SINGLE PARENT ATTACHMENT STYLES AND ITS RELATIONSHIP WITH TEENAGE PREGNANCY IN NAMIBIA

By

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DECLARATION

I declare that "**SINGLE PARENT ATTACHMENT STYLES AND ITS RELATIONSHIP WITH TEENAGE PREGNANCY IN NAMIBIA"** is my own work Student Number **31601839** and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references. I further declare that I have not previously submitted this work, or part of it, for examination at UNISA for another qualification or at any other higher education institution.

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Signature Date

(Lilian N Nwagboso)

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ABSTRACT

Teenage pregnancy is a growing social concern in Namibia. In 2013, 19% of teenagers fell pregnant (MoHSS, 2014). Implications are enormous including economic, social and health issues. Attachment between parents and children is important in child development and enduring through life. The study aims to examine whether attachment styles of single parents increase the risk of teenage pregnancy in their daughters. The research used a quantitative method with a sample of 100 teenage girls in Windhoek, Namibia, completing the IPPA and Questionnaire to measure attachment and biographical data. Results analysis in this study suggests that teenagers from two-parents families are more likely to be securely attached (65%) and less likely to get pregnant as teenagers. On the other hand teenagers from single parent families are more likely to be insecurely attached (44%) and are more likely to get pregnant as teenagers. Thus, the attachment style predicted teenage pregnancy, particularly in single parent families where insecure attachment was more prominent. Recommendations for future research and for the government and other stake holders were provided.

Keywords: Single Parent; Attachment Style; Teenage Pregnancy; Risky Behaviour; Secure Attachment; Insecure Attachment; Primary Caregiver; Socioeconomic Status; Inventory of Parent and Peer Attachment; Absent Father.

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CHAPTER 1

GENERAL ORIENTATION

1.1 INTRODUCTION

Family conjures up various meanings and emotions in various context, the family as a unit in society is of interest. The evolution of societies, however, over the years has come with several social consequences. The organization of the family unit has experienced tremendous changes over this period, with the result that both the constitution and the management of the family unit have had to undergo changes. The evolution of the family unit and the journey to the acceptance of single parenthood is relatively a newer concept and has rapidly gained prominence. The constitution of the family now includes single unmarried mothers and their children, and in some instances, single unmarried men. Of note also are single parenthood that arise from divorces, deaths and separations. The relationships of the children to their parents vary and so are their attachment styles.

The family is the bedrock of society. The traditional family is made up of the nuclear family unit consisting of a father, mother and in some cases a child or children; typically residing in one home. A family as defined traditionally, is regarded as the nuclear family (Merriam-Webster, 2018). A nuclear family is made up of a set of parents, being the mother, father and their child or children (Encyclopaedia Britannica, 2011).

Nowadays, families of different makeups exist. These include the traditional nuclear family, same-sex parents and child, and the single parent family which comprised of only one parent and the child (Merriam-Webster, 2018). The modern family structure may be defined as two or more people having the same goals and values. This would usually include having long term commitments to one another and they would usually live in the same home (Blessing, 2017).

Family in Africa has to do with being an African. Traditionally, family in Africa has to do with the community. There is usually a complex interconnected network of shared relationships, which could include a grandmother, an aunt and an uncle (Iman, 2013). In South Africa among the blacks, children could be taken care of by an extended family member who is not their biological parent. We could therefore see orphaned children being taken care of by extended family members (Makiwane & Kaunda, 2018). About 80% of foster care parents in South Africa are extended family members (Makiwane & Kaunda, 2018).

Family structure could take on different forms, including married families, cohabiting parents' families, blended families, single parent families, extended families and even child-headed families (Davids et al., 2016). For the purpose of this study, the family as a unit which is traditionally termed nuclear was of interest, and the focus was on the two-parents and single parent families.

Single parent family is a family in which one parent is mainly responsible for, and lives with the child or children. Single parenting is a concept of the modern day. This could be made up of a mother and child/children, or a father and the child/children. The makeup of the single parent family could be the result of bereavement of a spouse, divorce, or a never-married parent. The occurrence of single-parent families is increasing worldwide, with one quarter, and in some cases up to one third of families being headed by single parents.

There are challenges associated with single parenting of children. Children and adolescents raised by single parents seem more prone to behavioural problems. They are more likely to be engaged in antisocial activities, such as smoking, alcohol abuse and sexual intercourse as adolescents than those from two parents' families (Carlsund, Eriksson, Lofstedt & Sellstrom, 2013).

The attachment theory reflects a secure attachment between a parent and a child as a secure base to explore. Insecurely attached infants may not feel secure and may display rejection and fear. Some may have unresolved trauma and there could be a role reversal, which is a situation in which the roles of the child and parents are reversed, such that the child takes care of the parents and the parents seem to be the ones needing attention. Securely attached children on the other hand, are usually more independent, resilient and develop to become competent adults. Children who experienced insecure attachment may have more difficulty coping with others and are more prone to risk-taking behaviours including engaging in early sexual activities which could lead to teenage pregnancy (Morsunbul, 2009; Fuertes, Grindell, Kestenbaum & Gorman, 2017).

This study highlights the effects attachments have on a child that is raised in a single parent home, particularly the single parent that was never married. The assumptions are that the attachment style in the single parent's home may differ from that in a two-parent home which has implications on the child's future including risky behaviours that may lead to unplanned teenage pregnancies among the females.

Teenage pregnancy can be defined as a teenage girl between the ages of 13-19 getting pregnant (UNICEF, 2018). Teenage pregnancy is a challenge worldwide, with high percentages in many regions of the world. The latter remains despite improved efforts to curb it through sex education, availability and affordability of contraceptives and other family planning methods available.

In 2016, Kangootui reported that an average of 127 women in Namibia fall pregnant per day; 39% of them being teenagers below the age of 15 (Kangootui, 2016). This is a cause for concern for health planners, in view of improved health education and social engagements being provided. Examining the root causes of teenage pregnancy may well lead to lasting and effective interventions in curbing the escalation.

Teenage pregnancy inflicts many adverse effects on the girl child, including delayed or poor progress in educational engagements and achievements, reduced capability for economic empowerment and exposure to low-income jobs. In addition, there are health challenges to the teenager and the baby (Saha, 2017). Adverse cumulative effects on the nation's economy as well as the reduction in potential human resources are enormous. These consequences persist both for the mother and child even after adjusting factors that increase the risk for teenage pregnancy. Such factors include; poverty, poorly educated parents, a single parent family upbringing and poor performance in school activities (Hoffman & Maynard, 2008).

The attachment between a parent and the child has lifelong implications. Attachments can have impacts that may affect a child's whole life (Segal, Glenn & Robinson, 2017). It is on this premise that the research further examined the attachment styles between the parent and the child, and the effects they may have on the rate of teenage pregnancy in Namibia. Of particular interest for this study is the single parent and child attachment styles.

Efforts towards curbing teenage pregnancy rates are expected to impact positively on the reduction of its rate. There is a serious need to identify practical, effective and sustainable preventive measures to curtail teenage pregnancy rate. Thus, there is a need to investigate the effects single parenting attachment styles may have on teenage children and to find ways of mitigating these effects. This will contribute to the debate and discussion at large.

1.2 BACKGROUND OF STUDY

The research is expected to be of benefit to the society through the provision of information on raising well-adjusted families. Our society will also be empowered in its

understanding of attachment style that increase secure attachments, thus raising children that will display lasting effects of a secure attachment, namely; feelings of security, balanced relationship skills and better fit into society and adhering to societal norms.

Interest in this research developed from observing the high rate of teenage pregnancy in Namibia. It was also observed that there seemed to be a high number of single parent family structures. The study investigated if there are any correlations between teenage pregnancy and parents' attachment styles particularly among single parents that were never married.

Goals of Vision 2030 of Namibia, describe targeted ideals for the nation, including among others, health for all Namibians, improved education and provision of employment for all. It further reiterates the need for a good and stable economy, maintenance of healthy family institutions where children thrive and are protected and ultimately participate fully in society as the future adults of the nation (*National Planning Commission (NPC), 2004; National planning commission, 2017).* Ultimately each child should have a chance to actualize his or her potential with minimal deterrence. One such deterrence is the challenge to the development of girls in the society. There seems to be a tendency for female children to be marginalised by traditional practices and societal norms that tend to deny them opportunities in the nation. Additional to this burden is the ever-increasing burden of teenage pregnancy. Causes vary and are subjects of intense discourse, but input into the understanding of the underlying factors that are responsible for the high rate of teenage pregnancy will add to the efforts to curtail it; thus improving the chances of achieving the national goals as embodied in Vision 2030.

The study is hoped to be of benefit to the nation. Reduced teenage pregnancy will lead to a more stable workforce, a smaller number of school dropouts, potential and the gain in economic ability. The other benefit include the reduction in resources devoted to the healthcare of pregnant teenagers and their babies.

Furthermore, it is envisaged that in investigating the effects of attachment styles and the impact this have on the child's future, this study will contribute to the general debate on this issue. It will also provide caregivers with greater tools to plan and improve the quality of life of the female child. It is further hoped that the outcome of the study will assist in promoting effective attachment styles as an intervention to reduce teenage pregnancy rate. It is also hoped that it will reduce the impacts of teenage pregnancies on young girls and the nation as a whole through a renewed focus on the family unit.

There is much literature focusing on teenage pregnancy, but a few literature is available on the attachment theory and on single parenting. There is a paucity of literature that explores the correlation between attachment theory, single parenting and teenage pregnancy. This study's findings will contribute to the scholarly discussion on these subjects.

1.3 DEFINITION OF TERMS

The following terms, attachment, single parent, teenage pregnancy, which will frequently occur in the research are defined below.

Attachment can be described as a strong bond and connection between a caregiver, usually a parent, and the child that has effects lasting throughout life.

Single parent refers to an uncoupled person who lives primarily with a child or children and is mostly responsible for raising the child or children. A mother is usually the primary caregiver. The single-family structure is often the result of the death of the spouse, divorce or never being married.

Teenage Pregnancy refers to pregnancy in a female child 19 years or younger. The pregnancy could range from 1 to 40 weeks.

1.4 PROBLEM STATEMENT

Teenage pregnancy is a challenge to the individual, family, nations and the world at large. The World Health Organisation (WHO) has declared it a pandemic (WHO, 2014). Teenage pregnancy increases the rates of an unproductive young workforce of a nation. It delays the development of the girls. It leads to high school dropout and poor education, which in turn increases the odds against their climb up the socio-economic ladder towards a better quality of life (Rosenberg et al., 2015). It is further noted that there is a high rate of depression among teenage mothers. Teenage mothers are more at risk of depression than adult mothers (Collingwood, 2016). Teenagers tend to be more at risk of indulging in anti-social practices including alcoholism, dangerous sexual practices and drug consumption (Salas-Wright, Vaughn, Ugalde & Todic, 2015).

Insecure attachment in childhood is a predictor of various forms of psychopathology in adolescence and later in life (Kerns & Brumariu, 2014). Studies indicate that single parenting may be challenging to the parent and could impact on the attachment of the

parent with the child. This in turn could adversely affect children and their behaviour later in their lives including their behaviour and early sexual activities that could result in teenage pregnancy (Hoskins, 2014). Our study hopes to determine the predominant attachment style in single-parent homes in the community and to examine the possible link between attachment styles and teenage pregnancy.

1.5 RATIONALE OF STUDY

Studies have been carried out on attachment styles, single parenting and teenage pregnancy respectively. Most of these studies have been on these individual concepts, but there is a paucity of studies that relate these concepts to each other, and how they impact on each other. The paucity of information in the literature on this subject in our country is a challenge to the entire understanding of the subject. Therefore, the relationship between the single parent attachment styles and teenage pregnancy in Namibia is of particular interest.

It is hoped that the outcome of the study made available to health managers will contribute to efforts in curbing teenage pregnancy in Namibia.

1.6 PURPOSE OF THE STUDY

The purpose of this study is to

- Examine the relationship between attachment style of single parents, to teenage pregnancy;
- Identify the effects parent's attachment style have on their teenage daughter;
- Examine the predominant attachment style of the single parent. The attachment theory of Bowlby and Ainsworth was used as a framework. The theories believe that the attachment style which develops between a parent and a child has far-reaching effects on the child, the child's development and the child's future.

The independent variables in this research are identified as the parent, coming from a single parent home or a two-parent home. The other independent variable is the attachment style, which could be a secure attachment or insecure attachment. The variations of insecure attachment would be identified as insecure ambivalent attachment style and insecure-avoidant attachment for the purpose of this research. The dependent variable in this research is identified as the teenager that is pregnant.

1.7 OBJECTIVES OF THE STUDY

The objectives of the study are:

- To determine the predominant attachment style among single parents, to their children.
- To describe the effects of attachment style on female teenagers.
- To ascertain if the attachment style experienced by female teenagers influenced, contributed and added to the risk of teenage pregnancy.
- To determine if single parenting is associated with increased risk of early sexual activities and teenage pregnancy.

1.8 RESEARCH QUESTIONS

The research attempted to identify answers to the following questions:

i. What is the predominant attachment style single parents have?
ii. What effects does the attachment style have on female teenagers?
iii. Does the attachment style experienced by female teenagers contribute to the risk of teenage pregnancy?
iv. Does single parenting increase the risk of early sexual activity and teenage pregnancy in daughters?

1.9 CONCLUSION

Chapter one presented a general overview of the study, including an introduction and a background to the study. Aims and objectives, research questions as well as assumptions to the study are presented and key terms defined.

OUTLINES OF CHAPTERS TO FOLLOW

The study carried out a systematic inquiry with examination and analysis of the research subject. This will be achieved in the five chapters of this study.

Chapter 2

The second chapter focuses on the review of relevant literature to the study. This aids in contextualizing the study.

Chapter 3

The third chapter describes the research method used for data collection and analysis. A quantitative research design is employed. It includes details of issues considered to protect the ethical rights of the respondents.

Chapter 4

Chapter four of the study deals with data analysis and interpretation.

Chapter 5

In chapter five of the study, the findings of the study are presented, results are discussed, and recommendations are made for future studies. The limitations of the study are also discussed. This chapter concludes the study.

CHAPTER 2

THEORETICAL FRAMEWORK AND LITERATURE REVIEW

2.1 INTRODUCTION

This chapter presents the literature review of the study. The theoretical framework on which the study is based is examined and discussed. The first section of this chapter examines single parenting and the different forms in which it could be found. It is examined in relation to the impact on the female child. Thereafter, teenage pregnancy is examined, with a review on the general state of teenage pregnancy worldwide and in Namibia specifically. The economic empowerment of the women is hampered by teenage pregnancy, with education being cut short and work potential reduced. The high rate of teenage pregnancy is a concern in Namibia (Tjihenuna, 2013). Literature on attachment style is reviewed, with a view to identifying the attachment styles most common to the single parent and its possible influence on teenage daughters becoming pregnant as teenagers.

Further implications and scenarios of teenage pregnancy are reviewed, including health implications, HIV/AIDS implications on the teenage mother, child, and the nation. Literature is also examined, to ascertain the impacts of poverty and environs on teenage pregnancy and which causes which; that is whether it is poverty causing teenage pregnancy or the other way around. Teenage pregnancy and child support grants are also examined. Finally, the theoretical framework of the study is discussed. The theoretical framework is focused on the attachment style, as proposed by Bowlby and Ainsworth. They are further examined in relation to their possible effects on parenting, effects on teenagers, their sexuality as well as possible risks and protective factors of attachment.

2.2 THE SINGLE PARENT

The single parent is a relatively new concept, with a family traditionally known to consist of a father, a mother and child or children. A single parent can be defined as someone who brings up his or her child on his or her own without the other parent living with them (Collins dictionary, 2017). The singleness is not just the physical presence or absence of the parent. A father or mother who is regularly out for work with travels or works in a

different city will still be recognized as part of the home. A single parent family could be headed by a mother or father.

Single parent families are families headed by a parent who is widowed, divorced or who have never been married. Single-parent families tend to have challenges that are peculiar. They are often economically challenged as only one person earns an income as opposed to coupled parents where the two parents contribute to income generation. The single parent is challenged by having to cater for all family obligations. The single parent teenage mother for example usually lacks the skills to obtain a well-paid job and could remain unemployed. When employed, it is usually in a low paying job that may not generate enough income to look after herself or the child. In many occasions, fathers to the children do not provide child support, and where they do, it is often inadequate.

Family composition could affect teenage early fertility. A child with one or both parents absent is more likely to engage in early sexual activities than the one who has both parents present (Pilgrim et al., 2014).

The single parenthood could be the result of divorce, widowhood or a parent who has never been married. In the past single parenthood was mostly caused by the death of the other parent. Presently, in addition to bereavement of a spouse are divorce, separations and pregnancy of unmarried females (Chamie, 2016). About 44.2% of single mothers are divorced or separated, about 36.8% have never been married and only 1.1% is widowed. About 53.5% of single fathers are divorced or separated, while about 24.7% were never married. About 82.2% of single parents are mothers, and 17.8% are fathers (Wolf, 2017; Schuder, 2017).

