was 3.00 while the post-test score was 2.00. The mean difference was 1.00 points. This result thus shows that, in general, mothers were more convinced that they would know the answers to questions once they started talking with their daughters. There was thus a stronger leaning towards disagreeing with the given statement. The difference was statistically significant ($p < 0.05$), and the results can be generalised to a population with similar characteristics as the sampled mothers.

In exploring the belief that it felt uncomfortable talking about sexual issues, the pre-test mean score was 3.17 while the post-test score was 2.20. The mean difference was 0.97 points. This result thus shows that, in general, mothers were more convinced that they would not feel uncomfortable talking about sexual issues. There was thus a stronger leaning towards disagreeing with the given statement. The difference was statistically significant ($p < 0.05$), and the results can be generalised to a population with similar characteristics as the sampled mothers.

Mothers' responses to the statement that sex should not be discussed openly revealed a difference in the results for the pre-test at 2.40 and the post-test at 1.77. The mean difference was 0.63 points. This result thus shows that mothers were more convinced that sex should be discussed openly. There was thus a stronger leaning towards disagreeing with the given statement. The difference was statistically significant ($p < 0.05$), and

the results can be generalised to a population with similar characteristics as the sampled mothers.

Mothers' responses to the statement that they might provide too much sexual information to their daughters showed a pre-test score of 3.17 while the post-test score was 2.30. The mean difference was 0.87 points. This result thus shows that mothers were more convinced that they would not provide too much sexual information to their daughters. There was thus a stronger leaning towards disagreeing with the given statement. The difference was statistically significant ($p < 0.05$), and the results can be generalised to a population with similar characteristics as the sampled mothers.

In surveying mothers' beliefs regarding whether their daughters were too young to be exposed to talk about sexual issues, the pre-test score was 2.70 while the post-test score was 1.73. The mean difference was 0.97 points. This result thus shows that mothers were more convinced that their daughters were not too young to be exposed to talk about sexual issues. There was thus a stronger leaning towards disagreeing with the given statement. The difference was statistically significant ($p < 0.05$), and the results can be generalised to a population with similar characteristics as the sampled mothers.

Mothers' responses to the statement that being friends with their daughters might lead to loss of respect from their daughters revealed a pre-test score

of 2.37 and a post-test score of 1.40. The mean difference was 0.97 points. This result thus shows that mothers were more convinced that being friends with their daughters would not lead to loss of respect from their daughters. There was thus a stronger leaning towards disagreeing with the given statement. The difference was statistically significant ($p < 0.05$), and the results can be generalised to a population with similar characteristics as the sampled mothers.

The mean differences of all the statements ranged from 0.63 to 1.0 which shows a substantial difference. The overall mean results revealed a lower mean in post-test result (1.88) when compared to pre-test results (2.76) with a mean difference of 0.88. This shows that mothers had more positive beliefs regarding the discussion of sexual matters after the training than before the training. Except for one statement, all these differences were also statistically significant ($p < 0.05$), which means that the training programme improved mothers' beliefs around the discussion of sexual matters.

Looking at the results as shown in table 10, it is clear that the post-test results moved close to a score of 1, which is the more positive outcome. Nevertheless, there were still some mothers whose beliefs did not reach the desired level. For example, higher scores were still remaining for issues such as feelings of discomfort and the fear of providing too much sexual information, where scores were above 2.0.

Table 10

Pre- and post-test results regarding mothers' beliefs about sexual discussion

Statement	Pre-test Mean	Post-test Mean	Mean difference	Std. Deviation Pre- /Post	T	Sig. (2-tailed)
I fear talking about sex may encourage the act of sexual intercourse	2.53	1.77	0.77	1.4 / 0.9	2.571	0.16
I fear I may not know the answers to some questions once I start talking with my daughter	3.00	2.00	0.10	1.1 / 0.9	4.551	0.00
I feel uncomfortable talking about sexual issues	3.17	2.20	0.97	1.6 / 1.1	3.25	0.00
I believe sex should not be discussed openly	2.40	1.77	0.63	1.4 / 1.0	2.129	0.04
I fear I may provide too much sexual information	3.17	2.30	0.87	1.3 / 1.0	2.832	0.01
My daughter is still too young to be exposed to talk about discussions about sexual issues	2.70	1.73	0.97	1.3 / 1.1	4.075	0.00
Being a friend to my daughter may lead to loss of respect from her	2.37	1.40	0.97	1.1 / 0.7	4.252	0.00
Overall mean	2.76	1.88	0.88			

Note: A lower mean score indicates a more positive outcome than a higher mean score.

4.3.2 *COMMUNICATION ABOUT SEXUAL ISSUES*

The second sub-scale of the pre- and post-test questionnaires addressed mothers' communication about sexual issues. For all questions in this sub-scale, 1 point reflected a more negative outcome and 5 points reflected a more positive outcome. Thus a larger mean score indicates a more positive outcome than a lower mean score.

For the statement regarding whether the mother had started talking to her daughter about changes to expect in her body, the pre-test mean score was 3.30 while the post-test score was 4.47. The mean difference was 1.17 points. This result thus shows that, in general, more mothers had started talking to their daughters about changes to expect in their bodies. There was thus a stronger leaning towards agreeing with the given statement. The difference was statistically significant ($p < 0.05$), and the results can be generalised to a population with similar characteristics as the sampled mothers.

The survey sought to find out from mothers whether their daughters would know what to do if their menstruation started outside the home. The pre-test score was 3.23 while the post-test score was 4.30. The mean difference was 1.07 points. This result thus shows that, in general, more mothers had started preparing their daughters about changes to expect in their bodies. There was thus a stronger leaning towards agreeing with the given statement. The difference was statistically significant ($p < 0.05$), and the results can be generalised to a population with similar characteristics as the sampled mothers.

Regarding the statement whether mothers had talked to their daughters about when to have sexual intercourse, the pre-test score was 2.03 while the post-test score was 3.63. The mean difference was 1.60 points. This result thus shows that more mothers had talked to their daughters about when to have sexual intercourse. There was thus a stronger leaning

towards agreeing with the given statement. The difference was statistically significant ($p < 0.05$), and the results can be generalised to a population with similar characteristics as the sampled mothers.

For the statement whether mothers talked to their daughters about the benefits of waiting to have sexual intercourse, the pre-test score was 2.37 while the post-test score was 3.83. The mean difference was 1.47 points. This result thus shows that, in general, more mothers talked to their daughters about the benefits of waiting to have sexual intercourse. There was thus a stronger leaning towards agreeing with the given statement. The difference was statistically significant ($p < 0.05$), and the results can be generalised to a population with similar characteristics as the sampled mothers.