Children raised by two parents tend to be successful at school; they seem to have a future in the labour market, as opposed to children raised by a single parent, who are more likely to face financial hardship and experience a variety of cognitive, emotional and social problems (Badger, 2014; Kedro, 2016). Up to 75% of children born to single parents are more likely to give birth as teenagers (Kedro, 2016). Children of single parents are more likely to have a higher school dropout rate, be more involved in delinquent activities including the use of alcohol and drugs. They tend to marry earlier, have children earlier and divorce earlier than those from couple parent homes.

Single parenting is one of the leading causes of teenage pregnancies (Prezi, 2014). Children of single parents tend to engage in sexual activities and other risky behaviours earlier than those who come from coupled parents' homes. Children who are raised by

persons other than their biological parents are also at higher risks of getting pregnant as teenagers. Kempner (2013) believes that female teenagers with single parents with poor economic status, are at risk of teenage pregnancy. Poverty is associated with school dropout, unemployment and is a determinant of the neighbourhood where the child is raised. All these accentuate the risk of teenage pregnancy. He also stated that the level of education of the child is inversely related to the risk of teenage pregnancy (Kempner, 2013).

This study is interested in the various forms of single parent families, various dimensions of the single parent families are highlighted to give a broader and more in-depth view of the single parent family. We would examine some of the different single parent families in depth.

2.2.1. A Single Parent who is Widowed/Divorced

2.2.1.1 The Single Parent who is Widowed

The widowed parent is a parent whose spouse died and did not get married again. In the past, this accounted for the main reason why there were single-parent families. The single parent that has never been married is self-explanatory. This is a parent who has a child or children out of wedlock.

2.2.1.2 The Single Parent who is Divorced

Single parent homes could result from divorce or separation. In a divorce, a couple is legally separated from each other and the marriage dissolved. The raising of the child is then mostly by one parent. In the United States, more than 45% of marriages end in divorce. This places about 40% of children having divorced parents and thus living in a single parent home. About 80% will live in a single parent home headed by the mother (Hopf, 2010).

Divorce leads to stress and increases the risks children are exposed to on a daily basis. Children from divorced families are more at risk of performing poorly academically, dropping out of school, abusing alcohol and drugs, and becoming pregnant as teenagers than children from married families (Hopf, 2010). About 20% to 25% of children from divorced homes display severe emotional and behavioural problems when compared to 10% from non-divorced homes. Some children emotionally support the parents they stay with, and that increases the stress on these children. The parent may have poor emotional attachments with the child. Adolescents from divorced families tend to show more risk-

taking behaviours especially if the divorce happened when the child was in the early adolescent phase (Hopf, 2010; Wallerstein, Lewis & Rosenthal, 2013; Gibson-Davis & Gassman-Pines, 2010).

Children from divorced homes experience the effects of financial strain after the divorce. Family income is generally reduced to about 50% to 75%. US Census Bureau estimates about 37% drop in family income following a divorce. The effects are felt indirectly, like the family moving to a less expensive neighbourhood with higher crime rate, less desirable peer group and weaker schools (Hopf, 2010; Wallerstein et al., 2013; Gibson-Davis & Gassman-Pines, 2010). About a third of children of these children will live in homes where the parent remarries or cohabits before they turn 18. This places additional stress on the child (Hopf, 2010). These factors could affect the child and their attachment with their parent and consequently their future. Children from divorced families tend to have lower self-esteem than children from non-divorced homes (Hopf, 2010).

In single parenting resulting from a divorce, there are attachment styles established prior to the divorce. In cases where the attachment style was secure, it tends to get destabilized for a period and may revert back to the predominant attachment style known to the family. If the attachment style was insecure it is usually made even more insecure. The child mostly loses close contact with at least one attachment figure and the attachment with the one parent that has legal authority may be challenged. The child is often stressed even with an amicable divorce. This may affect the child's self-esteem, school performance, display of behaviour problems manifesting in disruptive and risky behaviours, including early sexual activities (Fagan & Churchill, 2012).

Children may lose the relationship with other family members, such as extended family on the father's side. About 18% to 25% percent of children from divorced homes have no contact with their father 2 – 3 years after the divorce (Hopf, 2010). Teenagers are affected by the death of a significant person, divorce of parents and a major change in their lives such as moving to a new house or changing school. These stressors may lead to depression, which in turn causes them to become vulnerable and tend to seek to compensate for the emotional loss by trying to be intimate with someone. This vulnerability places them at great risk of unwanted pregnancy as teenagers (TeenHelp, 2016; Andreson, 2014).

2.2.2 Single Parent - Absent Parent

An absent parent legally refers to a parent that does not have custody of their child and who may be obliged to pay some form of support for the child. They are generally not physically present in the home. They are also likely to have abandoned their child.

The absent parent could be physically absent or emotionally absent. Further examination would be made of these.

2.2.2.1 Emotionally Absent Parent

An emotionally absent parent could be the mother or father. Emotionally absent parents are usually physically present in the home, they however tend to find it difficult and at times seem incapable of giving love and attention; they are emotionally distant. They usually leave all authority, emotional support and in some cases responsibility to their spouses (Exploring your mind, 2016).

Children from such family structures are likely to develop feelings of abandonment, fear and insecurity. Psychological absence of a parent may create emotional wound in a child (Exploring your mind, 2016). These children become insecure and are likely to form unhealthy relationships with other people in a bid to get attention (Exploring your mind, 2016).

2.2.2.2 Physically Absent Parent

The Physically absent parent is one who is not physically present in the home, not because of circumstances due to work or studies, but is not physically involved it the life of the child. The parent could be the mother or father.

Children naturally seek attention from their parents. The attention they get from the parent that is the opposite gender has an added effect (Windsor, 2018). This study would therefore focus on the physically absent father as one of the dynamics of the single parent absent parent, especially because the study is interested in the parents' attachment to their female teenager.

2.2.2.3 Physically Absent Father

In this study, we are more interested in the physically absent father. We will identify the physically absent father as one who does not live with the child and is mostly not involved in the child's life financially and in bringing up the child.

There is a need for a father figure in the life of female adolescents. A healthy relationship between a father and a child helps the child to be resilient. A child that feels loved has a sense of emotional security, which makes the child able to cope more with stress and thus less vulnerable to anxiety and depression (Edwards, 2015). The United States Census Bureau study of 2011 estimated that 24 million children do not live with their biological fathers. That is 1 in 3 children do not live with their fathers (Edwards, 2015). The absence of a parent can have a negative effect on a child, including having low self-esteem, difficulty in socializing, or maintaining relationships

When fathers are absent, female children have difficulties to relate with men in a healthy way, leading to gain negative coping skills, such as sexual promiscuity, avoidance of intimacy, substance abuse, anxiety and depression. Children with an absent father are more likely to be promiscuous and get pregnant in their teens. They are more likely to have problems with sexual health and are likely to have had intercourse before the age of 16, hence more likely to become pregnant as a teenager. They may experience their father's absence as a rejection, which makes them susceptible to exploitation by adult men (Kruk, 2012; Rodriguez, 2016). Children with fathers that are absent are more at risk of poverty, educational problems and lower educational scores (Rodriguez, 2016).

The absence of a father increases the risk of early sexual activity and teenage pregnancy in their children. A father's absence from home is identified as a major risk factor for early sexual activity and teenage pregnancy (Leeuwen &Mace, 2016; Langley, 2016; Mendle et al., 2009). Other risk factors related to father's absence include poverty, poor parental monitoring and lack of control of children (Schafield, Bierman, Heinrichs, Nix and conduct problems prevention Research Group, 2008; Kruk, 2012). These risk factors are also prevalent in divorce cases.

Female children from absent-father homes, as adolescents, tend to initiate contact and seek attention from adult males. The younger they are when the father left home the more they seek such attention (Flouri, 2010). Behavioural problems early in life including sexual activities and teenage pregnancy could be indicators of negative outcomes in adolescence (Kruk, 2012). Behaviour problems and associated personality characteristics can be genetically transmitted (Kruk, 2012).

Adolescent suicide is another serious risk these female children are exposed to in their lives. About 65% of adolescent suicides come from homes where the fathers are absent. Children with absent fathers are more at risk of depression and suicide (Kismet, 2016). In

comparison with other children, children raised with the father absent are 5 times more likely to commit suicide. They are more likely to display features of depression and anxiety and are 32 times more likely to be incarcerated. They are more likely to have lower educational levels, have low paying jobs, and lower job security. In marriage, they are likely to have more relationship issues and thus have a high divorce rate. These children are more at risk of alcohol and drug abuse, social and mental behaviour problems (Kismet, 2016).

Fathers are important for their girls, as they nurture their child's development in a different way from the mothers. Fathers focus on teamwork and competitiveness. This focus has an effect on the management of emotions, intelligence and academic achievement (Romero, 2014). Fathers give a sense of self-non-pregnant and when girls do not have this, they become insecure, having low self-esteem and unable to recognize their self-worth (Kortsch, 2014). Kortsch (2014) believes that a girl sees her self-worth reflected in a father's behaviour towards her. Fathers that are present and nurture their daughters, help them to develop a secure sense of self-worth and behave as desirable women (Jordan, 2014). Girls nurtured by fathers usually have a healthy relationship with men. When fathers are absent, daughters may search for the father's love they are missing elsewhere. They are at risk of relating to men in unhealthy ways and seeking attention in inappropriate ways and relate intimately with older men (Garrett-Akinsanya, 2011).

The emotional and social well-being of children remains a major challenge in many countries, including the United States, Canada, the United Kingdom and most of Africa, Namibia inclusive. One of the factors that affect this emotional and social wellbeing is the effect of a father's absence in his child/children's lives (Kruk, 2012). The two main causes of a father's absence in their child's life are divorce and children born outside marriage (Kruk, 2012).

Kruk (2012) indicates that about 71% of high school dropouts do not have fathers. These children score poorly in tests of reading, mathematics and thinking skills. They are more likely to become truants at school, drop out of school by the age of 16, and are less likely to gain academic or professional qualifications. About 85% of adolescents in jail have an absent father and about 90% of runaway children come from homes in which fathers are absent (Kruk, 2012).

Children with an absent father are five times more likely to be physically abused and emotionally abused. They are a hundred times at risk of fatal abuse. Pre-scholars that do

not live with both of their biological parents are 40 times more likely to be sexually abused (Kruk, 2012). Children without fathers are more likely to have more psychosomatic health symptoms such as asthma, headaches and stomach aches. They display a range of mental problems, including anxiety, depression and suicide. Children without fathers in their future relationships are more likely to divorce; they are more likely to have children outside of marriage (Kruk, 2012). Children with absent fathers are more likely to be depressed and have aggression and emotional problems (Holborn & Eddy, 2011). The relationship between the mother and child in homes headed by mothers can be quite strained (Gibson-Davis & Gassman-Pines, 2010; Wallerstein et al., 2013).

Father absent household is common in South Africa and Namibia. Single parent households headed by mothers accounted for 40% of families in 2008 (Holborn & Eddy, 2011; Makiwane & Berry, 2013). In South Africa, there are over 39% of children living in a single parent home headed by a mother (News 24, 2013). We will be examining the single parent home headed by the mother in the next section.

2.2.3 Single Parent Mother Headed Family

A single mother has a child or children that are still dependant, they may have become single by being widowed, divorced or unmarried (Collins Dictionary, 2017).

The United States of America has about 12 million single-parent families. More than 80% were headed by a single mother (U.S. Census Bureau, 2016). In 2016, there were about 83% single-mother families and 17% single-father families. An estimate of 4 of every 10 children is born to an unmarried mother. About 1 in 4 children under 18 years were being raised without a father, that is about 17.2 million (U.S. Census Bureau, 2016).

A high percentage of single mothers never graduate from high school, which in turn increases the chances of their children not graduating from high school by 10% (Kedro, 2016). Single mother headed families are more likely than two-parent families to live in poverty. In 2017 in the USA, the poverty rate for the single parents was 34%, which was almost 5 times more than in the two-parents' family which had a poverty rate of 6% (Single mother guide, 2019).

Single mothers have a high percentage that never got married, up to 50%, about 29% are single as a result of divorce, while 21% become single through separation or were widowed of their spouse (Single mother guide, 2019).

A high percentage of single mothers never graduated from high school, which in turn increases the chances of their children not graduating from high school by 10%.

The single parent mother only has an interesting phenomenon, which has an added dimension that is of interest to this study particularly as it is on the rise and may have its own peculiar effects. There is the single parent mother who is still in their teenage years.

The study also examined this dimension of the single mother, that is, the single mother who is still a teenager. This would refer to mothers of the teenage respondents whose gave birth to their first child while they were teenagers.

2.2.3.1 Single Parent Teenage Mother

There is an increasing number of teenage mothers who are taking on the parenting role. This teenage mother would refer to a parent who has given birth while still in their teens, that is being between the ages of 12 to 19 years. This has much implications for the mother and child. Teenagers whose mother gave birth to them while a teenager and teenagers with sisters who got pregnant as teenagers are more likely to become pregnant as teenagers (Hoffman & Maynard, 2008; Wall-Wieler, Roos, & Nickel, 2016).

Studies in the United States and the United Kingdom show a teenage birth rate of daughters of teenage mothers to be double that of daughters of women who were at least 20 years or older at their first pregnancy. Research indicates that children born to teenage mothers are more at risk of getting pregnant as teenagers because their mothers are single (Wall-Wieler, Roos, & Nickel, 2016). They possess inadequate, parenting ability as teenagers, because of the poor socioeconomic environment in which the children are raised (Wall-Wieler, Roos, & Nickel, 2016).

The age of a mother may influence the attachment pattern with her child and thus the outcome of the child's development. The teenage mother is generally deficient, due to her age (Crugnola, Lerardi, Gazzotti & Albizzati, 2014). Teenage mothers do not have enough coping skills and may not have social support. The teenage mother tends to be more negative and punitive and less nurturing in their interactions with their children (Crugnola et al., 2014). Teenagers are often physically, mentally and indeed financially inadequate to raise children. Most are unable to complete their education, thereby, have low income, if any. Teenage mothers may have insecure attachment styles; they tend to pay less attention to their child/children and may be less tolerant and therefore prone to hurt their children.

Adolescent mothers may not have a secure attachment with their children because of their own developmental deficiencies (Flaherty & Sadler, 2011). Teenage mothers are less likely to receive adequate prenatal care and are more likely to have complications in pregnancy and delivery.

According to the Urban Child Institute (2014), adolescent parenting is one of the major risk factors associated with poor early childhood development. In addition to its other effects, teen parenting is likely to hinder a child's social and emotional wellbeing. Adolescents are less likely to engage in emotionally supportive and responsive parenting as they have limited knowledge of effective parenting (Urban Child Institute, 2014). A child born to a teenage mother is more likely to have more difficulty acquiring cognitive and language skills as well as social and emotional skills like self-non-pregnant and self-confidence. These abilities begin to develop in infancy, and they are essential for school readiness (Urban Child Institute, 2014).

The teenage parent is usually challenged financially and emotionally, and with that, a high percentage suspend their education. They could be harsh in their parenting which arises from less experience and poor coping skills as well as the tendency to be depressed from stress, feelings of anger and resentment. In many instances, the teenage parent has to raise the child on their own, with many fathers abandoning them without any financial assistance (Urban Child Institute, 2014).

However, many children of teen parents go on to become successful adults, but it often involves parents making greater sacrifices than other parents would have to make. For example, some adolescent parents may abandon their own aspirations in an effort to ensure that academic and career success is attainable for their child. Research shows that children born to adolescent mothers are more inclined to repeat their parents' behaviour. The Urban Child Institute (2014) reports that they are more likely to drop out of school, have more health problems, face unemployment and become teen parents themselves. Promoting positive parenting among young mothers improves their children's chances for success. Increasing parents' knowledge about child development and effective parenting strategies help them protect their children from many of the risks that accompany early parenthood.

Starting at birth, children begin to develop social and emotional skills. It is important for parents, no matter their age, to ensure that their children are adequately prepared to face challenges later in life by maintaining a loving home environment that nurtures their

ability to learn about themselves and the world around them. A strong foundation of social and emotional skills helps children make better choices in adulthood and decrease the probability of errant behaviours.

A reduced ability to supervise the children and a subconscious acceptance of teenage pregnancy contribute to a higher likelihood of a teenager from a teenage mother getting pregnant (Wall-Wieler, Roos, & Nickel, 2016). As many as 182,000 girls in high school get pregnant yearly in South Africa, with a large number of them as young as 14 years. There is an estimated 18% of students getting pregnant or impregnating students yearly (Ghosh, 2013).

It is estimated that 3 out of 10 girls get pregnant before they turn 20. Eight out of ten teenage fathers do not marry the mother of their first child (National Campaign to Prevent Teen and Unplanned Pregnancy, 2013). Teenage parents, particularly mothers, are less likely than their counterparts who did not have babies as teenagers to be married by the age of 35 (Slocum, 2015).

2.2.4 Psychological Impact of Teenage Pregnancy

Teenage children of teenage mothers tend to have disturbed psychological behaviour, poor school performance and poorer reading ability in comparison to children of older mothers. They are more likely to smoke and drink regularly. They usually have a low socioeconomic position and their mothers are most likely to have been depressed. The teenager may have developed physically enough to get pregnant, but psychologically, they are still emotionally immature to carry the responsibility of being parents, and they are unable to provide for their children and give all the stimulation necessary for proper child rearing. Teenage pregnancy disrupts normal development. Teenagers are usually idealistic, they may be egocentric, see things as individuals, and tend to do things independently. They may not be sensitive and responsive to the infant (Flaherty & Sadler, 2011).

Teenage mothers are more likely to experience depression, especially around the prenatal period. They are also likely to have higher rates of prenatal deaths. Similarly, children of teenage mothers experience more health problems in the neonatal period and early in life when compared to children of older mothers. Preterm deliveries and low birth weights are common in teenage pregnancies. The most common negative social outcome among

children of teenage mothers is that they are more likely to become teenage mothers themselves, this causes the cycle of poverty to be perpetuated (Child Trends, 2016).

Teenage mothers tend to come from poor families. They are more likely to have been brought up in poor neighbourhoods when compared to older mothers. They tend to remain poor and to be socially and economically disadvantaged. When teenage mothers were compared to older mothers in Europe, 40% were found to live in poverty compared to 11% of older mothers in the same situation.

The Department of Social Development revealed that poverty, unemployment and inequality have been identified in South African families, as some of the most common factors that affect proper family functioning and the development of children. Children living in poor households are negatively impacted emotionally, psychologically as well as in their cognitive and physical development (Makiwane & Berry, 2013). There is a higher likelihood of children of single mothers to die before the age of five (Clark and Hamplová 2013), to be malnourished/stunted (Gurmu and Etana 2013) and to have low grades or drop out of school (Steele, Sigle-Rushton, Kravdal, 2009).

Female children of teenage mothers tend to be associated with early sexual exposure. There seems to be an intergenerational transfer of the risk of teenage pregnancy among their daughters (Meade, Kershaw & Ickovics, 2008; Wall-Wieler, Roos, & Nickel, 2016).

Risky behaviours usually increase in adolescence, and the difference between children born to teenage mothers and children born to older mothers becomes significant then. Children of teenage mothers are more at risk of using drugs, running away from home, joining gangs and dropping out of school.

2.2.5 Single Parent Statistics in Africa and Other Parts of the World

Literature indicates that 30% of children are born to single mothers. About 20% of female single parents are unemployed, while 8% of male single parents are unemployed. The poverty rate for a two-parents' household in 2009 was 11%, while for a single parent's household, it was 44.3% (Schuder, 2017).

Africa

South Africa has a high level of 40% of children living in single-parent homes mainly with their mothers, and about 4% living with their fathers. Mothers head about 80% of single-parent households worldwide (Chamie, 2016).

The proportion of children who live in single-parent homes headed by mothers is 10% in Nigeria and 34% in South Africa. The proportion of single mothers was 27% in Congo Brazzaville and 53% in Namibia (Chadoka-Mutanda & Mbanefo, 2015). Research reports indicate that Namibia tops the six countries selected for study in the prevalence of premarital childbearing with 25.5% (Palamuleni & Adebowale, 2014). Another study indicates premarital fertility in Namibia to be 42.7 % (Pazvakawambwa, Indongo & Kazembe, 2013)

In Namibia, the predominant marital pattern is of never-married women. Analysis from the National Health and Demographic Survey (NDHS) states that women interviewed in 1992 and in 2006 indicate 50.3% and 56.6% of the women were never married (Pazvakawambwa, Indongo & Kazembe, 2013). Single parents that have never been married are highest in Latin American countries; Colombia with 74 %, and Chile with 68%. Other countries include South Africa with 59%, France 56% and the United States with 40% (Chamie, 2016).

The World

It is estimated that 14% (320 million out of 2.3 billion) of the world's children live in a single parent home. One in seven children who is under 18 years' lives in a single parent home. These homes are headed mostly by single mothers (Chamie, 2016). In China, 10% of children live in single-parent homes, while in the United States they make up 28%. The United Kingdom has about one-fifth of its children living in single-parent homes, again mostly headed by mothers.

About 21% of children living only with their fathers live in poverty. Only about 11% of those living with both parents can be regarded as poor. About 40% of single parent families live below the poverty line (U.S. Census Bureau, 2016). The single-parent family is more likely to live in poverty than the married couple family. In 2015 the poverty rate for the single mother family was about 5 times higher than the couple headed family, with 36.5%, while that of the married couple family was 7.5% (Tucker & Lowell, 2015).

One-third of children with a single mother end up with a college degree, and about one-sixth end up not completing high school. When compared to married couple families, a single mother earns significantly less. In 2013, the median income for a single mother was $26000 while that of a married couple family was $84000 (U.S. Census Bureau, 2016).

2.2.6 Risk Factors of the Single Parent Family

The following factors place the family structure more at risk and specifically increases the risk of teenage pregnancy. These factors can be found in all family structures, they however tend to be more prominent in single parent families.

Being a Single Parent Family

Being in a single parent family is a major risk factor for family members and particularly daughters to be at risk of teenage pregnancy. This could be from any makeup of single parents, including divorced and never married parents. Divorce could lead to poor conflict management, less social competence for the child, as well as an early loss of virginity (Fagan & Churchill, 2012). The children in widowed family seemed to approve of pre-marital sex and co-habitation (Fagan & Churchill, 2012). Children of divorced parents tend to have more relationships and multiple partners, their relationships do not usually last long which may contribute to why they have multiple partners (Fagan & Churchill, 2012).

Absence of the Father

Having a father that is absent, by divorce, or one who choose not to be part of family's life physically or emotional or a father that is deceased, greatly affects the family structure and the children (Langley, 2016). There seems to be a constant void that the children seek to fill, sometimes by disruptive behaviours and for some by seeking opposite gender's attention.

Inconsistent Adult Supervision

Poor supervision and monitoring increase the risk of teenage pregnancy (Morin, 2019). None or minimal supervision from an adult, because the adult is not available due to work hours, other pressures. Sometimes the adult may be under the influence of drugs or alcohol and so is unable to give good guidance to the children. The parents may themselves be children as in the case of teenage parents and may be at a loss of how to guide the child or may get frustrated by having to guide children when they themselves also need attention and guidance.

Poor Support Network

Poor support network is a risk factor of teenage pregnancy in single parent families (Malachi, 2019).When there is no relative, friend, neighbour or system that can assist in needy times, it increases the pressure on the sole parent who may have to work to maintain the family as well as be the only one available to supervise and monitor the child. The child is likely to become more exposed, with possibility of negative outcomes in life.

Poverty and Low Socioeconomic Status

The single parent family is more likely to live in poverty. Income and resources to maintain the family most often come from the one parent, which is usually not as much as income in a two-parent family. This may place the family in a neighbourhood where families with similar income live with challenges that face such neighbourhood. The child is more exposed to more likelihood of negative outcomes in life including teenage pregnancy (Kedro, 2016).

2.2.7 Protective Factors of the Single Parent Family

Protective factors are attributes which may come from families, the community or an individual. They could mitigate or eliminate the risk factors in families and rather increase the health and well-being of a family.

There may be challenges in the single parent families, even though many single parent families also do very well and the children from these families also do well. The single parent family in many cases is a well–adjusted family with secure attachment and positive future outcomes. The single parent is challenged to raise a child or children on their own in many cases with one source of income, making decisions on their own as well as parental monitoring, this makes raising the child a challenge. The single parent can be quite resilient and does overcome challenges, giving rise to a strong bond with the child resulting in secure attachment with the child. A single parent family can be a functional family and can bring about positive outcomes for the teenager, who grows up to be strong, resilient and successful.

Various factors have been identified in such single parent family structures, these could include the following protective factors.

Resilience of Parent

The parent that is resilient help the child better able to deal with life's challenges (Malachi, 2019). They do have to raise funds usually alone, sometimes by having more than one job, raise and monitor the child mostly alone, as well as other challenges that may come their way. The way they handle these challenges and show emotional stability helps the child feel secure and gives the child a life to model.

Social Connections

A network of friends and family which creates a good support system for the single parent family (Malachi, 2019). Similarly, support groups such as the church, a community group or a group with similar interest to that of the family form part of the social connections. These create an extended form of security for the child and a wealth of role models that could have positive impacts on the child, as well as ease of the pressure of responsibility on the single parent.

Strong Bonding of Single Parent with Child

In the single parent family structure, there may be a stronger bond between the parent and the child than in the two-parent family structure (Malachi, 2019). As a result of being the lone parent that is always with and available to the child, there is more one on one time available to be with the child, which could create a strong bond (Malachi, 2019). The parent that forms bonds with their child creates a sense of security. Single parents who are able to form such bonds have a secure attachment with their children which makes for a positive outcome.

Knowledge of Parenting

Parenting can be learnt, and good parenting and knowledge of child development is a protective factor for families (Malachi, 2019). As parents expose themselves to training, formal and informal from those who have successfully parented in the past such as relatives, professionals including nurses and counsellors, they have more chances at creating good bonds with their child.

A Sense of Community

In the single parent family structure, the child may have access to a bigger support system than in the two-parent family (Malachi, 2019).The single parent and child may be living with an extended family member such as the grandparent, or other relatives; or is usually

in close communication with them, such as after school care. The two-parent family may not live in such close proximity to relatives. The single parent may try to participate in community groups such as a church (Malachi, 2019). This broadens the support system of the child and results in a more secure attachment with the child and positive outcomes later in life. Others sharing in the raising of the child reduce the burden on the parent which in turn allows for bonding with the child and cause less stress.

Networking with groups of similar interest to family and even extended family helps the single parents. They do not then feel overwhelmed with pressures and have extra hands to help. Also, the child is able to connect and attach to others, which make them feel secure and makes for a secure attachment with positive future outcomes.

Social and Emotional Competence of Children

Families that helped their children adopt social skills, teaching them how to communicate their feelings and how to solve problems as well as how to interact positively with others (Malachi, 2019). Teenagers were usually well adjusted and had a secure attachment which predicted positive outcomes.

Children Sharing Responsibility

Children from single parent families learn to be responsible quite early and contribute to the general wellbeing of the family by the chores and other things they do (Malachi, 2019). This could give them a good sense of self-esteem, which impacts on their sense of well-being. With the child taking up some responsibilities, the pressure on the parent would be less. These responsibilities could include making their own school lunch, cleaning up themselves and their room and doing their homework at set times.

2.3 TEENAGE PREGNANCY

Teenage pregnancy is defined as pregnancy occurring in a child aged 12 – 19 years. The term is also associated with the girls who are not yet legal adults and are usually still in school and dependent financially on parents (Medical dictionary, 2017). Teenage pregnancy is of great concern worldwide, attracting a lot of attention.

Teenagers aged 18-19 years make up the highest group of teenage pregnancies, accounting for 73% of teenage births in 2014 (Hamilton, Martin, Osterman & Curtin, 2015). In 2010, the United States of America recorded teenage pregnancies of 60% live

births; 15% in miscarriage, and 25% in abortions (Kost & Henshaw, 2014). The teenage birth rate is higher in the United States than many other developed countries such as Canada and the United Kingdom (United Nations Statistics Division, 2015). In 2013, teenagers aged 15 – 19 years had 274,000 babies, which are about 26.5 births for every 1000 girls. About 1700 teenagers between the ages of 15 -17 years give birth every week and about 16 million teenagers in the world give birth annually, while 3 million 15 to 19-year-olds have unsafe abortions yearly (United Nations Statistics Division, 2015).

Complications in pregnancy are the second leading cause of death in 15 to 19-year-old girls (Teenhelp, 2016). About 77% of teenage pregnancies are unplanned. With 15% end up in miscarriages and 30% in abortions. In 2014, for every 100 teenagers between the ages of 15 to19, there were 24.2 births. In 2014, one in six births was to a teenager aged 15-to 19 with a previous child (Hamilton, Martin, Osterman, & Curtin, 2015).

Teenage pregnancy is a challenge all over the world, with great repercussions, including poor education, behavioural and emotional problems and abusive activities. There are economic challenges to the teenagers and the communities they reside in. These teenagers face challenges to secure jobs because of age, level of educational attainment, and past history records; thus, a circle of poverty is perpetuated both for the teenager and the nation at large. Depression, stress and suicide rates in pregnant teenagers are higher than in non-pregnant teenagers (Hodgkinson, Colantuoni, Roberts, Berg-Cross & Belcher, 2010). These could be the consequence of competing issues, such as developmental crises, adolescent transition, childbearing, and in certain cases having to leave home. This may affect a parent's attachment to a child and could result in abuse or neglect of the child.

Smit (2011) noted that in 2010, about 1500 learners in Namibia, dropped out of school due to pregnancy. According to Kahorere Hungi, reports from the Namibia Planned Parenthood Association (NAPPA) youth pregnancy rates in Namibia are very high with 20% of 17-year-olds, 35% of 19-year-olds, and 57% of 20-year-olds being pregnant. These numbers could be much higher but may not be documented. This impacts on the type of jobs they can secure and thus affect their economic power. This will in turn affect the choice of residing location. All these having a spiral effect on the unborn child ultimately affecting the way they attach to their child and vice versa. Adolescent pregnancy remains very prevalent, particularly in the rural areas of the country, and has a negative impact on the health of the adolescents and their infants (Smit, 2011).

Teenage pregnancy exposes the young mother to health risks including anemia, sexually transmitted diseases, poor weight gain and pregnancy-induced hypertension which could continue later in life, as well as cephalopelvic disproportion. Teenagers are economically dependent and as such do not have the means for medical care which places the infant at risk both in gestation (in the womb) and after birth.

Many children born to teenage mothers are prone to low birth weight, which increases the probability of complications like blindness, deafness, cerebral palsy as well as infant mortality. Children born to teenagers may be abused or neglected by parents, because the pressure of parenting may overwhelm the teenager. The infant's performance in school may also be impacted negatively. These negative impacts on the infant are often mitigated by the help coming from other sources such as the grandparents or other relatives.

Teenage pregnancy impacts the economy and society. In the United States, up to $9.4 billion was spent on teenage pregnancies and deliveries in 2010 (Teenhelp, 2016). Only about 50% of teenage mothers aged 15 to 19 get a high school diploma, and by 30 only 1.5% of those with teenage pregnancy have a college degree. This raises issues with employment, with 80% of unmarried teenage mothers depending on welfare from government, family or friends (Teenhelp, 2016). Low education and low-income levels of a teenager's family may contribute to high teenage pregnancy (Boonstra, 2011).

2.3.1 Teenage Pregnancy in Namibia

Teenage pregnancy is a challenge in Namibia. There are concerns about the high rate of teenage pregnancy in the community, in government and with organisations focused on child health. Teenage pregnancy in Namibia increased from 34% in 2012 to 36% in 2013. The Kavango region has the highest teenage pregnancy rate in the country with 15% of teenagers between the ages of 15 to 19 recorded as being pregnant (Tjihenuna, 2013). According to the Centers for Disease Non-pregnant and Prevention, almost 2500 teenagers fall pregnant every year in Namibia. In 2013 approximately 46 000 teenage girls in Namibia fell pregnant. Thus, there are an average of 127 girls getting pregnant daily of which 39% are younger than 15 years old. A major reason for dropping out of school is pregnancy, with 45% of girls leaving school because they are pregnant (Tjihenuna, 2013; Nekomba, 2016).

In Namibia, the risk factors for teenage pregnancy include lack of knowledge about contraceptives, single parents and poor maternal education. Several components contribute

to the high teenage pregnancy rate, including poverty. According to the National Campaign to Prevent Teen Pregnancy, teenagers whose mother gave birth as a teenager are more likely to get pregnant as a teenager. Teenagers, whose parents were unmarried when they were born, are more likely to get pregnant as teenagers. Teenagers, whose mothers did not complete high school or university, are more likely to become pregnant as teenagers (Tjihenuna, 2013). Other risk factors include peer pressure, low self-esteem, misconceptions about sexual activity by other girls. Teenagers could be influenced by their parents' model of abuse of alcohol and lifestyle with partners. Alcohol and drugs make the teenager take risks and therefore become more vulnerable to get pregnant as teenagers (Tjihenuna, 2013).

According to the Demographic Health Survey conducted between 2006 and 2007 in Namibia as well as the Teen Fertility Survey in the Kavango region in Northern Namibia, teenage pregnancy rates are relatively high, with Kavango region reporting the highest teenage pregnancy rate of 34%. This is compared to a national average of 15% (United States Agency for International Development, 2011). Teenage pregnancy in the nation raises concern at the individual and national levels. At the individual level, there are concerns of limited education and health for mother and baby. Whereas, at a national level, the high teenage pregnancy rate compromises efforts to mitigate the spread of HIV infection, which is presently one of the biggest threats to national development in Namibia. This in turn compromises economic progress in the region (United States Agency for International Development [USAID] 2011).