For the statement whether mothers talked to their daughters about how to resist peer pressure to have sex, the pre-test score was 2.63 while the post-test score was 3.87. The mean difference was 1.23 points. This result thus shows that, in general, more mothers talked to their daughters about the benefits of waiting to have sexual intercourse. There was thus a stronger leaning towards agreeing with the given statement. The difference was statistically significant ($p < 0.05$), and the results can be generalised to a population with similar characteristics as the sampled mothers.

Furthermore, the study went on to establish whether mothers had talked to their daughters about how to detect possible sexual abuse. The pre-test score was 2.70 while the post-test score was 4.07. The mean difference was 1.37 points. This result thus shows that more mothers had talked to their daughters about how to detect possible sexual abuse. There was thus a stronger leaning towards agreeing with the given statement. The difference was statistically significant ($p < 0.05$), and the results can be generalised to a population with similar characteristics as the sampled mothers.

For the statement whether mothers had talked to their daughters on how to handle possible sexual abuse, the pre-test score was 2.57 while the post-test score was 3.97. The mean difference was 1.40 points. This result thus shows that, in general, more mothers had talked to their daughters about how to handle possible sexual abuse. There was thus a stronger leaning towards agreeing with the given statement. The difference was statistically significant ($p < 0.05$), and the results can be generalised to a population with similar characteristics as the sampled mothers.

For the statement if a boy/man touches my daughter on her private parts, she knows exactly what to do, the pre-test score was 2.83 while the post-test score was 4.27. The mean difference was 1.43 points. This result thus shows that, in general, more mothers affirmed that their daughters knew exactly what to do if a boy/man touches their private parts. There was thus a stronger leaning towards agreeing with the given statement. The

difference was statistically significant ($p < 0.05$), and the results can be generalised to a population with similar characteristics as the sampled mothers.

For the statement my daughter knows my values around sex and sexuality, the pre-test score was 2.30 while the post-test score was 3.70. The mean difference was 1.40 points. This result thus shows that, in general, more mothers affirmed that their daughters knew their values around sex and sexuality. There was thus a stronger leaning towards agreeing with the given statement. The difference was statistically significant ($p < 0.05$), and the results can be generalised to a population with similar characteristics as the sampled mothers.

Mean differences on all statements ranged from -1.07 to -1.60 which shows a substantial difference. Examination of the overall mean results for this sub-scale revealed a higher mean in post-test result (4.01) when compared to the mean results of the pre-test (2.66), with a mean difference of 1.34. This shows that mothers had initiated age-appropriate sexual information and had more positive communication regarding sexual issues after the training than before the training. All these differences were also statistically significant ($p < 0.05$), which means that the training programme improved mothers' communication about sexual issues.

A look at the results as reflected in table 11 clearly showed that the post-test results moved close to a score of 5, which is the more positive outcome. However, there were still some mothers whose communication about sexual issues did not reach the desired level. For example, lower scores were still remaining for issues such as whether their daughters would know what to do if their menstruation started outside the home as well as changes to expect in their bodies.

Table 11

Pre- and Post-test Results regarding Mothers' Communication about Sexual Issues

Question	Pre-test Mean	Post-test Mean	Mean difference	Std. Deviation Pre- /Post	T	Sig. (2-tailed)
I have started talking to my daughter about changes to expect in her body	3.30	4.47	-1.17	1.5 / 0.9	-4.676	0.00
If my daughter's menstruation starts outside the home, she knows what to do	3.23	4.30	-1.07	1.4 / 1.0	-4.750	0.00
I have talked to my daughter about when to have sexual intercourse	2.03	3.63	-1.60	1.3 / 1.3	-6.033	0.00
I talk to my daughter about the benefits of waiting to have sexual intercourse	2.37	3.83	-1.47	1.4 / 1.3	-5.047	0.00
I talk to my daughter about how to resist peer pressure	2.63	3.87	-1.23	1.3 / 1.0	-5.524	0.00
I talk to my daughter about how to detect possible sexual abuse	2.70	4.07	-1.37	1.4 / 0.9	-6.011	0.00
I have talked to my daughter about how to handle possible sexual abuse	2.57	3.97	-1.40	1.5 / 1.0	-5.662	0.00
If a boy/man touches my daughter on her private parts, she knows exactly what to do	2.83	4.27	-1.43	1.5 / 0.9	-5.682	0.00
My daughter knows my values around sex and sexuality	2.30	3.70	-1.40	1.3 / 1.2	-6.142	0.00
Overall mean	2.66	4.01	-1.34			

Note: A larger mean score indicates a more positive outcome than a lower mean score.

4.3.3 KNOWLEDGE ABOUT SEXUAL ISSUES

The third sub-scale of the pre- and post-test questionnaires examined mothers' knowledge about sexual issues. For the first three questions in this sub-scale, 1 point reflected a more negative outcome and 5 points reflected a more positive outcome. Thus a higher mean score indicated a

more positive outcome than a lower mean score. For the last two questions, 1 point reflected a more positive outcome and 5 points reflected a more negative outcome. Thus a smaller mean score indicated a more positive outcome than a higher mean score.

For the statement that a girl's body begins to change much earlier than a boy's body, the pre-test score was 4.47 while the post-test score was 4.93. The mean difference was 0.47 points. This result thus shows that, in general, slightly more mothers believed that a girl's body changed much earlier than a boy's body. There was thus a stronger leaning towards agreeing with the given statement. The difference was statistically significant ($p < 0.05$), and the results can be generalised to a population with similar characteristics as the sampled mothers.

For the statement that it is possible for a girl to become pregnant before she has had her first menstrual period, the pre-test score was 2.33 while the post-test score was 3.20. The mean difference was 0.87 points. This result thus shows that, in general, more mothers believed that a girl could become pregnant before she had her first menstrual period. There was thus a stronger leaning towards agreeing with the given statement. The difference was statistically significant ($p < 0.05$), and the results can be generalised to a population with similar characteristics as the sampled mothers.

For the statement “most sexually active teens are the least informed”, the pre-test score was 2.53 while the post-test score was 3.67. The mean difference was 1.13 points. This result thus shows that, in general, slightly more mothers were convinced that the most sexually active teens were the least informed. There was thus a stronger leaning towards agreeing with the given statement. The difference was statistically significant ($p < 0.05$), and the results can be generalised to a population with similar characteristics as the sampled mothers.