According to the Namibia Demographic and Health Survey [NDHS] (2013), as recorded in Namibia by the Ministry of Health and Social Services [MoHSS] & International Children's Fund[ICF] (2014), the percentage of women of childbearing age who have never been married is sixty; almost double that of those who have been married which stands at thirty-four percent. Seven percent of women of childbearing age are separated, divorced or widowed. According to NDHS (2013), the average age in Namibia of sexual activity for women is 19.0 years, while for men it is 18.2 years. About 5% of women and 10% of men had become sexually active by 15 years old. Sixty-two percent of women and 74 percent of men indicated being sexually active by 20 years. The average age of a woman at first birth is 21.6 years; however, a more detailed analysis reveals a slight decrease to age at first birth being 18 years old.

2.3.2 Teenage Pregnancy, HIV/AIDS and Health Implications

With the HIV/AIDS epidemic, teenage pregnancy raises the risk for high HIV prevalence among this age group. Teenagers who have risky sexual behaviour are more likely to engage with more than one partner and are also more likely to engage with much older partners. This increases the risk of being infected by HIV (Christofides, 2014).

Early teenage pregnancy increases HIV incidences among South African women. Risky sexual behaviours such as multiple partners and significantly large age gap between partners increase the risk (Christofides, 2014). Teenagers involved in an unprotected heterosexual relationship are at a higher risk of teenage pregnancy and HIV infection. Literature indicates that there is a higher prevalence of HIV among pregnant women than in the general population in South Africa (Mchunu, Peltzer, Tutshana, & Seutlwadi, 2012; Moodley Esterhuizen, Pather, Chetty, Ngaleka, 2009; Shisana, Rehle, Simbayi, Zuma, Jooste, Pillay-van-Wyk, Mbelle, Van Zyl, Parker, Zungu, Pezi, & SABSSM III Implementation Team, 2009).

In South Africa, the prevalence of HIV in women aged 15-19 years old, is 6.9% and between the ages of 20- 24 it is 21.1% (Shisana, et al., 2009; Kharsany, Frohlich, Nonhlanhla, Gethwana, Samsunder, Dellar, Mkhonza, Karim, & Karim, 2015).

The adolescent fertility rate of ages 15 – 19 was 65 births per 1000 women in 2003. About 27.3% of women were pregnant as teenagers (Department of Health, 2008). It is noted that some teenagers in South Africa engage in risky behaviours which places them at risk of getting infected with HIV/AIDS, including unprotected sex, multiple sex partners, early sexual debut, and low contraceptive use (Atuyambe, Kibira, Bukenya, Muhumuza, Apolot & Mulogo, 2015).

Teenage girls with older partners tend to engage in transactional sex in which a gift or money is exchanged for sex. They are more at risk of becoming pregnant and being infected by HIV/AIDS as they have poor negotiating power with the partner with regards to protected sex. There is access to reproductive health information and services in South Africa, but teenagers avoid them because of public stigma (Mchunu, Peltzer, Tutshana, & Seutlwadi, 2012).

Diseases such as HIV/AIDS in a parent will impact the child. HIV infected parents are too sick to care for the children, or may even die, exposing the children to poverty and emotional trauma. There is a reduced level of parental non-pregnant and guidance, due to

loss of positive role models. They are poorly supervised, marginalized and traumatized. Many grow up as orphans and street children, while some form child-headed households to avoid separation from their siblings (Goldberg & Short, 2016).

Some are brought up by grandparents with a limited capacity to parent, either because they are too old to do proper monitoring or are overburdened with other children left in their care. These children are more at risk to be recruited for sex work. They are susceptible to emotional instability which could expose them to relationships with risky behaviour. There is no adequate parenting, less support and opportunities are limited (Goldberg & Short, 2016).

2.3.3 Teenage Pregnancy and Health Implications for Mother and Child

Childbirth and complications during pregnancy are the second leading causes of death in the world for teenagers between 15 -19. Girls below 16 years of age have the highest risk of maternal mortality and morbidity when compared to women who are over 20 years of age (WHO, 2016). Pregnant teenagers are more at risk of having low birth weight babies (Jewkes, Morrell & Christofides, 2009). Teenage pregnancy is a major cause of poverty and ill health worldwide (WHO, 2016; Neal, Matthews, Frost, Fogstad, Camacho & Laski, 2012). The challenges pregnant teenagers face includes the risk of developing high blood pressure.

Pregnant teenagers are more likely to have health problems, including, anaemia, urinary tract infection, depression, substance abuse, increased sexual risk behaviour and pregnancy-induced hypertension (Grant & Hallmam, 2008). Among teenagers aged 15 to 19 years, in sub- Saharan Africa, about 35% indicate that their pregnancies were neither planned nor wanted. One-third of these pregnancies resulted in unsafe abortions while two-thirds delivered (Bankole & Malarcher, 2010). In Soweto South Africa, 23% of pregnancies in teenagers between 13 to16 years and 14.9% of pregnant teenagers 17 to19 years are aborted (Mchunu, Peltzer, Tutshana, & Seutlwadi, 2012).

Teenagers that are exposed to sexual activities are at risk of contracting Sexually Transmitted Infection (STI). The risk is increased by the use of alcohol and drugs, as well as the naivety of teenagers about STIs and unprotected sexual exposure. They are also not emotionally mature and so do not make safer choices about sex and often feel pressured by their partners into unsafe sexual practices (Neville, 2016).

2.3.4 Teenage Pregnancy, Poverty and the Environment

Poverty could be defined as a situation where there is scarcity or lack of money or means of support; it is a state of being poor (Dictionary.com, 2017). The environment refers to the surroundings, conditions or influences usually of a place. It could also refer to cultural and social events that shape a person or populations' life (Dictionary.com, 2017)

Teenage pregnancy is closely associated with poverty. It is debated by researchers whether teenage pregnancy causes poverty or if it is poverty which causes teenage pregnancy. Literature indicates that in the United States of America 750,000 teenagers become pregnant yearly and about 30% of women have been pregnant at least once before they turned twenty. Most teenage pregnancies are accidental. Teenagers engaging in unprotected sexual activities have a 90% chance of falling pregnant within a year (Brooks, 2017). The United States of America recorded the highest teenage pregnancy rate of the developed world. The rates are twice as that found in the United Kingdom and four times the rates in France and Germany (Brooks, 2017).

Researches in 2009 and 2010 show 48% of teenagers live below the poverty line. Thirty-four (34%) teenage mothers that live with parents live below the poverty line. While for teenagers that live on their own, 63% live below the poverty line. About two-thirds of teenage mothers receive some form of public assistance, especially in the first year of the child's birth including medical care, or grants as in South Africa (Brooks, 2017). Poverty is both a cause and the consequence of teenage pregnancy and about 60% of teenage mothers live in poverty. Teenage mothers are less likely to complete high school, and less likely to earn a university degree. As a teenage mother, access to educational programs is less, and poor education results in limited skills and ultimately slim employment opportunities and ability to provide for themselves and their children (Brooks, 2017; South & Crowder, 2010).

Only about 38% of teenage mothers who have a child before they are 18 years of age will get a high school diploma by the age of 22, in comparison with 89% who did not have a child as a teenager. A high number of pregnant teenagers drop out of school, even where the education system encourages that they stay on. About 30% of teenagers who drop out of school do so as a result of pregnancy (Brooks, 2017).

About 80% of teenage mothers are not married to the father of their children. Teenage fathers are usually not very educated and may not be able to assist financially, and thus

the teenage mother and child are likely to live in poverty (Brooks, 2017). Teenage fathers are usually not involved in raising the child and do not provide financial support; either because they are unable or unwilling. Only 29% of teenage mothers obtain a legal agreement for child support, but only half receive any child support. Many teenage mothers are supported by their own parents. Some, however, have to fend for themselves and their children (Brooks, 2017).

Children living in poverty with teen mothers often receive less education than their peers that do not live in poverty. Even when an effort is made to maintain the same educational standards for both groups, those that live in poverty are usually challenged by missing more school days than their peers. They are usually required to take care of other family members and attend to matters that take them away from school. This results in a high school dropout rate. The dropout rate of teenagers who live in low-income household is seven times higher than that of the general population (Brooks, 2017). Children of teenage mothers may suffer from learning disabilities or developmental delays. A teenage mother may not know how to get financial or medical assistance to combating learning delays in their child, and so the child may never be assisted.

Only a few teenage mothers will attempt to enroll for a university or institution of higher learning program, and only about half of those who enroll will actually complete the degree. Teenage girls in a welfare system are at a higher risk than other teenage groups of being pregnant as teenagers. Teenage girls in foster care are two times more likely to get pregnant as teenagers, than teenagers not in foster care (Brooks, 2017; Boonstra, 2011).

2.3.5 Teenage Pregnancy, Poverty and Environmental Implications

Teenage pregnancy greatly impacts on the teenage mother, with 34% not been able to get a high school certificate, college diploma or university degree and less than 2% would have earned a degree by the time they are 30 years old. With less education, the possible earnings are less which in turn affects the national economy negatively (Culp-Ressler, 2012). A single person dropping out of school could mean an approximate amount of $260,000 possibly lost in earning, taxes and productivity for each drop out (Culp-Ressler, 2012). A lot of money also goes from the taxpayer's money into public sector health care cost towards treating and caring for pregnant teenagers and their babies. It has been estimated that students who drop out in a specific year of just one class can cost the nation's economy. This is based on projected earnings that these teenagers could have brought in (Culp-Ressler, 2012).

Pregnant teenagers have high drug addiction rates. They also tend to be at risk of committing suicide because of stress that arises from the pregnancy results such as financial difficulties and feelings of abandonment by family (Saha, 2017). Pregnant teenagers are more likely to go through depression; they are also more likely to abuse or neglect their children, as they may feel overwhelmed by the responsibility of parenting. Slocum (2015) indicated that children of teenage parents are likely to drop out of school. Sons born to teenage mothers are twice as likely as their counterparts to be imprisoned, while daughters born to teenage mothers are three times more likely than their counterparts to get pregnant as teenagers (Slocum, 2015).

Factors that increase the risk of sexual activity and pregnancy in teenagers, include the use of alcohol, drugs and tobacco, dropping out of school, not having social support, such as family or friends. Other factors include being in an environment where teenage pregnancy is common, living in poverty and being a victim of sexual abuse. Being a child of a teenage mother is also a risk factor to getting pregnant as a teenager. Depression and other mental health problems are also risk factors contributing to teenage pregnancy (Teen Help, 2016).

Factors that put teenagers at risk of unplanned pregnancy include living in a family where there is violence and sexual abuse, or a family in which there is regular conflict between members. Others could be an unstable home with unstable living arrangements. Not performing well in school and living in a low socio-economic background also tend to predispose the teenager to teenage pregnancy. Another factor is a family history of getting pregnant at a young age. When the mother's level of education is low, the child is more at risk to get pregnant during their teenage years. Living in a rural area and having a mental health diagnosis can also predispose a teenager to get pregnant as a teenager (Neville, 2017). When teenagers have lost a baby through abortion or otherwise, it is not uncommon for them to be pregnant by the next year, possibly trying to replace something lost.

Teenage Pregnancy and the Effects on Children of Teenage Mothers

About one-third of pregnant teenagers aged 15 to 19 do not attend prenatal care in the first trimester of their pregnancy. The number increases to 50% for teenagers below 15 years of age. This puts the pregnant teenager and the unborn child at risk. The teenager's bodies are still maturing, and early pregnancy puts them at risk of having premature babies. They are also at risk of having preterm and low weight babies. These babies are at risk of having developmental disabilities and chronic medical conditions that may require physical

therapy (Brooks, 2017; Sedgh, Finer, Bankole, Eilers & Singh, 2015). Female children born to teenage mothers are 20% likely to get pregnant in their teens. Male children have a 13% chance of being incarcerated.

Teenage Pregnancy and the Consequence for the Teenage Mother

Many teenage mothers find it difficult to continue with their education. Only about 50% of teenage mothers have a high school diploma by 22 years compared to 90% of their female peers that did not get pregnant as teenagers. Teenage mothers have limited education and little or no job skills. Employment opportunities are therefore limited (Brooks, 2017). Children of teen mothers are more likely to have lower scores on the standardized test and are less likely to obtain a high school diploma (Brooks, 2017).

2.3.6 Teenage Pregnancy and Implications on the Nation

Teenage pregnancy has financial implications for the community and the nation. These financial implications are in the form of medical care for the teenager and the child both in the period of pregnancy and aftercare. Cost is increased with an increased need for foster care and increased incarceration rates. There is also tax revenue that could have been accrued to the state (Brooks, 2017).

Teenage pregnancy affects national revenue. Most developed and developing nations try to accommodate pregnant teenagers and their babies through welfare schemes, health care for the teenager and child, in some cases foster care, as the teenager is usually not able to afford these services. In the United States of America, yearly expenses to assist pregnant teenagers results in about $7 billion. Additionally, teenage mothers hardly contribute to taxes but rather cost the tax-payer a lot of money (Saha, 2017; Culp-Ressler, 2012).

Teenage mothers have a high dropout rate from educational institutions, which decreases projected earnings that the nation could have acquired. About 34% of teenage mothers do not ever earn a degree or diploma, and less than 2% would have got a degree by the age of 30. This amounts to a significant loss of earnings the nation could have acquired (Saha, 2017; Culp-Ressler, 2012). Teenage pregnancy affects mother, child and the nation. The nation is affected by a loss of the potential workforce (Culp-Ressler, 2012).

2.3.7 Implication of Child Grants in South Africa

Social grants were established in South Africa to reduce poverty. In particular, the Child Support Grant was established in 1998. It was established as a non-contributory social assistance aimed at the protection of children, elderly and those with disabilities. There has been a marked reduction of poverty since its inception, with the decline being seen more significantly among the most impoverished (Patel, 2012). The Child Support Grant is mainly accessed by women. A flat benefit rate of R260.00 is given per child per month to those who apply with proper documentation and meet the setup criteria such as the child must be under the age of 18, not in another benefit institution, and enrolled in school. (Patel, 2012).

There has been a debate as to whether the child support grant has encouraged more teenage pregnancies. This however, does not seem to be the case based on research findings. Firstly, there has been a decline in teenage fertility/birth rate from the time the grant was introduced. This would not have been the case if pregnancies were due to a desire to obtain the grant. This decline therefore, indicates that the grant likely is not a reason for teenage childbearing (Makiwane, 2010). Teenage fertility in the 1980s was at 103 births per 1000, has seen a decline just before and after the introduction of Child Support Grant in 1998. A 30% decline in fertility rate is recorded in the first five years from 1998 to 2003. This would indicate that contrary to what was perceived by some the grant is not seen as an incentive to fall pregnant and have a child (Makiwane, 2010). Secondly, there has also been a decline in teenage fertility in rural areas where fertility rates were previously higher than in urban areas, and where people might have seemed in greater need of the grant. There was a decline of 33% from 99 per 1000 in 1998 to 66 per 1000 in 2003.

Thirdly, the number of teenage mothers who benefited from the grant were few compared to the total number of teenage mothers recorded in the period. Only 3% of teenage mothers were benefitting from the Child Support Grant. This again indicates that people were not getting pregnant for the monetary grant (Makiwane, 2010). Teenage mothers could only continue to receive the grant if their child was eligible. The age for eligibility is 18 years and younger and the likelihood of a non-teenage mother to continue to receive on the behalf of their child at that age would be 34years. Therefore, it would be quite difficult for a teenager to misuse the grant and keep getting pregnant to obtain the grant (Makiwane, 2010). Statistics indicate that 10.4% of all abortions in state facilities in the year 2003, was to women who were younger than 18 years old. If these teenagers were

getting pregnant to claim the Child Support Grant when the child was born, then they would not have terminated the pregnancy (Makiwane, 2010).

2.3.8 Teenage Pregnancy and Social Determinants of Health, Socioeconomic Status (SES)

Social determinants of health are environmental factors prevalent in which people are born in, live, play, worship, learn and age that may affect their health, their functioning and quality of life (Healthy People 2020, 2017; Penman-Aguilar, Carter, Snead & Kourtis, 2013). Some social determinants are closely associated with high teenage pregnancy rates, such as low education, low income, unemployment and poverty. Teenage pregnancy rates are generally higher in rural areas than in urban areas. In 2010 teenage pregnancy rates in the rural areas of the United States were almost three times more than other areas of the country. There were 43 births per 1000 teenagers as against 33 births per thousand (The National Campaign to Prevent Teen and Unplanned Pregnancy, 2013).

Research in the past decade shows that social class or socioeconomic status (SES) is related to the quality of parent-child relationships. Also, a range of developmental outcomes for adults and children Objective indicators of SES could include household income, level of parent's education, and the parent's occupation (Conger, Conger & Martin, 2010). Indicators of living above the poverty line include graduating from school, getting a fulltime job and getting married before having a child. If these indicators are present, the probability of living in poverty is only 2 percent, but in their absence, the probability of living in poverty will be 76 percent (Yglesias, 2012).