For the statement that a girl cannot become pregnant the first time she has sex, the pre-test score was 1.40 while the post-test score was 1.20. The mean difference was 0.20 points. This result thus shows that, in general, more mothers were slightly convinced that a girl could become pregnant the first time she had sex. There was thus a stronger leaning towards disagreeing with the given statement. However, the difference was not statistically significant ($p > 0.05$), and the results cannot be generalised to a population with similar characteristics as the sampled mothers.

For the statement, “I want to talk to my daughter about sexual issues but I do not know what to say”, the pre-test score was 4.17 while the post-test score was 2.07. The mean difference was 2.10 points. This result thus shows that, in general, more mothers who wanted to talk to their daughters about sexual issues knew what to say. There was thus a stronger leaning towards disagreeing with the given statement. The difference was

statistically significant ($p < 0.05$), and the results can be generalised to a population with similar characteristics as the sampled mothers.

Mean differences on all statements ranged from 0.20 to 2.10, which shows a substantial difference. Examination of the overall mean results for this sub-scale revealed a higher mean in post-test result (3.01) when compared to the mean results of pre-test (2.98), with a mean difference of 0.03 points. This shows that mothers exhibited more knowledge regarding sexual issues after the training than before the training. All these differences were also statistically significant ($p < 0.05$), which means that the training programme improved mothers' knowledge of sexual issues.

Table 12 showed a big difference that took place with regard to the fact that mothers want to talk to their daughters about sexual issues but do not know what to say. The post test showed a very big improvement in this regard. Although some mothers still remained with inappropriate knowledge as some still seem to believe that girls cannot get pregnant before menstruation.

Table 12

Pre- and Post-test Results regarding Mothers' Knowledge about Sexual Issues

Question	Pre-test Mean	Post-test Mean	Mean difference	Std. Deviation Pre-/Post	T	Sig. (2-tailed)
*A girl's body begins to change much earlier than boys	4.47	4.93	-0.47	0.9/0.3	-3294	0.00
*It is possible for a girl to get pregnant before she has had her first menstrual period	2.33	3.20	-0.87	1.3/1.5	-3.432	0.00
*Most sexually active teens are the least informed	2.53	3.67	-1.13	1.5/1.2	-4.410	0.00
Overall mean	3.11	3.93	0.82			
**A girl cannot get pregnant the first time she has sex	1.40	1.20	0.20	0.8/0.5	1.989	0.06
**I want to talk to my daughter about sexual issues but I do not know what to say	4.17	2.07	2.10	1.9/1.1	9.265	0.00
Overall mean	2.76	1.64	1.15			

Note: *A higher mean score indicates a more positive outcome than a lower mean score.

** A lower mean score indicates a more positive outcome than a higher mean score.

4.3.4 ABILITY TO ENGAGE IN DISCUSSIONS ABOUT SEXUAL ISSUES

The last sub-scale of the pre- and post-test questionnaires examined mothers' ability to engage in discussions about sexual issues. For all questions in this sub-scale, 1 point reflected a more negative outcome and 5 points reflected a more positive outcome. Thus a lower mean score indicates a more negative outcome than a higher mean score.

For the statement whether mothers were able to use correct anatomical words for genitals, such as the vagina and penis, the pre-test mean score was 1.50 while the post-test score was 3.60. The mean difference was 2.10 points. This result thus shows that, in general, mothers were more able to use correct anatomical words for genitals. There was thus a relatively strong leaning towards agreeing with the given statement. The difference was statistically significant ($p < 0.05$), and the results can be generalised to a population with similar characteristics as the sampled mothers.

The survey went further to determine mothers' ability to identify opportunities to talk about sexual issues with their daughters. The pre-test mean score was 2.03 while the post-test score was 3.90. The mean difference was 1.87 points. This result thus shows that, in general, mothers were slightly more able to identify opportunities to talk about sexual issues with their daughters. There was thus a stronger leaning towards agreeing with the given statement. The difference was statistically significant ($p < 0.05$), and the results can be generalised to a population with similar characteristics as the sampled mothers.

For the statement that "mothers can help their daughters set sexual morals and values to live by", the pre-test mean score was 1.97 while the post-test score was 3.80. The mean difference was 1.83 points. This result thus shows that, in general, mothers were more able to help their daughters set sexual morals and values to live by. There was thus a stronger leaning towards agreeing with the given statement. The difference was statistically

significant ($p < 0.05$), and the results can be generalised to a population with similar characteristics as the sampled mothers.

For the statement that mothers could instil their sexual values in their daughters, the pre-test mean score was 1.87 while the post-test score was 3.70. The mean difference was 1.83 points. This result thus shows that, in general, mothers were substantially more able to instil their sexual values in their daughters. There was thus a stronger leaning towards agreeing with the given statement. The difference was statistically significant ($p < 0.05$), and the results can be generalised to a population with similar characteristics as the sampled mothers.

The study also ascertained whether mothers could explain to their daughters with confidence how to differentiate between good and bad touching. The pre-test mean score was 2.60 while the post-test score was 4.10. The mean difference was 1.50 points. This result thus shows that, in general, mothers were more able to explain to their daughters how to differentiate between good and bad touching. There was thus a stronger leaning towards agreeing with the given statement. The difference was statistically significant ($p < 0.05$), and the results can be generalised to a population with similar characteristics as the sampled mothers.

Mothers were asked if they could confidently teach their daughters with confidence how to handle sexual pressure, the pre-test mean score was 2.17 while the post-test score was 4.07. The mean difference was 1.90

points. This result thus shows that, in general, mothers were much more able to teach their daughters how to handle sexual pressure. There was thus a stronger leaning towards agreeing with the given statement. The difference was statistically significant ($p < 0.05$), and the results can be generalised to a population with similar characteristics as the sampled mothers.

The survey also probed whether mothers could coach their daughters with confidence how to recognise inappropriate pressure to have sex. The pre-test mean score was 2.10 while the post-test score was 4.00. The mean difference was 1.90 points. This result thus shows that, in general, mothers were much more able to coach their daughters regarding how to recognise inappropriate influences to engage in sexual activity. There was thus a stronger leaning towards agreeing with the given statement. The difference was statistically significant ($p < 0.05$), and the results can be generalised to a population with similar characteristics as the sampled mothers.

The study also aimed to establish whether mothers could teach their daughters how to respond to unsafe situations. The pre-test mean score was 2.43 while the post-test score was 4.30. The mean difference was 1.77 points. This result thus shows that, in general, mothers were more able to teach them how to respond to unsafe situations. There was thus a stronger leaning towards agreeing with the given statement. The difference was statistically significant ($p < 0.05$), and the results can be generalised to a population with similar characteristics as the sampled mothers.

Mean differences of all statements ranged from -1.50 to -2.10, which shows a substantial difference. The overall mean results revealed a higher mean in post-test result (3.93) when compared to pre-test results (2.08) with a mean difference of 1.85. This shows that mothers had much more positive self-efficacy regarding the discussion of sexual matters after the training than before the training. All these differences were also statistically significant ($p < 0.05$), which means that the training programme improved mothers' self-efficacy regarding the discussion of sexual issues.

Looking at the results as reflected in table 13, it is clear that the post-test results moved close to a score of 5, which is the more positive outcome. Nevertheless, there were still some mothers who still expressed inability to discuss sexual issues particularly on how to help their daughters differentiate between bad and good touch, where score was low at 1.50.

Table 13

Pre- and Post-test Results on Mothers' Appraisal of Self-efficacy

Question	Pre-test Mean	Post-test Mean	Mean difference	Std. Deviation Pre- /Post	T	Sig. (2-tailed)
Use correct anatomical words for genitals, e.g. vagina and penis	1.50	3.60	-2.10	0.90/1.07	-12.46	0.00
Identify opportunities to talk about sexual issues with daughter	2.03	3.90	-1.87	1.07/0.92	-8.35	0.00
Help my daughter set sexual morals and values by which to live	1.97	3.80	-1.83	1.03/0.85	-8.99	0.00
Instil my sexual values in my daughter	1.87	3.70	-1.83	0.94/0.92	-9.25	0.00
Explain how to differentiate between good and bad touching	2.60	4.10	-1.50	1.25/0.71	-8.44	0.00
Teach her how to handle sexual pressure	2.17	4.07	-1.90	1.02/0.70	-10.85	0.00
Coach her on how to recognise inappropriate influences to have premature sex	2.10	4.00	-1.90	0.96/0.70	-10.88	0.00
Teach her how to respond to unsafe situations	2.43	4.20	-1.77	1.04/0.61	-11.27	0.00
Overall mean	2.08	3.93	-1.85			

Note: A lower mean score indicates a more negative outcome than a higher mean score.

4.4 TRAINING EVALUATION RESULTS

At the start of the training, all 30 mothers who attended the training expressed their different expectations prior to the onset of the training. These expectations were analysed qualitatively by putting relating themes together. Mothers expressed their hidden fears and the hold that culture had on them, as well as how it had contributed to their subtle silence and withdrawal from discussing sexual issues with their daughters.

'Dealing with hidden fear ... Fear that you are encouraging it' (M5)

'Avoid taking away innocence yet empowering her' (M8)

'Culture does not permit such discussion.' (M10)

'Desire to be different from my mum ... There was no opportunity to discuss issues like this.' (M13)

Mothers unanimously echoed their desire for a way out, and hoped that through the training they would be able to open a line of communication regarding sexual issues with their daughters.

'How do I make my daughter comfortable?' (M15)

'How to cross cultural barriers and make daughters informed ... Give them support' (M16)

'We tend to hope that our girls will keep legs closed' (M21)

'Being open with sexual issues' (M28)

One of the expectations that mothers had at the onset of the training was not only to be able to provide their young daughters with the necessary sexual information but also to know what should form the content of their discussions.

'What do you say?' (M9)

At the end of the training, mothers were given training evaluation forms to complete (see Appendix H). The evaluation was conducted by using a questionnaire that included 11 closed items. The purpose was to elicit mothers' views in relation to the usefulness and relevance of the content. In analysing mothers' responses, frequencies of the quantitative data were

first calculated, and then the qualitative data were analysed by categorising responses into emerging themes.

Table 14 shows the results of the 11 closed statements of the training evaluation forms. Participants rated time, as well as the influence of training on their knowledge and skills. When ratings were combined, 100% of mothers indicated that the training had enhanced their knowledge and skills respectively. With regards to the time allocated for training, 84.7% of mothers agreed that the time allocated for training was adequate, 7.7% of mothers disagreed while another 7.7% of mother neither agreed nor disagreed.

When ratings were combined, mothers (100%) found the training content to be helpful and relevant respectively. In addition, 96% of mothers agreed that the objectives for all the sessions were met while 5.0% of mothers felt that the objectives for all the sessions were not met. When mothers were asked to rate their ability to apply the lessons learnt during the training, 100% of mothers agreed that they would be able to put the information learnt to use at home with their daughters. In addition, 100% of mothers agreed that they would recommend the training to other mothers.

Table 14

Assessment of Training Programme

Items	Strongly disagree	Disagree	Neither disagree/ agree	Agree	Strongly agree
	%	%	%	%	%
Training enhanced knowledge	0.0	0.0	0.0	7.7	92.3
Training enhanced skills	0.0	0.0	0.0	19.2	80.8
Training time was adequate	0.0	7.7	7.7	38.5	46.2
Training content was helpful	0.0	0.0	0.0	7.7	92.3
Training content was relevant	0.0	0.0	0.0	15.4	84.6
Objectives for Session 1 met	0.0	3.8	0.0	26.9	69.2
Objectives for Session 2 met	0.0	3.8	0.0	23.1	73.1
Objectives for Session 3 met	0.0	3.8	0.0	15.4	80.8
Objectives for Session 4 met	0.0	3.8	0.0	19.2	76.9

The four open-ended items on the training evaluation forms required mothers to itemise the actions that they would implement when they went home, based on the knowledge gained from the training. They were also required to state the improvements that could be made to the training; topics that they would like to see presented in the future and any other additional comments that they might have had. Using a qualitative method, mothers' responses were numbered from "M1" to "M30", and presented in the order of analysis.

4.4.1 *MOTHERS' ENVISAGED ACTION PLANS*

The implementation of an action plan is a direct step towards commitment to the accomplishment of a task. Mothers were, therefore, encouraged to write their action plan and commit to taking personal action regarding discussions about sexual issues with their daughters. The themes that

emerged from the action plans were ‘openness/trust’, ‘talk around pubertal changes’, ‘benefits of delaying sexual initiation’ and ‘maximising teachable moments’. Each of these themes is discussed in detail.

A priority action plan for a number of mothers was to strengthen their relationships with their daughters based on trust and openness.

‘Have an open relationship ... Encourage daughter not to be afraid to talk to me.’ (M1)

‘Build trust and open up communication barriers ... Become her friend forever to overcome life challenges thru support and guidance.’ (M8)

Another priority issue for mothers was to commit to providing support and guidance to their daughters so that they were not left with the burden of having to interpret or make sense of what was going on in their bodies, as well as not know what to do when menstruation starts.