Teenagers whose mothers were pregnant as teenagers are more at risk of getting pregnant as teenagers. Teenagers that live in poorer neighbourhoods are more likely to get pregnant as teenagers than their peers that live in wealthier neighbourhoods (Taylor, 2017). Teenagers who are in school and who have a positive attitude towards school and are performing well educationally are less likely to get pregnant as teenagers, than those that struggle with school (Taylor, 2017). Living in a rural area or in a neighbourhood with low income are at a higher risk of getting pregnant as a teenager (Taylor, 2017). Teenagers with mothers who gave birth in their teens, and whose mother have only a high school degree or less, are more likely to get pregnant as teenagers. Teenagers that live with both biological parents at age 14 are less likely to get pregnant than those who do not (Martinez, Copen & Abma, 2011). Daughters of teenage mothers are 22% more likely than their peers to become teenage mothers (Teenhelp.com, 2016). Statistics of 2014 in the United

States indicate 24.2 births for every 1000 female teenagers ages 15 to19. Almost 89% of these births are to single mothers. About 17% of these births are to teenagers that already had one or more babies (Hamilton, Martin, Osterman & Curtin, 2015). About 77 % of teenage pregnancies are unplanned (Mosher, Jones & Abma, 2012).

Children raised in homes with authoritative parenting are less likely to be involved in risk-taking behaviour when compared to children who are raised in a home with uninvolved parents (Hoskins, 2014). Authoritative parenting style displays warmth towards the child, and there are high levels of non-pregnant in the home. Where there is parental warmth, risky behaviour is less likely to develop. This may lead to fewer sexual partners in late adolescence, thereby reducing the risk of teenage pregnancy (Kan, Cheng, Landale & McHale, 2010). Good communication between the parent and the child could ensure less risky sexual behaviours. On the other hand, where parental warmth is lacking, there is an increase in teenage pregnancy. Children who report a distant and problematic relationship with parents tend to engage in risky sexual behaviour. They tend to have more partners and tend to use contraceptives less than their peers (Roberts et al., 2012).

Teenagers that are supervised by parents tend to be positively impacted. These teenagers usually start later only as young adults with sexual engagements and generally have fewer partners. They have fewer opportunities to engage in risky sexual behaviours (Landor et al., 2011; Roberts et al., 2012). Parenting that is harsh, insensitive, inconsistent and hostile can cause adjustment problems for children and put them at risk of developing mood and behaviour disorders (Marshall & Kenney, 2009; Hoskins, 2014). The quality of parenting has an effect on teenage sexual behaviour and risk of pregnancy (Hoskins, 2014). Maternal education is strongly linked to parenting and attachment bonds between parent and child (Zhang, 2012). Thus, when parents had a tertiary education, they are likely to have better relationships with their children.

2.3.9 Peer Pressure Effect

Peers of the teenager can influence the sexual attitudes and behaviour of the teenager (Wallace, Miller, Forehand 2008; Landor, Simons, Simons, Brody, & Gibbons, 2011). Parents that monitor their children tend to have influence over their choice of peers and their association with peers. They are able to monitor the whereabouts of the child and can to a great extent limit risky sexual behaviours. Low monitoring increases the risk of teenage pregnancy (Roberts et al., 2012).

2.3.10 Effects of Teenage Pregnancy on the Offspring

Young children are sensitive to their environment. They are quick to gain social and cognitive skills and emotional competencies. Healthy development can be obstructed by poverty, inappropriate care and violence. They become easily susceptible to these factors. Children's developing brains are quick and sensitive to assimilate things from their world. Social experiences could be nurturing, increasing learning ability, and a better quality of life (Ermisch, Jantti, Smeeding, 2012). They are also easily affected by negative experiences such as violence, poverty and inappropriate care. These hinder healthy development (Brown et al., 2009). Early experiences can be embedded in the brain and other biological systems (Hertzman & Boyce, 2010). Adjustment problems have also been associated with insensitive, inconsistent and hostile parenting behaviours (Huijbregts, Séguin, Zoccolillo, Boivin & Tremblay, 2008).

The infant is particularly sensitive to parenting behaviours, as the maturation of the neurophysiologic system makes the child particularly receptive to emotional and behavioural regulation. Children, who are exposed early to adverse experiences which disrupt bonding and attachment, tend to have a higher risk of developing anxiety, depression and other stress-related illnesses in adolescence and adulthood. The way a mother was parented can be a predictor of how she would likely parent her children (Hertzman & Boyce, 2010).

Mothers with a history of adverse early experiences are associated with difficulties in parenting. Those with a history of sexual and physical abuse tend to be more intrusive with their children than mothers that were not abused (Neukel, Bertsch, Fuchs, Zietlow, Reck, Moehler, Brunner, Bermpohl & Herpertz, 2018).

2.3.11 Risk Factors of Teenage Pregnancy

There are a number of factors that increase the risk of teenage pregnancy including the following:

Individual Risk Factors

These are aspects which put the child at risk of teenage pregnancy by what they may get themselves involved in.

Drug and Alcohol Use and Abuse: Drug and alcohol use and abuse reduce inhibition of the teenager and increase risky sexual behaviour. Of teenagers who had sex, 19% had used drugs or alcohol before engaging in sexual intercourse (Pflugradt, 2018).

Lack of Knowledge about Sex and Contraceptives: Teenagers that are uneducated about sex are more likely to get pregnant as teenagers. They might have only partial knowledge and may not use contraceptives correctly (Pflugradt, 2018). They may not understand the biological and emotional implications of sexual intercourse (Pflugradt, 2018). *Poor School Performance:* Poor school performance and lack of education of teenagers puts them at risk of teenage pregnancy (Morin, 2019). *Low self-esteem:* Low self-esteem could arise from many different reasons. It generally indicates a sense of insecurity in self, which is usually as a result of insecurity with parents. Low self-esteem increases the risk of teenage pregnancy (Morin, 2019).

Victim of Sexual Abuse: Teenagers can become pregnant as a result of rape or sexual abuse (Pflugradt, 2018). Teenagers who experienced sexual abuse were 3 times more likely to get pregnant before they turned 18 years (Pflugradt, 2018). Other risk factors such as lack of future goals, beginning to have sex at a young age, attitudes towards contraceptive that are negative and ambivalence about having a child (Morin, 2019).

Social Risk Factors

These are factors that may increase the risk of teenage pregnancy that may be due to environmental factors and issues not directly under the control of the individual.

Peer Pressure: Teenagers feel pressured to make friends and fit in. They may, therefore, feel pressured to have sex especially when suggested by their friends, and when they feel everyone else is doing it and it may make them more accepted into the peer group (Morin, 2019). *Friends who are Sexually Active:* Having friends that are sexually active may encourage the teenager to also get sexually active at an early age (Morin, 2019). *Dating at an early age:* When children begin at an early age to date and go out with the opposite gender, it increases the risk of teenage pregnancy (Morin, 2019). *Dating Older People:* Dating older men could increase the risk of teenage pregnancy (Morin, 2019). When teenage girls date older men, they may feel pressured to agreeing to

have sex with them to prove their 'love', and may also be misinformed by older men about safety of such a relationship particularly without protection against pregnancy or STD's.

Low Socioeconomic Status: Teenage pregnancy is more in areas of poverty and economic disadvantage. With low socioeconomic status there is usually less income, less education of children, not many positive youth programs or game centres, and residence might be situated in a neighbourhood with similar low socioeconomic status families. (Pflugradt, 2018). *Limited Access to Contraception:* Limited access to health care physically and because of the attitude of healthcare staff towards adolescents as well as cost of birth control pills and other family planning contraceptives could be a barrier to limiting unwanted pregnancies (Pflugradt, 2018). Also, when the teenager and partner have negative feelings about conception, it could also be a barrier to preventing teenage pregnancy (Pflugradt, 2018).

Family Risk Factors

These are factors that come from the family that may increase the risk of teenage pregnancy.

Poor or Limited communication between Parent and teenager: Communication is key to a secure attachment, when there is poor communication between the parent and the child, the child may find it difficult to speak to the parent about sex and other issues and rather get advice and suggestions from peers (Pflugradt, 2018). *Negative family Interactions:* When there is abuse and violence in the family, it could make the child feel insecure and affect attachment to parents. *Significant unresolved Conflict between Family Member:* Where there is conflict in the family the child may feel insecure, which would lead up to seeking affection elsewhere, which may lead to teenage pregnancy.

Single Parent Families: Single parents have several challenges. Single parenting is associated with destructive conflict management methods, diminished social competence and early loss of virginity (Fagan & Churchill, 2012), which would lead up to teenage pregnancy. *Poor Parental Supervision and Monitoring:* With parents occupied by trying to make ends meet, sometimes by working two jobs, children might be left unsupervised for long periods of time. Also, in case where parents might have habits of abusing alcohol or drugs or psychologically depressed, they might not properly supervise their children. The children may thus get involved in risky activity which may lead up to getting pregnant. Poor parental monitoring increases the risk of teenage pregnancy (Morin, 2019).

Family History of Teenage Pregnancies: There is more risk of teenage pregnancy in families were there has been previous family members who got pregnant as teenagers (Morin, 2019). Daughters of teenage mothers are 51% more likely to get pregnant as a teenager (Pflugradt, 2018). Teenage girls are 3 times more at risk of teenage pregnancy if there is an older sister who got pregnant as a teenager (Pflugradt). *Forced Marriages*: Child marriage is one of the key risk factors of teenage pregnancy. The teenage child is forced to get married at an early age, sometimes as early as 10 years and may not attend school anymore and have no access to sex education (UNFPA, 2013), this increase their vulnerability and risk of teenage pregnancy. This is prevalent in South Asia and Sub-Saharan Africa and could be as a result or tradition culture, or for money (UNFPA, 2013).

Many of these factors interject with each other. Of interest to this study is the family risk factor and in particular Single parent family as a risk factor in the cause of teenage pregnancy.

2.4 THEORETICAL FRAMEWORK

Research studies are based on theories and the theoretical framework gives the research a structure that supports the theory of the research. It introduces and describes the theory on which the research problem is based. Theories are created to explain and understand phenomena (University of Southern California [USC], 2017)

A theoretical framework enables the research to have a strong scientific foundation, which provides support to the research (Vinz, 2015). The theoretical framework indicates a scientific basis for research, indicating that it is grounded in scientific theory. The theories and ideas that are related to the research are important to identify. This assists in the construction of the research, indicating knowledge in key concepts, theories and models related to the research (Vinz, 2015).

Theories explain, predict and help in the understanding of phenomena. The theoretical framework is the structure that can support the theory of a research study. It introduces and describes the theory that explains why the research problem under study exists (University of Southern California [USC], (n.d.). The theoretical framework also shows key variables and how they might differ in given circumstances. The theoretical framework concerns itself with theories and ideas which exist in relation to a given

subject. It gives the research direction while at the same time provides scientific justification to the investigation. Conceptual framework relates to a set of ideas or formulated propositions about the nature of phenomena being examined, these form the basis of the questions the research attempts to answer and guide the procedures to be used (De Vos, Strydom, Fouche & Delport, 2013).

These definitions and models cause the research to have a direction that will be built upon as the research progresses. Theoretical framework indicates scientific justification for research. Indicating it to be grounded and based on scientific theory (Vinz, 2015). To determine the contents of a theoretical framework, key concepts need to be selected. Relevant concepts, theories and models need to be defined and evaluated. One may add other elements to the theoretical framework such as similar studies done, analysing similarities or differences. Explanations on how the research will add to already existing knowledge (Vinz, 2015). Therefore, this study focused on attachment theory.

2.4.1 Attachment Theory

Attachment can be defined as a bond of affection that develops between a child and a caregiver, usually the parent (Medical dictionary, 2017; Dictionary.com, 2017). Attachment to the caregiver is the foundation upon which other attachments in a child's life develop from. This study is interested in the effects of the attachment between the parent and the child, and weather this could determine whether a child becomes pregnant as a teenager or not. The way infants relate with their parents in the first years of life impacts on future relationships. Attachment with parents serves as blueprint reflecting an attitude towards themselves and others later on in life. Teenagers with secure attachment seek comfort from their caregiver when going through difficulties. They are usually easily comforted and get back to exploring and new experiences.

The attachment theory deals with relationships and emotional bonds between people, which could be, for example, a parent and child, or between romantic partners. In this study, the focus was on attachment between a parent and child, in particular, a parent and a teenage child. Attachment is a concept that has interested psychologists through centuries. Behaviourists suggest that food leads to the formation of attachment behaviour (McLeod, 2017). Attachments are said to be life enduring, meaning the impacts exist and affect a child for a lifetime. It is thought that through the process of natural selection, attachments emerge. Bowlby's attachment theory and further expansions by Ainsworth attachment theory are of interest in this research.

Attachments are formed in childhood and go on to affect the child's life in adulthood. Working models are developed and manifest in reactions to needs and how they are met (Firestone, 2013). Hazan and Shaver's (1987) research indicated that about 60% of people have a secure attachment; 20% display an avoidant attachment, and another 20% display anxious attachment (Firestone, 2013).

Attachment can be described as a lasting bond that connects people regardless of location or the amount of time that has passed (Bowlby, 1969; McLeod, 2017). Attachment manifests in behaviours such as the child seeking out the attachment figure, particularly when threatened or upset (Bowlby, 1969; McLeod, 2017). Attachment theory is deeply connected with the works of John Bowlby who worked as a psychiatrist at a child guidance clinic in London in the 1930s. While treating many emotionally disturbed children, he developed a deep interest in the attachment theory. Bowlby sees the caregiver as providing safety and security for the infant (McLeod, 2017).

Two theories are thought to have led to the development of the attachment theory. The first one is the learning/behaviourist theory of attachment. Dollard and Miller (1950) suggest attachment to be the result of learned behaviours. The theorist believes the basis of attachment is food, and a child would therefore, be attached to whoever fed it. This indicates classic conditioning, associating the feeder with comfort, or operant conditioning, where the repeated behaviour of crying or smiling seems to be rewarded with attention and comfort (Dollard & Miller1950; McLeod, 2017).

The other theory is the evolutionary theory as proposed by Harlow and Zimmermann (McLeod, 2017). They suggest that attachment develops because the mother offers comfort, and infants are born with a need to touch and cling to something for emotional support. Harrow experimented with monkeys in the development of the theory. He took baby monkeys from birth and isolated them for different periods. This resulted in the monkeys engaging in weird behaviours such as rocking themselves and clutching their own bodies, tearing out their hair and even biting their own arm and legs. When reintroduced to a company of monkeys, they appeared to fear the other monkeys and became aggressive towards them. The longer they were isolated from other monkeys, the worse their response when reintroduced to the group. Those that were isolated for up to a year never fully recovered (Harlow & Zimmermann 1958; McLeod, 2017).

In another experiment, Harrow separated monkeys from their mothers at birth and placed them in a cage with a surrogate of wire covered in soft terry cloth and the other surrogate

mother had no cover. The monkeys were seen to spend more time with the cloth mother; it seemed to provide comfort and was a safe base for them. They only went to the wire mother for feeding and would then return to the cloth mother. In danger, they will seek out the cloth mother. Harlow concluded that for normal development there should be an object to cling to in the first months of life, which is the critical period. He also concluded that maternal deprivation can be damaging and may be irreversible if an attachment is not made before the end of the critical period (Harlow & Zimmermann, 1958; McLeod, 2017).

2.4.2 Attachment Theory Bowlby

John Bowlby, who is said to be the father of the attachment theory, defines attachment as a strong bond which develops between the parent and child which endures and can also be evident later in life (Bowlby, 1969; McLeod, 2017). Using an ethological theory, he explains the sequence of attachment development and states that attachment is natural between the infant and the caregiver, the infant having behaviours such as crying, cooing, and smiling which in turn produce a response from the parent. He believes feeding is not necessarily a source of attachment, so the infant may not necessarily attach to the person that feeds him but also show strong attachment behaviour toward the primary caregiver. He postulates that attachment will be formed initially with one primary caregiver who could determine how secure or insecure the attachment would be.

The development of an attachment of the infant to the caregiver identifies the caregiver as a secure base even when the caregiver is not physically present (Bowlby, 1969; McLeod, 2017). Bowlby describes the internal working model, by which we can predict how a child may act under stress when in need of an attachment figure. The attachment system is measured by the child, who seeks to ascertain if the attachment figure is attentive, nearby, or accessible. In cases where the child feels the attachment figure is attentive, accessible or nearby, they will feel secured. However, in case where the attachment figure is not accessible or attentive, the child could show signs of distress. Bowlby believes there is a critical age for this attachment to take place, being between 0 – 5 years, after which the child may have developmental retardation or restriction (McLeod, 2017).

Bowlby leans towards the evolutionary theory of attachment, which suggests that a child is born with a biological tendency to form attachments with others, for its survival. The child therefore, displays behaviours such as smiling and crying which elicits a response from the adult. Attachment, according to Bowlby, is not about the provision of food, but

more about care and response to the child (McLeod, 2017). Bowlby believes that the child will initially form an attachment with one primary figure, and that figure will be the secure base from which the child explores the world. The relationship formed with the main attachment figure determines the future attachment relationships.