‘Start preparing my daughters for menstruation ... Teach my daughters about sex and sexuality.’ (M3)

‘Have the much needed or long overdue talk about menstruation and sex. (M16)

‘Start talking about body changes.’ (M21)

Some mothers committed to discussing the benefits of delaying sexual initiation with their daughters.

‘Discuss the benefits of waiting.’ (M18)

‘I will teach her about self-acceptance and choices, delaying sexual desires.’ (M19)

As part of their action plans, mothers decided to maximise opportunities provided by teachable moments to impart desired sexual values to their daughters.

'Use opportunities to talk about the topics that matters...get more involved e.g. watching TV with them and analyse the content with them' (M2)

'Teach safety measures for uncomfortable situations.' (M3)

4.4.2 *MOTHERS' SUGGESTIONS REGARDING IMPROVEMENT OF THE TRAINING PROGRAMME*

Mothers' views on improvements that could be made to the training included "allocating more time", "methodology", "up-scaling of training", "inclusion of sessions for girls", "inclusion of sessions for boys/fathers", and "refresher sessions".

Having had the opportunity to be part of this training, some mothers were of the opinion that training should be extended beyond one day. They even mentioned the possibility of having sessions in a more serene environment out of town.

'Allocate more time.' (M9)

'Maybe do a 2 day course – a Friday night and Saturday. Like you said, those that see their daughter as a priority will make a plan.'(M13)

'To make for 2 days at a place out of town' (M17)

'Assign more time' (M19)

Having been exposed to and made conscious of the potential benefits inherent in the training, some mothers advocated that the training be extended to the larger population.

'To put it on NBC, radios and newspapers' (M5)

'Involve both parents/teachers' (M6)

'Extend to all mothers in Namibia' (M8)

'Marketing so that more mothers can attend ... More media publication to reach more mothers' (M18)

'Larger outreach to mothers and provide support groups for mothers.'
(M23)

'The training needs to be marketed to reach the population.' (M24)

As part of the improvements suggested for the training, some mothers opined that a curriculum be designed and implemented solely for girls.

'Create a syllabus for girls' face-to-face training' (M9)

'Girls also to be invited for an additional topic to share their feelings'
(M17)

'To invite girls for a session ... To include girls as young as 5 years in the information' (M25)

Furthermore, some mothers wanted sessions about how to provide age-appropriate sexual information to the boy-child; these sessions should also be extended to fathers.

'Let's also focus on how to deal with our boys. The same training on boys should be presented to fathers'. (M4)

'Fathers must be part of it to guide boys.'(M8)

'Training about boys ... Fathers should be included in training.' (M9)
'I think for parity reasons – we can also touch the boys' topics/ integrate ... The training must also accommodate fathers.' (M24)

'How to deal with a boy child' (M25)

In addition, some mothers requested that follow-up training/refresher courses be organised on a regular basis.

'Follow-up training' (M7)

'Conduct follow-up sessions of this nature on a regular basis' (M10)

'Training of this nature to be conducted more often' (M12)

'Have on-going course/ refreshers'. (M15)

4.4.3 *MOTHERS' SUGGESTIONS ABOUT FUTURE TOPICS FOR TRAINING*

Mothers' suggestions regarding future topics included the prevention of child abuse, education about paedophiles, dealing with girls who are already sexually active, as well as rape, growing boys, sexually transmitted infections (STIs), father/daughter relationships, alcohol and general information.

Mothers wanted training sessions on paedophiles, trafficking, the dangers of the internet and pornography so that they could educate their daughters.

'How to alert young girls about paedophiles... Alert young girls about the dangers on internet ... Pornographic photos taken by young boys' (M2)

'Create awareness about adults who take advantage of girls e.g. trafficking is real, how to equip girls to avoid these situations'. (M13)

Mothers wanted to know how to provide support to a rape victim, which may be their daughters.

'How to deal with being raped' (M2)

'Child abuse – how to prevent it' (M12)

Mothers would like sessions on how to relate with sexually active girls, as well as sexually transmitted infections.

'How to handle our daughters if they have already started engaging in sexual acts' (M3)

'Information on sexually transmitted diseases' (M19)

In addition, mothers wanted joint sessions for mothers and daughters.

'Training for mothers and daughters together' (M7)

'Presentation for father/daughter' (M8)

Mothers would like sessions on drinking alcohol, as well as the qualities of a good friendship and women empowerment.

'Involve other matters like alcohol that leads our girls to make wrong decision' (M22)

'Teach qualities of good friendship'. (M26)

4.4.4 *MOTHERS' ADDITIONAL COMMENTS*

Mothers' additional comments mainly focused on appreciation for organising the training. Mothers were full of appreciation for the knowledge and skills gained from the training.

'I needed this training so much; I will definitely make sure that what I learned today will be done at home'. (M1)

'I appreciate the whole training because it's a life time opportunity, thanks a lot'. (M3)

'This was very educative and informative. I will be the champion of this process by taking the message through to other mothers who were not invited due to their children being at other schools. I will never forgive myself should I not take this up with my daughter and anything happens to her! Thank you, for the job well done!' (M4)

'The training was very informative and will help improve mother-daughter relationship'. (M10)

'This was a real eye opener and you are certainly doing a great job. Well done!!!' (M15)

'Honestly, this training was fruitful to me and I cannot ask for more'. (M18)

'I am really glad for this opportunity because I know it will help me and my daughter and thanks a lot for the facilitator for giving us this guidance'. (M20)

'Very informativecreated more awareness of supporting our daughters' (M21)

'The workshop is very fruitful. We are living with children in houses and we don't know how to bring them up. Hence, community outreach recommended. Anyway what is happening now can make a great positive impact in the life of our girls. I personally value and appreciate your commitment' (M24)

4.5 **SUMMARY**

The data analysis concluded that there were significant differences between pre- and post-test results. This finding implies that the training experience may have accomplished its primary goal. The research process did not consider extraneous variables that may have influenced the data.

CHAPTER 5

DISCUSSION OF RESULTS AND RECOMMENDATIONS

5.0 INTRODUCTION

In this chapter, the findings from the quantitative and qualitative data are merged to reflect complementarity or divergence. The importance of merging the data is to present a clear picture of the data from all elements of the study. The two datasets enabled important results to be considered and conclusions drawn. This chapter further explores whether an intervention for mothers increased their knowledge, communication and self-efficacy to have discussions with their daughters about sex-related topics. This chapter equally examines both the theoretical and rational meanings of the findings as detailed in the previous chapter, limitations that characterised the study, as well as recommendations to help mothers in the early sexual socialisation of their very young adolescent daughters.

5.1 DISCUSSION OF RESULTS BASED ON THE NEEDS ANALYSES

For the needs assessment, 104 mothers completed a questionnaire which included both open-ended and closed questions. The respondents were all from the Khomas region and constituted a rich and cultural diversity – Whites, Oshiwambos, Coloureds, Hereros and Caprivians, as well as other nationalities. The majority of respondents were between the ages of 35 and 49 and were married; with a substantial percentage having tertiary education. The majority had a biological relationship with their daughters and were also living with their daughters.

This study highlighted many limitations in mothers' sexual discussion with their young adolescent girls. Studies suggest that the ideal time to initiate discussion with adolescents about sex and sex-related issues is when they are of elementary school age and before they become sexually active (Foster et al., 2011; Newby et al., 2011). The findings from the study confirmed this report in that some mothers (61.5%) agreed that the appropriate time to initiate discussion about sex and sex related issues with their daughters was before the onset of puberty. The qualitative data however revealed a contradictory finding in that mothers strongly felt that their daughters were too young to be exposed to talk around sexual issues. For example, "*She is still too young and I feel she is still innocent ... I will do so when she gets to high school*". The deduction here is that mothers synchronise age with innocence and are deliberately avoiding discussing about sex and sex-related issues with their young adolescent girls for fear that it may stimulate curiosity and the temptation to explore sexual activities (Coffelt, 2010; Motsomi et al., 2016; Tesso et al., 2012). This position explains the reason why mothers suggested that discussion about sexual issues should wait until their daughter matures enough to handle such discussions or preferable when in high school. This finding supports previous research that parents consider the high school phase as an appropriate age to start discussions about sex (Guilamo-Ramos et al., 2007; Lederman, 2003; Perrino, Gonzalez-Soldevilla, Pantin, & Szapocznik., 2000). Mothers are underestimating their adolescents' sexual risk behaviours. This is an erroneous assumption of young adolescents' sexual behaviour (Dessie et al., 2015) because there is no prescribed,

definitive age for the onset of puberty or for sexual exploitation. Adolescents are maturing much earlier and puberty tends to start early for some girls (Goldman, 2011; Morris & Rushwan, 2015) and the spate of child sexual abuse does not agree with such delay. This is an impressionable period, and waiting until high school may be too late for young adolescents to receive necessary sexual information and for mothers to wield their influence. This view supports the findings of Perrino et al., (2000) that sexual behaviour begins in early adolescence, before high school and this also corroborated the assertion by Lederman (2003) that maternal influence is much stronger in the pre-teen school years or when sexual behaviours have not been established. The effect of delaying the provision of sexual information can be devastating resulting in premature sex, pregnancy, sexually transmitted infections, sexual abuse and exploitation.

Studies on parent-child communication about sexuality showed that some parents report discomfort in addressing certain topics with their adolescents (Malacane & Beckmeyer, 2016) and Nolitha (2014) believes that this discomfort may stem from beliefs and cultural norms including taboos that prevent open discussion of sexual issues. The findings from the study confirmed this report in that only 37.6% of mothers reported feeling comfortable to discuss sexual issues with their daughters and the findings from the qualitative data confirmed that cultural norms make discussions very uncomfortable, embarrassing and an uncommon phenomenon for mothers. For example, *“I am afraid to discuss about sex. Sex is taboo*

among Oshiwambo people especially to kids – it is only meant for adults.”

This finding resonates with existing knowledge that sex is still being viewed as a taboo and thus infrequently discussed in homes (Nambambi & Mufune, 2011; Siriarunrat et al., 2010). The discomfort experienced in sexual discussion may prevent effective sexual education from taking place, which subsequently limits opportunities for young girls to get timely factual sexual and reproductive health information. This further exposes young adolescent girls to harmful and inappropriate sexual information through the internet and friends and especially if they are linked to groups that express permissive attitudes towards sex during the developmental phase (Gruber & Grube, 2000; Peci, 2017). In view of these findings, it is crucial to help mothers to critically appraise previously accepted beliefs in the light of new experiences (Dewey, 1944). Fidishun (2000) asserted that when adult learners are provided with reflective learning opportunities, they are able to question their prejudices based on life experiences and move toward a new understanding of information presented (Fidishun, 2000).

Another striking revelation from the qualitative findings was that there were other deep-seated issues emanating from familial structure that created a feeling of discomfort and embarrassment for mothers. Challenging circumstances like divorce, separation and single parenthood seem to complicate mothers' abilities to engage in sexual discussion with their daughters. Regardless of mothers' marital status, some mothers felt they had one time in their lives compromised their values around sex,

particularly because they had their daughters when they themselves were teenagers. An experience that consequently created a sense of discomfort and embarrassment for them to share their values around sex or even help their daughters set sexual morals and values to live by. They felt that their own moral standing was already questionable and thus did not think they had the moral power to talk to their daughters about delaying sexual initiation. It was obvious that past mistakes laden with the feelings of guilt and shame created discomfort in mothers. The following excerpt was an expression from one of the mothers: *“I truly have to indicate that I too do struggle a bit with setting my sexual values right thus making it a bit difficult for me to help my daughter set sexual morals and values to live by too.”*

For some mothers, it was the fact that they were divorced or separated and/or where the other parent is in another relationship and discretion had not been applied that caused a sense of apathy towards sexual discussion whether directly or indirectly. For example, *“It is difficult to talk about sex as her father flaunts his girlfriend, she is aware of then they have had sex...she has witnessed a lot with her parents’ problems and her father is very verbal and crude about sex”*. This finding is consistent with previous research that 74% of senior, high school girls regretted the sexual experiences that they had had (Kristen, 2001). Mothers’ unwillingness to engage in discussions about sexual issues with their daughters is, therefore, not unrelated to regrettable teenage experiences even if they desired a much better experience for their daughters than they had had. It becomes

crucial to help mothers reflect on and reconstruct their experiences, draw meaning from them and see how their experiences can be of benefit to their daughters. This suggestion resonates with Kolb (1984) and Dewey (1944) that learning is a process whereby knowledge is created through transformation of experience in order to meet the challenges of later problems. As mothers learn through their past experiences (Bandura, 1997), they are then able to reconstruct their past experiences and this will provide learning opportunities for their daughters that can positively influence their daughters' decision to stay sexually abstinent (Miller et al., 2001), delay sexual initiation or have fewer incidences of unprotected sexual intercourse (Mulema, 2013) and less likely to engage in unsafe sexual behaviour (Motsomi et al., 2016; Dessie et al., 2015). This suggestion resonates with the findings of Sisneros (2009) that mothers who shared their personal experiences with their daughters felt an increase in honesty in their relationships.