2.4.2.1 Stages of Attachment

There are various stages of attachment. The newborn to about 6 weeks old is in the pre-attachment stage, the infant attracts the adult by crying, smiling, cooing and making eye contact. They are generally soothed by the presence of the caregiver.

By 6 weeks old to about 8 months old, there the attachment begins to develop. Infants start developing trust in their mother. They are soothed quicker by their mother and smile more when with her. By 8 months to 2 years, there is a clear-cut attachment. Attachment is usually established at this stage. The infant will usually prefer his mother to anyone else. There is usually separation anxiety when the mother leaves (McLeod, 2017).

After 18 months, there is a formation of a reciprocal relationship. Language develops, and separation anxiety is less. There is an understanding by the infant that the mother that leaves will come back again. There is a sense of security in knowing that the parent will always be there for them. Bowlby calls that an internal working model (McLeod, 2017).

There is a critical period in which an attachment should be developed. From birth to about 5 years of age. If an attachment is not developed in this period, the child is likely to have irreversible developmental consequence such as increased aggression and reduced intelligence in comparison to other children (McLeod, 2017). Available and responsive primary caregivers help the child to develop a sense of security. The child sees the caregiver as dependable and thus a secure base from which the child can explore the world (Cherry, 2017).

2.4.3 Ainsworth's "Strange Situation" Procedure

Mary Ainsworth expanded on Bowlby's work. She conducted a study titled "Strange Situation" Procedure (SSP), which reveals the effect of attachment on behaviour. A rating system was developed based on the behaviour of the infant during the Strange Situation Procedure and especially during the reunion with the mother. In the study children between the ages of 12 and 18 months were observed and their response when they were briefly left alone by their mothers and when they were reunited to their mothers. The

observations in the research led Ainsworth to describe three major styles of attachment namely; secure attachment, ambivalent-insecure attachment and avoidant-insecure attachment (Ainsworth, 1978; Cherry, 2017). Later researchers Main and Solomon added another attachment style called disorganized-insecure attachment (Main & Solomon 1986; Cherry, 2017).

Ainsworth further indicated that children raised with a secure attachment style, on the other hand, appeared social and explorative within the environment. They seem friendly to the mother but could be wary of strangers. They could show signs of anger and sadness when the mother is away but usually adjusted to the absence. They show excitement with the return of the mother (Ainsworth et al., 1978; McLeod, 2017).

The Anxious or Ambivalent attachment style displays a distinguished pattern of behaviour, the infants usually show signs of anxiety and hostility towards the mother, and yet want to be close to her at the same time. The behaviour is portrayed both when the mother is out of the room and when she returns back.

Later the researchers described another type of attachment called the disorganized attachment. In this attachment the child may display mixed behaviours, seeming dazed, disoriented or confused. They tend to both avoid and resist the parent.

Children who do not have a primary caregiver figure as in orphanages may find it difficult to form an attachment because trust has not been developed with a caregiver in the early days of their lives. Also, children who are adopted after the age of six months are more at risk of attachment problems (Cherry, 2017).

The concept of attachment in Bowlby and Ainsworth's theory is appropriate for this research, which examined mainly the attachment between child and parent and how it affects the child at a later stage in life. Bowlby and Ainsworth both believe that the attachment style developed between the parent and a child has far-reaching effects on the child, its development and its future. They both investigated the attachment style from the formative years of the child.

2.4.3.1 Patterns of Attachment

There are four main classifications of attachment distinguished by Ainsworth and later Main.

Secure Attachment

Children with secure attachment may feel distressed when separated from the caregiver but are usually assured when the caregiver returns. When frightened, they seek comfort from their caregivers and are assured of the caregiver's reassurance and comfort. They make up between 65 - 70% of infants (Ainsworth, 1978, Cherry, 2017).

Ambivalent-Insecure Attachment

Children with ambivalent attachment are very distressed when separated from the caregiver. The child does not trust or depend on the caregiver for security when in need. This attachment style is not so common, with about 10%of children in the United States having this attachment. These children are not comfortable with exploring an unfamiliar environment, when separated from their caregiver, they display distress. When the caregiver comes back, they seem to have a desire for proximity and yet resist comfort at the same time (Ainsworth, 1978; Cherry, 2017).

Avoidant-Insecure Attachment

Children with an avoidant attachment tend to avoid their caregivers. They seem not to have a preference between caregivers and a total stranger. They appear too similar to securely attached children, until they are separated from their caregivers. They do not seem to be visibly affected by the caregivers leaving, and on returning they may seem to avoid them. The children learn to avoid seeking assistance from the caregiver. Research suggests that this attachment style may be as a result of abusive or negligent caregivers. Avoidant attachment pattern makes up about 20-25% of the US population (Ainsworth, 1978; Cherry, 2017).

Avoidant-Insecure attachment stems from parents that tend to be emotionally unavailable or unresponsive to the children. They may disregard or ignore their children's need and would seem to be rejecting the children when their child is in need. They seem to discourage crying. The avoidant attached child tends to suppress the need to seek out comfort when in distressed, in pain or in need. They may learn to soothe themselves and nurture themselves. These children seem to develop a pseudo-independence view of life and as such may not seek help and support from others. Children with avoidant attachment may not show a desire for closeness love or affection on the outside. They may try to be close to the attachment figure and yet not relate with them directly. In the "strange situation" procedure, it is observed after being separated from the mother and the mother

returns to the room, the avoidant infants tend to avoid or actively resist contact with the mother (Cherry, 2017).

Disorganized-Insecure Attachment

Children with disorganized attachment may seem confused and disoriented. They could display a mixture of behaviours, such as resisting and avoiding their primary caregiver. The caregiver might be both a source of comfort and a source of fear. There might be no consistent pattern of behaviour from the caregiver. These children seem to have no set response to the stress of separation or reunion; their behaviour is unpredictable and seems to be disorganized (Main & Solomon, 1986; Cherry, 2017).

The relationship between the primary caregiver and the child can create a secure, anxious, disorganized or avoidant attachment style that will form a blueprint for relationships development. Being securely attached to a parent or primary caregiver bestows numerous benefits on children that usually last a lifetime. Securely attached children are better able to regulate their emotions, feel more confident in exploring their environment and tend to be more empathic and caring than those who are insecurely attached.

Insecure attachment patterns may be formed when parents are distant, misattuned or intrusive. These cause the children to be distressed. The children adapt to this form of rejection by building defensive attachment strategies that will give them a feeling of safety and reduce frustration and pain. Insecure attachment can be categorized into three groups; avoidant, ambivalent/anxious and disorganized/fearful. Attachments can best be described by the response of the parties that attach.

2.4.4 Problems with Attachment

When children do not form secure attachments early in life, it could have a negative impact on their lives both later in childhood and in their adulthood. Children with an oppositional defiant disorder (ODD), conduct disorder (CD) and post-traumatic stress disorder (PTSD) often display attachment problems, which might have resulted from earlier abuse, neglect or trauma (Cherry, 2017).

Attachments are long-lasting; they impact on one's life. Securely attached children appear to have good self-esteem. As adults, they usually have happy and healthy long-lasting relationships. They feel secure enough to open up themselves with others (Cherry, 2017). Securely attached children tend to be more self-reliant, they tend to be independent, they

are good with social relationships, tend to perform well at school and they do not usually display depression or anxiety (Cherry, 2017).

Attachments with a person are long lasting; they are meant to cause pleasure and soothe when there is stress. Bowlby believes that the non- responsiveness or absence of a mother for long periods especially in the first two years of a child's life can have negative effects on the child. He called this maternal deprivation (McLeod, 2017).

Bowlby believed there was a need for a child to develop a close relationship with one main caregiver, usually the mother. When this bond does not occur, there may be negative consequences, including depression, aggression, delinquency, and a decline in intelligence and affectionless psychopathy (McLeod, 2017).

2.4.5 Attachment Styles and Their Impact on Sexuality and Pregnancy among Teenagers

Literature and research confirm the relationship between the attachment style of a child and his/her future sexual behaviours and interest. Generally, individuals with a secure attachment style with their parents tend to develop stable relationships. Contrastingly, people with insecure attachment develop a negative and repulsive relationship with others, mostly due to their self-developed negative attitude towards themselves (Potard, Coortois, Reveillere, Brechon, & Courtpis, 2017).

With secure attachment, the child should feel safe, soothed, seen and secure. It is postulated that a compassionate environment in which the emotions and reactions of the parents are regulated will lead to secure attachment. Thus, children that are securely attached have the trust that others will be there for them when they need them. The anxious/preoccupied attachment style is perceived with a child whose parent is intermittently available or rewarding and then frequently unavailable and not attending to the child, thus making the child confused and frustrated (Firestone, 2016). Children that grow up with an anxious attachment style find it difficult to trust that others will be there for them when they need them. They may be insecure in future relationships and may become clingy.

Teenagers with a secure attachment style with their parents are less likely to be involved in promiscuous sexual encounters, described as sex without love (Olley, 2010). They are less likely than anxiously attached and avoidant attached individuals to engage in risky sexual behaviour (Olley, 2010). Teenagers with secure attachment with their mothers tend

not to desire to be pregnant and thus have a lower risk of becoming pregnant. This may be due to security, satisfaction of parental care, internalization of values and norms passed on by the parent. Securely attached teenagers tend to delay sexual gratification until they are in a stable romantic relationship (Potard, et al., 2014). Securely attached individuals are usually associated with relationships in which they are comfortable with intimacy and emotions where they develop stable closeness and confidence in others (Potard, 2014). Securely attached individuals in their relationships are characterized by sexual activity with fewer partners and closer relationship (Portard et al., 2014). These traits of a securely attached teenager would usually result in them being less at risk of getting pregnant as teenagers.

In an avoidant-dismissive attachment, the parent could meet the child's basic need such as providing food; but they usually find it difficult to respond to the child on an emotional level (Firestone, 2016). The child thus adapts and begins to behave as if they do not have emotional needs, leading them to develop a pseudo-independent stance of 'I can take care of myself'. The child thus learns to avoid expressing their needs and wants and tends to keep an emotional distance from others to feel safe (Firestone, 2016). This makes the child avoid closeness to anyone later in life (Firestone, 2016).

Avoidant attachment is usually generally associated with a tendency to be self-reliant in relationships, those with avoidant attachment usually also have a decreased comfort with intimacy, making them emotionally withdrawn (Brenner, 2017). This may have the effect of making teenagers with such attachment to be at risk of teenage pregnancy as they may easily engage in sexual relationship with multiple partners. They can also casually engage in sex without having a desire for more commitment in the relationship. Avoidant attached individuals especially avoidant attachment in girls, particularly with the father, seemed to influence their sexual decision making (Potard, 2014). Fearful-Avoidant attached individuals have a tendency in relationships to sleep with more people over a lifetime, they also easily agree to casual sex, having the desire to be connected but also feeling repulsed by relating closely to others (Brenner, 2017). An avoidant attachment, especially to mother, is often associated with emotional disinvestment in sexuality (Potard, 2014).

Those with anxious attachment have a tendency of low self-esteem, and so tend to always seek reassurance, they are also likely to be preoccupied with their own needs (Brenner, 2017). Individuals with anxious attachment may usually crave for attention which make them seem 'needy' (Brenner, 2017). Avoidant attachment teenagers may be emotionally

detached in sexual relationships, they may have multiple superficial short-term relationships (Potard et al., 2014).

Those with an ambivalent attachment are more likely to be predisposed to greater sexual involvement than those with secure attachment. Ambivalent attached individuals tend to be dependent on others, they have a fear of abandonment and not being loved (Potard et al., 2014). This makes them more 'clingy' and in need for reassurance, which makes them easier targets for casual sex which could in turn result in teenage pregnancy. Ambivalent attached individuals tend to have less communication in their relationships and more presexual activities such as kissing and sexual fondling, they have a great association with sexual involvement (Potard et al., 2014). As teenagers, ambivalent attachment patterns may lead to earlier and more frequent sexual intercourse especially with teenage girls (Potard et al., 2014).

Insecure attached individuals are more likely to take risk than securely attached individuals (Li et al., 2019). Insecurely attached individuals are more likely to have negative feelings and thoughts in forming and maintaining of relationships. They may be distrusting and have less reliance on others and are easily dissatisfied with others (Potard et al., 2014). These make them more at risk of getting pregnant as teenagers.

Insecure children are anxious about the caregiver, if they will be available when they need them. They have a fear that the caregiver may be unresponsive or not effectively responsive when they have a need (Barnett, 2008; Weinfield, Sroufe, Egeland, and Carlson, 2008; Kerns & Brumariu, 2014). Insecure attachments could make the child more vulnerable to depression, anxiety, aggression and delinquent behaviour (Fearon, Bakermans-Kranenburg, van Ijzendoorn, Lapsley, & Roisman, 2010).

2.4.6 Some Factors that may Exacerbate Insecure Attachment

Separation from the main caregiver: This happens when the main source of comfort is not available to the teen, for example, through divorce, sickness or death. *Parents with low emotional intelligence or mental disabilities*: This occurs in cases, where the parent may be depressed, addicted to drugs or alcohol for example. The parent may be unable to support the teenager, and in some cases, there is a swapping of roles where the child feels the need to emotionally support and comfort the parent, rather than the parent support and care for the child (Baras, 2015). This is the characteristic of insecure attachment, where the child does not have a secure base to come back to.

Teens that experience physical or emotional neglect: When a child's basic physical need is unmet by the parent, the child may not trust the parent to meet their emotional needs resulting in insecure attachment. Emotional needs may often be ignored or even mocked by the parent (Baras,2015).

Emotional abuse: The parent is meant to be a source of comfort, however, diminishing the child's feelings, could result in insecure attachment. The most common form of emotional abuse is verbal, mocking and threats as punishment. Physical neglect which may be as a result of low socio-economic status could also result in insecure attachment and ultimately teenage pregnancy. This is in relation to a study which found a significant relationship between socio-economic status and teenagers' attitudes towards pregnancy, idealization of pregnancy, and readiness to parent children (Mbhalati, 2012).

Trauma that was not properly addressed: The way trauma is dealt with by a parent can cause insecure attachment in teenagers. When parents seem to avoid the issues of trauma, the child may learn to avoid seeking help from the parent. If trauma makes the parent aggressive, a child may learn that it is okay to be aggressive to others when in pain. Securely attached children may also go through the same trauma but will tend to recover from it faster. They had to be more resilient (Baras, 2015).

Children with secure attachment tend to venture out and independently explore the world around them, seeing their parent as a secure base to which they can always return and refer to (Firestone, 2013). Children with an anxious attachment grow up looking for partners to complete them (Firestone, 2013). Those with dismissive avoidant attachment grow up with a tendency to be emotionally distant (Firestone, 2013). Those with fearful avoidant attachment seem to be afraid of a close relationship with their partners as adults, they are also afraid of rejection from friends or partners (Firestone, 2013).

Physical or Sexual Abuse: The parent is meant to protect and comfort their child when the parent physically harms the child instead of healing, it could result in an insecure attachment (Baras, 2015). Sexual or physical abuse could result in insecure attachment. Such abuse could be from someone other than the parent, such as a relative or family friend, making the parents involvement indirect, or it could be directly from the parent. The way the parent addresses the abuse may determine how the teenager translates a sense of security. For example, if the parent ignores or avoids the issue, the teenager may learn that whenever they get traumatized, there is no need to ask for help from such parent (Baras, 2015). If the parent was directly involved and was aggressive, the teenager may learn that aggression towards others is acceptable (Baras, 2015).

2.4.7 Attachment Risk and Protective Factors

When a mother is sensitive and responsive to her infant, there is more likelihood for a secure attachment to develop (Flaherty & Sadler, 2011). When mothers are depressed and have psychological distress, it could negatively affect the attachment relationship (Flaherty & Sadler, 2011).

A mother's own recollection of her past attachment as a child can determine if her relationship with her infant would be secure or insecure (Flaherty & Sadler, 2011).

The characteristics of an infant could affect the development of an attachment relationship between mother and child. For example, when a child has a difficult temperament it could affect the quality of the attachment. A low birth weight baby may not respond in the same way as a healthy baby, which might make it a bit more difficult to respond to the baby's needs (Flaherty & Sadler, 2011).

Environmental factors like social support could influence the quality of the attachment. Maternal grandmothers may provide the child with multiple attachment relationships altering the maternal-infant attachment relationship for a positive outcome (Cassidy, 2008). Teenage mothers are more at risk of poor attachment outcomes with their children. They are more at risk of living in poverty, having low education, having poor or no social support. They tend to have lower rates of secure attachment with their infants (Flaherty & Sadler, 2011).

2.4.8 Connection Between Insecure Attachment the Single Parent and Teenage Pregnancy

Children and teenagers seem to be more prone to problem behaviour that displays insecure attachment when raised by a single parent (Carlsund, Eriksson, Lofstedt & Sellstrom, 2012). The children from a single parent family have a strong correlation with drug use, poverty, school failure and teenage pregnancy (Baras, 2015). When there is insecure attachment between parent and child, the child grows up with a difficulty in trusting that the world is safe place, as well as a difficulty in trusting other people.

These form the risk of insecure attachment, including unpredictable parental behaviour, childhood abandonment, physical, verbal or emotional abuse, unrealistic parental expectations. These make a child believe that people around her cannot be trusted and her world may not be safe.

Such a child could be termed neglected and tends to develop an insecure attachment style. The insecure attachment style could lead to difficulties in relationships later in life, including not maintain a healthy proximity to other people. This could in turn lead to a lack of definite commitment in relationship or too much clinging in a relationship. These may result in being involved in casual sex and having multiple partners within a short space of time which eventually could lead up to and put a teenager more at risk of teenage pregnancy.

Secure attachment styles would usually maintain a healthy proximity to other people, they are not afraid of being close or intimate to people, but do not also depend on intimacy in a pathological way. Teenagers with insecure attachment styles would rather avoid closeness with other people and when they are close they seem to be 'clingy' like their lives depended on those people.

Teenage pregnancy could come from different pathways. In this study we see and are interested in highlighting teenage pregnancy that results from insecure attachment. Attachment of the infant is usually with the caregiver; in many cases the primary caregiver is the parent. The single parents are highlighted in this study and the prominent attachment style that can be found amongst them. Inspection is made to see if there is any relationship between the prevalent attachment styles found with the single parent and teenage pregnancy.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter deals with the research methodology of this study. It includes the research design, population of the study, sample and sampling techniques, the research instruments, validation of instruments, method of data collection, and method of data analysis. The chapter is concluded with ethical measures that were considered in the study and the summary of the chapter.

3.2 RESEARCH METHODOLOGY

Methodology is the philosophy on how the world should be studied. It is where assumptions on the nature of reality, knowledge and theories of what is being researched come together, such as the criteria for interpreting data (Wager, Kawulich & Gerner, 2012). It is a science, which examines the logic and various steps the researcher employs in resolving his research problem.

3.2.1 Research Paradigm

Paradigms are beliefs that guide a researcher on conducting the research and results' interpretation (Bryman, 2012). The methodology and design of research are based on the paradigm.

The research paradigm used in this research study is positivism. It focuses on the knowledge that is to be obtained in the study. Its methodology aims for reliable and valid relationships to be obtained in a precise and objective way (Du Plooy-Cillers, Davis & Bezuidenhout, 2014). Facts are translated to quantities that can be analysed using statistical techniques (Du Plooy-Cillers et al., 2014). Creswell (2014) indicated that positivism is a philosophical viewpoint where the cause typically determines an outcome. The ontology of positivism is that reality is stable and can be studied. Reality is definite and can as such be accepted or rejected (Creswell & Clark, 2011).

The epistemology of positivism requires the researcher to be objective and thus not directly immersed in the subject of the research. The researcher uses instruments for the collection of data in order to be objective (Creswell & Clark, 2011). Methodology in

positivism makes use of experimental and quasi-experimental designs. The positivist approaches often use a deductive approach as well as hypothesis testing.

Patel (2015) indicated that paradigms define a research study and can be viewed in three parts namely ontology, epistemology and methodology. The ontological, epistemological and methodological stance that the research is based on influences how the research is tackled.

Ontology refers to the study of being. It includes assumptions about what is being studied and questions the truth and objectivity of the study. This study employed a positivist ontology, meaning therefore that the research is real and tangible, as the researcher. A separation from and independence to the respondents being tested is made, such that there is minimal contact with the subjects being studied. The subject and investigations are put in an ordered form (Dudovskiy, 2019).

Epistemology is the study of knowledge which includes its nature and various ways of determining the knowledge (Patel, 2015). This study employed a positivist epistemology. The researcher, therefore, conducted the research using a scientific method, where the subject of the research is observable and measurable, questions are posed which is then reduced to tangible numbers that can be calculated. The results which are taken from a sample are aimed to explain and predict outcomes of relationships identified in this study. The positivist epistemology of this research uses the laws that rule human behaviour, as science uses the laws that rule the physical world (Dudovskiy, 2019).

The methodology used in a study is usually relates to the ontology and epistemology of the research (Jonker & Pennink, 2010). The methodology reflects the assumptions about reality and knowledge of the research. The methodology systematically solves the research problem (Kothari, 2014). A methodology is a way of enquiry, consisting of different methods (Crotty, 2009). It refers to principles that guide the research. The researcher determines which particular method should be employed for what is to be studied. It is usually concerned with the what, why, where, when and how of information that is to be obtained and analysed. The methodology can be described as a means by which the research problem can be solved in a systematic manner (Kothari, 2014).

This study employs a positivist methodology, the data collection and analysis are structured and there is a large sample population of 100. The positivist methodological stance of this research employs quantitative methods in obtaining and analysing the data. These allow the researcher to remain detached from the respondents. The quantitative

research is usually seen as valid, reliable and representative which embodies the stand of the positivist researcher (Dudovskiy, 2019).

3.3 RESEARCH DESIGN

Creswell (2014) highlighted that the research design indicates how the research is conducted. It is the plan and procedures of the research, which could include details of how data is to be collected and analysed. The design consists of the arrangement of conditions for the collection of data in a way that aims to combine the relevance of the research purpose to the procedure (Kothari, 2014). It is the collection and analysis of research data, aimed at achieving the research purpose while yet being economical in procedures used (Kothari, 2014). The research problem determines the design to be employed. The research design is guided by the researcher's research questions and objectives (Henning, Van Rensbur & Smit, 2011; Teddie & Tashakkori, 2009). The research design used in this survey is a non-experimental quantitative research design. Quantitative research designs are used to investigate theories objectively as they examine the relationships among variables (Smith & Davis, 2010). The quantitative approach generates data in a quantitative way.

Descriptive survey research is used for quantitative research designs (De Vos et al., 2013). Quantitative research as an approach, tests objective theories by examining the relationships among variables (Creswell, 2014). Therefore, descriptive cross-sectional survey design is used in this research. The study used a questionnaire and an inventory for data collection. According to Du Plooy-Cilliers (2014), descriptive research describes relations between variables as accurately as possible and can be used to compare responses that differ. Du Plooy-Cilliers also indicated that correlation research establishes if there is a relationship between two or more aspects of a variable. It could be a negative or positive correlation. However, Creswell (2014) highlighted that survey research provides a quantitative description of trends of a population through studying a sample of that population. He also described the procedure that can be employed when individuals are not randomly assigned as quasi-experiments.

Variables refer to characteristics that can be measured, and that differ among the population being studied (Creswell, 2014). They are also differentiated into independent and dependent variables. Independent variables are those that cause, influence or affect outcomes. Dependent variables on the other hand, depend on the independent variable so

they will change because of the independent variable (Creswell, 2014). Therefore, the independent variable in this research (the reason) is the attachment style of the single parent to their teenage child, and the dependent variable (the consequence) is teenage pregnancy.

3.4 RESEARCH METHODS

Various methods of research exist. There are quantitative, qualitative and mixed method approaches. The research employed a quantitative method.

Creswell (2014) highlighted that quantitative approach generates data and analysis in a quantitative pattern, which is more formal and not very flexible. It is pre-determined, and instruments are based on questions which included data. Statistical analysis is employed with statistical interpretation (Creswell, 2014).

The Quasi-experiments design is used in this study. Quasi-experiments are designs where the participants are not randomly assigned. Quasi-experiments are usually used in social science in common settings involving people. There is typically only one experimental group. According to Smith and Davis (2010) quantitative research designs tend to be objective in examining the relationships between variables.

This section comprises methods used in the study, including the selection of participants, the context of the study, data collection methods, and discussion guides and data analysis. Measures to ensure trustworthiness are also highlighted. This research employed the quantitative method approach. These methods are described in detail below.

3.4.1 Population of Study

The population of the study describes the specific individuals bound by some inclusion and exclusion criteria, who participate in the study. The study population is made up of two groups with a total of 100 teenagers. The test group is made up of 50 pregnant teenagers, and the non-pregnant group is made up of 50 non–pregnant teenagers. The pregnant teenage girls were between the ages of 13 to 19 years and are attending the antenatal clinic at the Katutura State Intermediate Hospital, Windhoek, Namibia. The non-pregnant teenagers are between the ages of 13 to 19 years in a secondary school in the same vicinity of Katutura. The main criterion for participant inclusion in the study was that they had to be teenage girls.

A cross-sectional design was employed, which according to David and Sutton (2011) is a design focused on collecting data of more than one case in a given period. The cross-sectional population was obtained by means of purposive sampling.

3.4.2 Sampling Procedures

Research aims at understanding whole populations, but whole populations are usually difficult to study for various reasons including logistics issues, time, funding and ethical issues among others (Cresswell, 2014). As a result, the selection of a portion referred to as a sample which can be compared to the population, is done (Cresswell, 2014). A sample is a portion of a whole population the research is interested in that is taken to represent such a population (De Vos, Strydom, Fouche & Delport, 2013; Smith & Davis, 2010). A non-probability purposive sampling was used in the selection of participants. Purposive sampling is a non-probability sampling technique used to narrow down the population that is of interest to the researcher. This was suitable for the research as the participants were to have unique characteristics, namely being pregnant teenage girls. It was also suitable in terms of time and cost constraints.

Kothari (2014) states that with non-probability sampling, there is a purposive choice of particular units of the universe to constitute a sample on the basis that the small sample selected out of the larger one will be representative of the whole population. This is often used where the participants are readily available and possess the characteristics of the population the research is interested in studying (Cresswell, 2014). A non-probability sampling could be used when sampling frames of the population being studied have no convenient sampling frames. It could also be used when there are other restrictions that could make a wider sampling impractical such as time or cost. It is also used when it is difficult to determine what the entire population consists of or it is difficult to gain access to the whole population (Du Plooy-Cilliers, Davis & Bezuidenhout, 2014; David & Sutton, 2011), as in the case of this study.

Non-probability sampling is used in line with the characteristics of research, such as when participants are not easily accessible and where a representative sample is not sought for generalizing to a broader population (Du Plooy-Cilliers et al., 2014). Purposive sampling also chooses the elements we want to include in our sample, which is usually based on characteristics determined by the researcher to be of importance to the research (Du Plooy-Cilliers et al., 2014).

Non-probability purposive sampling was used for this study. In non-probability sampling, there is no particular assurance that each item in a population is included in the sample (Stuckey, 2013). Sturkey states that with non-probability sampling, there is a purposive choice of particular units of the universe to constitute a sample on the basis that the small sample selected out of the lager one will be a representative of the whole.

A purposive study design according to the University of Southern California [USC], (n.d.) refers to the study of people selected for their insight or being information rich. This sampling method is aimed at gaining insights about a phenomenon, in this case, teenage pregnancy of children born to single parents. This was adopted because of the peculiar nature of the study, as well as time and cost constraints. A purposive sampling was used, which according to David and Sutton (2011) requires that the sampling population are selected based on the knowledge of the researcher that is which ones the researcher deems appropriate for the area being investigated. In quantitative studies, the aim is to have a large population. However, the size of the sample could be limited by factors such as logistics, finance and other constraints (David & Sutton, 2011).

The candidates were identified when they came to register for antenatal sessions at the antenatal clinic (ANC) at Katutura State Hospital. They were given research documentation which included the questionnaire and the inventory. The candidates in the non-pregnant group were also identified based on age and gender. They were selected from various grades in a secondary school when they had a free period or life-skills period. The secondary school is located in the same vicinity as the hospital in Katutura, Windhoek. Permission was obtained from the Principal of the school.

Research participants completed a structured questionnaire (Appendix A). The structured questionnaire consisted of pre-determined questions that are definite and concrete. The questions have the same wording and pattern for all participants (Kothari, 2014). These structured questionnaires were relatively easy to administer and inexpensive to analyse.

The researcher clarified questions when necessary. By the researcher conducting the structured interviews personally, there was a direct interaction with the participants. This afforded the researcher the opportunity to clarify questions or answers as the case may be from and to the participants.

3.4.3 Data Collection Instrument & Techniques

Data collection involves collecting information from sources relevant to the study in order to answer the research questions. It could involve testing the hypothesis and the evaluating of outcomes. Data collection techniques involve a systematic way of information collection on what pertains to the research, the people and the phenomena of interest and where it is taking place. Data was collected by means of a questionnaire and structured interview.

3.4.3.1 Questionnaires

A questionnaire is a document which contains questions and statements posed to the respondent in order to obtain information pertaining to the research that the researcher may be interested in (De Vos et al., 2013). The research made use of questionnaires, to obtain biometrical data, as well as to identify the socioeconomic status and income level, risk behaviour of the participants. The questionnaire was also used to identify if the participants were from single or dual parent homes.

A self-developed questionnaire made up of 26 items was used to obtain demographic information. The respondents were expected to complete the questionnaire in about 15 minutes. Questions were developed to be as simple as possible to improve understanding and responses. The questions were to give indications on demography, age, socioeconomic status, poverty level (income, where they live), the age when pregnant, age at mother pregnancy (first), parental marital status, parental level of education and financial status, types and levels of risk-taking behaviour of the respondents. Questionnaires and the Inventory of Parent and Peer Attachment (IPPA) form were administered individually for more effectiveness and for confidentiality. This allowed each respondent to respond as it affected her. The questionnaire accounted for consistency; whereby different respondents answer the same question. Questions were developed to be as simple as possible to understand and respond to with minimal education. Where necessary, interpreters were engaged.

3.4.3.2 The Inventory of Parent and Peer Attachment (IPPA)

The Inventory of Parent and Peer Attachment (IPPA), a tool developed by Armsden and Greenberg (1987) was used. The revised version that separates each parent and the peers was shortened to exclude the portion of the peers.

The Inventory of Parent and Peer Attachment (IPPA) was deemed appropriate for this study because the inventory was developed for adolescents within the age range of 12 to 20. The inventory focused on attachment to parents and peers, and the inventory's theoretical framework is based on Bowlby's attachment theory. It has also been used successfully in other studies on attachment. Some other instruments were based on either a younger preschool age group or older age groups. Some instruments focused more on attachment in a romantic relationship. So, these were deemed inappropriate for this study.

The Inventory of Parent and Peer Attachment (IPPA) was used to collect information on attachment levels and patterns with the parent who is regarded as the main caregiver. Three dimensions are assessed, namely; the degree of mutual trust, quality of communication, and the extent of anger and alienation. The theoretical framework is based on the attachment theory formulated by Bowlby (Armsden & Greenberg, 1987). The IPPA is formatted in Likert scaled items which determined the levels. This enabled the researcher to collect and access data pertaining to attachment of the participants to their parents. It includes 25 questions each for the mother and the father. The revised inventory exclude 25 questions for the peer as that section is not relevant to the study.

The inventory and the questionnaires were administered to the respondents that met the population criteria and attended the antenatal clinic. They were administered during the antenatal clinic visits. The questionnaire and inventory were adequate for the research as a means of providing the researcher with quantifiable data from the respondents that can be used for statistical analysis.

Inventory of Parent and Peer Attachment (IPPA) Psychometric Properties

The IPPA psychometrically has shown good reliability in its 3 dimensions. The Cronbach's alpha in its subscales range from .72 to .92 which is a very good reliability range. The test-retest reliability for the parent attachment was .93 which is a good reliability score.

The IPPA measure three dimensions of attachment relationship which are trust, communication and alienation. Trust refers to the teenagers' trust of their parents that they respect and understand their needs and desires (Armsden & Greenberg, 1987). Communication refers to the perception the teenager has of the parents' responsiveness and sensitivity to their emotional states and how much and of what quality their verbal communication and involvement with them is (Armsden & Greenberg, 1987). Alienation

refers to the way the teenager feels particularly anger, isolation and detachment experienced in attachment relationships with their parent (Armsden & Greenberg, 1987).

The three dimensions showed high inter-correlations with an *r* value which ranged from .70 to .76 for the parent version. The scores of the inventory of parent and peer attachment were significantly correlated with well-being scores such as life satisfaction and self-esteem. It also predicted depression/anxiety and resentment/alienation levels in adolescents (Armsden & Greenberg, 1987).

3.4.4 Data Analysis

Data is the evidence which is obtained by identifying, selecting and processing samples (Creswell, 2012). Quantitative research designs usually use statistical methods for analysis (Field, 2013). In quantitative analysis research, data is usually collected with the use of questionnaires, surveys and inventories. This research made use of a questionnaire and an inventory (Inventory of Parent and Peer Attachment (IPPA). Data in this research was captured using SPSS (Statistical Package for Social Sciences) IBM 24.

The descriptive analysis of the data was first done, which included measures of central tendency, namely; mean, median and mode as well as variation, which included the standard deviation. Inferential statistical analyses were done which includes Pearson's product moment correlation coefficient, t-test and regression analysis. The results were reported by means of statistical tables and graphs, then interpreted and discussed.