An earlier study reported that mothers often felt inadequate about their sexual health knowledge and lacked the skills to address sexual matters (Kamangu et al., 2017). This finding was confirmed in this study as only 40% of mothers felt well prepared to discuss sexual issues. The qualitative findings confirmed that some mothers lacked the knowledge about what should form the content of sexual information for their young adolescent daughters. For example, "*What do I say and how to say it?*" In addition, 50.0% of mothers agree to their daughters' vulnerability to HIV infection, STIs, pregnancy, rape and the possibility of being pressured into having

sexual intercourse but not many mothers (66.0%) have adequately provided sexual education to their daughters regarding these risks. The qualitative finding clearly confirmed mothers' perception, for example, *"How to approach the whole sex issue? Trying to explain what rape is."* This finding is consistent with previous research that many mothers do not know how to communicate sensitive topics like sexual coercion and assault with their adolescents (Advocates for Youth, 2010, Byers et al., 2008; D'Cruz et al., 2015). Studies have also found that the level of parental knowledge is largely correlated with the presence of sexual and reproductive health communication (Crichton et al., 2012). Mothers were likely to talk to their young adolescents if they believed they possess the knowledge and skills set to respond to their questions and explain matters clearly (Ortega et al., 2012) and reluctant if they felt less adequate about their sexual knowledge (Kamangu et al., 2017). The implication of this is that the lack of maternal sexual knowledge to adequately provide sexual education, for example about pubertal changes, leaves daughters with the burden of making sense of what is going on in their bodies. The inability of young adolescent girls to correctly interpret the changes taking place in their bodies predisposes them to inaccurate information about sex and sex-related issues; making them vulnerable to risky sexual behaviours. Addressing the lack of knowledge with mothers can lead to improved knowledge for adolescent girls.

Despite the internal struggles and seemingly negative, past sexual experiences that some mothers might have had, the majority of mothers (72.1%) still strongly disapproved of their daughters having sex during their adolescent years and 71.2% of mothers wished that their daughters will wait until marriage to become sexually active. It is, therefore, not a surprise that being able to validate and communicate this sexual value was identified by mothers as one of their priority training needs. The qualitative findings further confirmed mothers' desire to be able to share this value with their daughters. For example, "*I hope to teach my daughters to delay sex until they are married*". This finding is consistent with previous findings that parents who convey their clear expectations and values earlier about the importance of delaying sexual initiation are more likely to have adolescents who abstain from or delay sexual involvement (O'Donnell et al., 2007).

5.2 **IMPLICATIONS OF THE NEEDS ASSESSMENT FINDINGS ON PROGRAMME DEVELOPMENT**

In addition to information from the literature, the researcher used information from the needs assessment results for the development of the training programme. This led the researcher to identify four main themes which seemed to be of importance for the training programme. These were (i) mothers beliefs around sexual discussion; (ii) their actual communication with their daughters on sexual issues; (iii) their knowledge about sexual matters and (iv) their efficacy beliefs to discuss these matters with their VYA daughters.

5.3 **DISCUSSION BASED ON THE PRE- AND POST TEST RESULTS**

In order to judge the impact of the training programme, the four main themes were tested. With regard to mothers' beliefs around sexual discussion, the results clearly showed that the training had moderate positive effects on mothers' beliefs. For all seven items related to this section, the average responses of mothers improved between 0.63 and 1.0 points. Taking into consideration that the maximum score was 5, this is a relatively strong improvement. Except for one item, all were found to be statistically significant which means that this result could be generalised to a population with similar characteristics. Of significance is the realisation by mothers that the term 'friendship' has been culturally misconstrued and that friendship is needed to create the depth of connectedness that leads to openness in sexual discussion between a mother and her daughter. This finding is supported by previous research that a parent-child connectedness that is based on warmth, closeness and trust is one of the strongest factors protecting teens from not having sex or delaying onset of sexual intercourse and pregnancy if parents show concern and love early (Malacane & Beckmeyer, 2016; Siriarunrat et al., 2010).

A similar trend was found with regard to mothers' actual communication with their daughters. For all ten items related to this section, the average responses of mothers improved between 1.07 and 1.60 points. Taking into consideration that the maximum score was 5, this is a relatively strong improvement. All items were found to be statistically significant which means that this result could be generalised to a population with similar

characteristics. The largest mean difference between pre-and post-results (1.60) was found with regard to mothers talking to their daughters about when to have sexual intercourse. This is a phenomenal result and the implication of this is that it would be easier for adolescents to stay sexually abstinent or postpone sexual activity if they were able to have open and honest conversations about such issues with their parents (Albert, 2012; Harris et al., 2013; Hicks et al., 2013).

The results further showed moderate, yet significant, effects in mothers' knowledge about sexual issues. For all five items related to this section, the average responses of mothers improved between 0.20 and 2.10 points. Taking into consideration that the maximum score was 5, this is a relatively strong improvement. Except for one item, all were found to be statistically significant which means that this result could be generalised to a population with similar characteristics. A further impact of the training programme on mothers was that they were clearly more confident in knowing what to say when it comes to discussion about sexual issues with their daughters. On this question the difference between the pre- and post-test was 2.10 points. This finding affirmed previous findings that multi-session programmes for only parents improved parents' knowledge, attitudes and skills so that they become effective at communicating with their children (Akers et al., 2011; Kirby & Miller, 2002; Santa Maria, 2015).

A similar trend was observed with regards to mothers' ability at discussing sexual issues. For all eight items related to this section, the average responses of mothers improved between 1.50 and 2.10 points. Taking into consideration that the maximum score was 5, this is a relatively strong improvement. All items were found to be statistically significant which means that this result could be generalised to a population with similar characteristics. Another remarkable impact of the training was mothers' claim of their ability to use and teach correct anatomical words for genitals e.g. vagina and penis, where the mean difference between pre-and post-test results was 2.1 points. This finding agrees with previous study that parents who had taken a sexuality education course were more likely to discuss various aspects of sexuality with their children and to use appropriate terms for discussing sexual organs (Schuster et al., 2008).

Thus for all four themes, it was clear that the training had a positive influence on mothers in their overall beliefs, communication, knowledge and efficacy to discuss matters of a sexual nature with their VYA daughters. These findings are in line with research that when interventions target parents, it has the potential to generate significant and sustain improvement in knowledge, skills and confidence needed by parents (*mothers*) to talk and to provide meaningful sex education to their daughters (Leeds et al., 2014; Kirby & Miller, 2002).

5.4 TRAINING EVALUATION

Several mothers felt that their knowledge and skills were enhanced and that the training content was helpful and relevant. The application of varied learning methodologies enhanced performance. In considering what to change in future programmes, some mothers would like more topics, such as the prevention of child abuse, education on paedophiles, dealing with sexually active girls and rape, as well as pornography and STIs. Some mothers acknowledged that they wanted the training extended beyond a day and advocated that the training be extended to the larger population. They equally suggested that a teaching guide be designed and implemented solely for girls and boys based on their sexual needs.

Most mothers were simply glad for the opportunity to be part of the training. One of the mothers wrote, “*Honestly, this training was fruitful to me and I cannot ask for more*”. A few mothers expressed their gratitude to the researcher for the initiative, and some felt confident to initiate discussions about sexual issues with their daughters immediately. The positive responses from the mothers are an indication that they had gained valuable information and were satisfied with the content, structure and delivery of the programme. These outcomes show how important it is to create learning opportunities for mothers that help them to be more knowledgeable, competent and confident in providing appropriate support to their very young adolescent daughters.

5.5 **CONTRIBUTION OF THIS STUDY TO KNOWLEDGE**

This study highlights the need to support mothers in resolving uncertainties that threaten their efficacy to discuss sex and sex-related issues in a timely and meaningful manner with their young adolescent daughters. Even though most of the findings resonate with findings in existing literature, the familial structure of mostly female headed household that prevails in Namibia is an uncommon phenomenon that has not previously been identified and described in the existing knowledge base. Attention should, therefore, be given to strengthening the efficacy of mothers to discuss sexual issues with their daughters.

No previously published research in Namibia has designed a training guide for mothers to be able to provide sexual education to their very young adolescent daughters. The findings of this study reveal that mothers are open to intervention. It thus means that when mothers' role as sexual health educators is supported, it has the potential for improving their communication and relationships regarding sexuality with their very young adolescent girls, such that they are able to initiate and maintain on-going communication about sexuality in a timely and meaningful way. This may ultimately translate into sexual abstinence or delay early sexual initiation by adolescent girls.

In addition, I believe this study will increase the body of knowledge with regards to the sexual education of very young adolescent girls. The findings of this study are anticipated to be of benefit to the government,

schools, health professionals and NGOs as they work to promote the sexual health of young girls.

5.6 **RECOMMENDATIONS**

The following recommendations are made based on the findings from this study.

- Collaboration between mothers and health institutions should be established to improve maternal knowledge regarding sexuality information, especially when new information about sexual issues relating to VYAs emerges. Health promotion strategies, within the Namibian context, may help to raise mothers' profile as sexual health educators.
- There should be mobilisation for community support on maternal education relating to sexual and reproductive health issues through regular awareness-raising by government agencies, faith-based and community-based organisations, as well as NGOs. These organisations could also help create awareness among mothers regarding the harmful effects of myths associated with discussions about sex.
- Health information materials on young adolescents' physiological and psychological sexual development should also be provided to mothers.
- Partnerships between mothers and schools should be strengthened to provide consistency in sexuality education. This may be achieved through homework on sexual issues to create interaction

between mothers and daughters. Schools could also organise joint sessions for mothers and daughters through activities, such as mother-daughter nights. It is also essential to review Life Skills curriculum and other sex education curriculum to provide education to mothers.

- A restricted website can be established where mothers can register. This website will serve as a platform for them to discuss issues of concern, as well as receive support.
- There should be an up-scaling of training through the media, such as television and radio channels, as well as newspapers, in order to reach a larger population of mothers. Training could be provided to community health workers so that they are able to pass on the content of the training manual in different languages to reach more mothers.
- The present training programme should allow for follow-up sessions to include more topics, such as safety measures and health-related topics, such as paedophilia, trafficking, alcohol abuse, child abuse, sexual abuse and rape, STIs, dangers of the internet, pornography and dealing with guilt. The follow-up sessions will also provide opportunities for mothers to discuss the challenges that they experienced once they were faced with real life contexts.
- Future training could also be organised to bring mothers and daughters together in order to strengthen the bond between them.

- Research focusing on the specific needs of very young adolescent girls should be carried out in order to develop and implement curriculum guides that provide contextually for the needs of very young adolescent girls in Namibia.
- The measure of trust that children have in teachers should be fully explored as a platform to reach very young adolescent girls with sexual health information. A study should be conducted on the role of teachers and Life Skills teachers in the sexual education of very young adolescent girls.
- Sexual health topics taught through Life Skills in schools could be extended to include more topics, such as ‘The role of sex in life’.
- Very young adolescent boys are missing out on sexuality education. Research focusing on effective approaches to reach them with sexual information is needed. Studies on VYA boys that identify factors that influence risk-taking are also required to design effective programmes that will assist mothers, as well as fathers, in providing age-appropriate sexual information to their sons.
- Research on the influence of new media on adolescents’ sexual health development should be investigated.

5.7 CONCLUSION

This study explored the perceptions of mothers in the Khomas region about their efficacy to discuss sex and sex-related issues with their young adolescent daughters (ages 10 to 14). The study was conducted in four

phases using the mixed methods approach. A questionnaire comprising of open and close-ended questions were administered to mothers in Khomas region. The survey data were analysed using descriptive and inferential statistics and thematic analysis was used to analyse the qualitative data. The quantitative and qualitative findings give strength and help to decrease the weakness of each method.

The study highlighted factors that make it challenging for mothers to discuss sex and sex-related issues with their very young adolescent daughters. Most mothers expressed lack of knowledge, and confidence in discussing sex with their daughters. Culture and taboo as well as regrettable teenage experiences around sex were also found to weaken mothers' efficacy. These challenges provided the opportunity to develop a sexuality education programme to support mothers in overcoming these challenges and fulfilling their role as sex educators.

The results of this study suggest that self-efficacy can be induced through verbal persuasion (Redmond, 2010). When mothers feel confident, through encouragement, that they can discuss sexual issues and believe that their discussion will lead to positive outcomes, they are more likely to mobilise effort and sustain it than have self-doubt and dwell on personal deficiencies when they arise (Bandura, 1997). It, thus, means that sex education intervention programmes should include learning opportunities for mothers so that they become more confident as well as developing

necessary skills in providing appropriate and accurate sexual information to their young adolescent daughters.

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