Quantitative data from the semi-structured questionnaire and the Inventory of Parent and Peer Attachment were analysed using t-test statistics showing frequencies, means and standard deviations. The statistical software used to analyse the data was the Statistical Package for the Social Sciences (SPSS). Quantitative data were analysed by means of the arithmetic mean. The statistical significance was obtained with the use of a t-test. Likert Scale data from the IPPA was further analysed using the Spearman Rank correlation coefficient.

Data was presented by the use of tabulation and graphics. There was also a measurement of the strength of association between the two main variables of which the coefficient of contingency or the chi-squared was derived.

3.5 MEASURES OF RELIABILITY AND VALIDITY

Measures of reliability and validity are necessary especially in social sciences where constructs may be intangible such as attitudes, behaviours and attachment. There is a need of assurance that the methods used to collect data will give the same result at different times and will collect the desired data (Wagner, Kawulich & Garner, 2012). This reflects the quality of the research.

3.5.1 Validity

Validity is regarded as the most critical criterion and shows the degree to which an instrument measures what it is supposed to measure (Kothari, 2014). It includes two aspects, the instrument and the concept to be measured (De Vos et al., 2013). This research focused more on content validity, which is the extent to which the measuring instrument, in this case, the questionnaire and interview, provide sufficient coverage of the topic being studied.

Measures were taken to ensure the validity of the instruments used. There are various instruments to measure attachment which includes the Strange Situation Procedure. It is time-consuming, more expensive method to set up both material and other resources. It would not be as appropriate as it is ideal to measure smaller children who are not able to express themselves with words. The other instrument commonly used is the Adult Attachment Interview. This measures more of adults' current relationships and the way the adults view themselves. It is not ideal for the particular measure that was required for this study.

The instrument selected to study attachment for this research is the Inventory of Parent and Peer Attachment (IPPA) by Armsden and Greenberg (1987/2009). The Inventory of Parent and Peer Attachment in terms of validity among late adolescents yielded parental attachment scores that were moderate to high. This is in relation to Family and Social Self scores from the Tennessee Self Concept Scale and to most subscales on the Family Environmental Scale (Armsden & Greenberg, 1987).

The revised version, where questions to the mother and father were separated was chosen. This inventory was appropriate for this study, as this study sought to identify each parent's attachment to the child individually. It was further shortened to exclude the peer section, which was not needed for this study. The measure is valid, it is appropriate for the target population, the parent and the teenage child. It measures attachment between child and

parent, which is the focus of the study. It is a reliable tool and it is appropriate for the teenage population. Most teenagers are able to understand and answer questions in this tool. It has been used in different cultures and ethnic groups and observed to accurately measure the set objective, attachment styles (Armsden & Greenberg, 2009).

There are different types of validity; the primary ones being content validity, face validity, construct validity and criterion validity. Content validity seeks to determine if the test is representative of the specific content being addressed. Face validity seeks to determine if the test resembles what it is meant to look like when examined on the surface. Construct validity, on the other hand, seeks to test if it measures what it was meant to measure particularly in relation to other variables. Criterion-related validity seeks to determine whether the test predicts future behaviour accurately. The research focused on construct validity, content validity and face validity. The other instrument used for the study was the Questionnaire (Appendix A). It was constructed by the researcher and presented to the supervisor for appropriate validation. It was also put to a pilot test for instrument reliability before the final field work.

The instrument selected to study attachment for this research is the Inventory of Parent and Peer Attachment (IPPA) (Annexure B) by Armsden and Greenberg (1987). The Inventory of Parent and Peer Attachment has high validity among late adolescents. The proponents state that parental attachment scores are moderate to highly related to Family and Social Self scores from the Tennessee Self Concept Scale and to most subscales on the Family Environmental Scale (Armsden & Greenberg, 1987). This inventory is appropriate for this study since the target populations are the parent and the teenage child. It measures attachment, which is the focus of the study, between the child and parent. It is a reliable instrument, as it accurately measures what is expected and it is appropriate for the teenage population.

3.5.2 Reliability

Reliability is the extent to which an instrument produces identical or near-identical measurements under the same conditions (De Vos et al., 2013). Reliability of an instrument ensures that the same results would be obtained if the research is repeated at a different time using the same instruments; it measures its consistency (Du Plooy-Cilliers, Davis & Bezuidenhout, 2014). Reliability determines the extent to which results in research remain applicable if research is repeated.

The reliability of the instruments used is important to produce consistent results (Kimberlin & Winetrstein, 2008). The instrument Inventory of Parent and Peer Attachment (IPPA) has high reliability. It has a three-week test-retest reliability for a sample of twenty-seven 18-20-year olds. The test had a 93% reliability for parent attachment and 86% reliability for peer attachment. The revised version has been tested and is known to score approximately the same as the original version (Armsden & Greenberg, 2009).

Attachment theory can be said to be a universal concept. It was developed in the western world by Bowlby. It claims universality in all its components, though some may feel it is primarily western and may ignore the caregiving values and practices of other parts of the world (Keller, 2018). According to Bowlby who developed the attachment theory, attachment is universal, as the main concept which is the infants need to seek close proximity to their caregivers is universal (McLeod, 2017). Attachment behaviour of the caregiver responding to a child's need sensitively and appropriately cuts across cultures, and can therefore be dimed universal (McLeod, 2017).

The reliability of the constructs of the scale in this study is quite strong, with Cronbach's alpha (α) calculated as 0.88 for the pregnant group, and 0.82 for the non-pregnant group. The IPPA instrument shows good reliability. The IPPA has not been standardized in Namibia. Cronbach's alpha which test for reliability was however tested on the instrument used. The results indicated Cronbach's alpha (α) for the construct, with a range from 0.72 to 0.92.

There are different types of reliability namely; test-retest, split halves, internal consistency, parallel forms and inter-rater. The test-retest is a measure of stability with participants remaining the same when a measuring tool is used on different occasions. The split halves measures equivalence, whereby there are two measurements done separately by the tool which is split in half, and the results obtained are then correlated. The parallel form is a measure of equivalence in which participants are grouped and different instruments are used for the different groups concurrently. For inter-rater reliability, more than one group is used, and the same set of instruments are administered to each group. Internal consistency measures the consistency of each item in an instrument that it is measuring the same thing. The performance of each item is then correlated with the participant's performance.

3.6 PILOT STUDY

A pilot study is a small study that helps further design the main study (Arian, Campbell, Cooper & Lancaster, 2010). The pilot study is a smaller investigation which is used to test the measuring instrument as well as identify any deficiencies in the study (De Vos et al., 2013). The questionnaire and the inventory were pretested once. The pilot study was tested on four people, this is not a sufficient number when taking the sample population of 100 into cognisance. The ideal number should have been at least 5% of the sample population, being 5 people. The questionnaires were tested for their validity and reliability. It was also used to determine if the questions were easy enough to understand and respond to, as well as whether the answers reflected what the researcher seeks to identify. The time it took to complete the questionnaire and the interview were also addressed. The reliability of the instrument was checked, and it showed that each respondent understood the questions as meaning the same thing.

3.7 ETHICS

According to De Vos et al., (2013) ethics is a set of moral principles guiding rules and behavioural expectations especially, with regards to conduct towards experimental subjects, respondents, and people that may be involved in research.

By the nature of the study, all participants were teenagers, and some were under 18 years of age. Particular care was taken to ensure that each participant had a signed letter of consent obtained from a guardian and efforts were made for the guardians to also be physically present.

3.7.1 Informed Consent

Participants need to give consent to be part of the research (Du Plooy-Ciller et al., 2014). It was clarified to the participants that their identities will be protected and the purpose of the research was made known to them.

Informed written and signed consent was obtained from the parent or guardian of every participant under the age of 18, as well as from all participants who took part in the study. Participants were notified that they could withdraw from the study at any point and that there would be no negative consequences for withdrawal. Participant's identity remained anonymous. This was done by the use of codes to represent each participant. Phone numbers and directions of psychological services in the Ministry of Health and Social

Services were made available to the participants to access psychological counselling when needed. The informed consent included the purpose of the study, risks and benefits of the study, the right of the participant to withdraw at any stage of the study, the procedure of the interview as well as the contact information of the researcher and supervisor. Each respondent signed the consent form.

3.7.2 Confidentiality and Limits of Confidentiality

Participants were assured of confidentiality and this was maintained by making each entry anonymous. To encourage the respondents to be open with responses they were assured that the information they provide was not to be used against them. Their names and addresses were not taken. Participants were informed that information obtained was for the purpose of research, and could, therefore, be made public. However, as no names were taken but each respondent coded, it would be impossible for their information to be disclosed.

3.7.3 Purpose of Research and Rights Explained

An indication of what the questionnaire would entail was made known and assurance of anonymity explained to the young participants. It was by willing participation and consent was obtained from participants. Minor children were escorted by their parents as well. The participants were informed that they can withdraw from the study at any time and that they were not to be penalized in any way for doing so. The participants were also informed of the foreseeable consequence of disclosure which could be bringing back to memory things they may not have wanted to deal with at this stage. They were, however, also reassured that the health care workers, social workers and counsellors in the Ministry of Health, were ready to assist them if need be. A telephone number was provided for this purpose.

3.7.4 Ethics Approval

Ethical approval was obtained from the University of South Africa's Ethics Committee. Approval was also obtained from the Permanent Secretary of the Ministry of Health and Social Services, Namibia (Annexure A); the Superintendent of the Katutura Hospital (Annexure B) and from the Matron Head at the antenatal clinic in Katutura. Parental or guardian consent was obtained (Annexure D).

3.7.5 Research Benefits and Incentives

Participants were enlightened on how their participation would be of benefit to other teenagers and assist in non-pregnant ling teenage pregnancy and its adverse effects.

3.7.6 Researcher Contacts

Contacts and addresses were made available in the cover letter of the researcher and the University of South Africa. Participants were informed that they could contact the researcher.

3.8 CONCLUSION

This chapter provided a description of the study approach which included the research design, instruments used, validity and reliability of the instruments. The statistical tools that were used for analysis in this study were also discussed. The next chapter will present the findings of the research

CHAPTER 4

RESULTS OF THE STUDY

4.1 INTRODUCTION

This chapter presents the findings of this study obtained from questionnaires and inventory of Parent and Peer Attachment (IPPA) completed by the respondents. Chapter three was a breakdown of the methodology; methods used and analysis. This chapter presents the findings based on the research questions.

The research questions included the ascertainment of attachment styles of the single parent having an impact on teenage daughters becoming pregnant. Determine if single parenting is associated with the risk of early sexual activity and teenage pregnancy in daughters; and highlighting the predominant attachment style among single parents (that were never married).

The study had a population of teenagers (N = 100). This was made up of two groups, teenagers that were currently pregnant, which in this study would be referred to as the pregnant group (N = 50). The other half of the teenagers (N= 50) were not pregnant, and as such, they made up the non-pregnant group. The pregnant group sample population was obtained from the antenatal clinic in Katutura, Windhoek, while the non-pregnant group was obtained from a secondary school in Katutura, Windhoek.

Data was collected using two tools, namely a self-developed biographic questionnaire and an Inventory of Parent and Peer Attachment [IPPA] (Armsden & Greenberg, 1987). The Inventory of Parent and Peer Attachment analysed attachment between the parent and the child, which generated information on how attachment could impact on teenage pregnancy. While the biographical questionnaire gained data on single parenting, and other data on the teenager including risk-taking behaviour and family statistics such as family structure and socio-economic status respondent's mothers age at first pregnancy.

A t-test is an analysis of two population means through the use of statistical examination. A t-test with two samples is commonly used with small sample sizes, testing the difference between the samples when the variances of two normal distributions are not known.

The data was analysed using the Statistical Package for the Social Sciences (SPSS) Version. Descriptive statistics in the form of central tendency, means, standard and

deviation, frequency was used to describe the basic features of the data in this study. Simplified summaries of the sample and measures were given. The t-test was conducted to test the difference between the two-sample means. The Chi-square test was used to statistically test relationships or differences between the categorical variables in the study. Therefore, the statistical analysis is presented in the following section.

4.2 DESCRIPTIVE STATISTICS

A self-developed questionnaire was administered to all the respondents, questions included biographic information including age, level of education, working status and the main source of financial support.

The questionnaire revealed findings on biographic information as well as some insight into the socioeconomic status (SES). It also revealed risky behaviour patterns of the respondent, as well as family information.

The sample population is made up of 50 teenagers in the pregnant group and 50 teenagers in the non-pregnant group. The Inventory of Parent and Peer Attachment and Questionnaire were administered to the two groups. Table 4.1 gives an illustration of the descriptive statistics.

Table 4.1 Descriptive Statistics of Respondents

Variable	Item	Amount (Percentage) / (pregnant)	Amount(percentage) (non-pregnant)
Mean age (pregnant		17.86 years	17.62 years
Mean Education Level	Grade 9 - 11	26(52%)	50 (100%)
Employment Status	unemployed	47(94%)	49 (98%)
Employment Status	Employed	3(6%)	1 (2%)
Financial Support	Own	0(0%)	1(2%)
Financial Support	Partner	2(4%)	0 (0%)
Financial Support	Parent	37(74%)	41 (82%)

Financial Support	Some other caregiver	11(22%)	8 (16%)

4.2.1 Age

The chronological age was obtained from both groups. The pregnant group had a mean age of 17.86 (SD = 1.27) years, while the mean age was 17.62(SD = 1.41) years for the non-pregnant group. The age of the youngest respondent in the pregnant group was 15 years (4%), while in the non-pregnant group the youngest respondent age was 14 years (4 %). There is no significant difference between the mean ages of the two groups. The sample was chosen in such a way as to get comparable age groups.

4.2.2 Education Level of Respondents

The education level refers to the highest grade or level obtained by respondents. The education level of respondents in the pregnant group indicated 15(30%) had grade 8 and below, while 26(52%) of respondents had attained grades between 9 and 11; with 5(10%) studied up to grade 12, and 4(8%) were in a tertiary institution but had not yet completed. The non-pregnant group had 50(100%) of the respondents being between grade 9 and 11. None had yet attained the tertiary level, and all have already gone beyond grade 8.

4.2.3 Employment Status

Majority of the respondents who summed up 47(94%) in the pregnant group were unemployed, whereas 3(6%) were employed, however, their income was low. In the non-pregnant group, 49(98%) were not working and only 1(2%) was employed, although she was paid low income.

4.2.4 Financial Support

Majority of the respondents in the pregnant group 37(74%), and the non-pregnant group 41(82%) depended for financial support on their parents. While 11(22%) received financial support from some other caregivers in the pregnant group compared to 8(16%) in the non-pregnant group. Another 2(4%) received financial support from their partner in the pregnant group, with 1(2%) who supplemented with her own job in the non-pregnant group.

Findings investigating the research questions follow.

4.3 THE PREDOMINANT ATTACHMENT STYLES OF SINGLE PARENTS

This section seeks to answer one of the research question which was intended to determine the predominant attachment style of the single parent.

The study sought to determine the predominant attachment style of the single parents. This was done using the Inventory of Parent and Peer Attachment, the dominant resident parent in the life of the respondent and whom the respondent considered as the primary caregiver. The results were analysed and presented below.

4.3.1 Attachment Assessment Using the Inventory of Parent and Peer Attachment

Attachment was assessed with the revised version of the Inventory of Parent and Peer Attachment [IPPA] (Armsden & Greenberg, 1987) which measures the overall quality or security of the attachment bond with mother, father and with peers as perceived by the respondents. The focus of this study was on the mother and the father, while the peer measures are omitted.

The Inventory of Parent and Peer Attachment (Armsden & Greenberg, 1987) was administered to the pregnant and non-pregnant group and it consisted a sample population of 50 teenagers in each group, which made up 100 respondents. The questions were formulated as Likert scale items with five possible answers, ranging from almost never/ never true, not very often true, sometimes true, often true to almost always / always true. The inventory measures a score of the level of security of attachment as well as the three dimensions of attachment in a relationship, which are trust, communication and alienation as perceived by the respondent. Trust refers to the teenagers' perception of the parents, in terms of respect and understanding of their needs and desires. Communication would refer to the teenagers' perception of the parents' responsiveness and sensitivity to their emotions as well as the quality of their verbal communication and involvement with them. Alienation refers to the teenagers' feelings of anger, isolation or detachment as experienced in their relationship and attachment with their parents (Guarnieri, Ponti & Tani, 2010).

Parental attachment style was classified according to the IPPA classification rules in accordance with Armsden and Greenberg's (1987) direction for use of the scale. The score distribution, the three IPPA subscales were divided into thirds, lowest, middle and highest and rated as "low", "medium", or "high". Scores that fell at the cut off points were rated as medium so as to maximize the discrimination of the low and high rates.

Secure style classification was allocated to respondents who scored at least a medium on trust or communication and a low or medium on alienation. The avoidant style was allocated to respondents who indicated trust and communication as low and alienation was medium, or if communication was low and trust was medium, and alienation was high. The ambivalent style was designated if communication and alienation were at least medium, and communication was higher than trust and alienation was not lower than Trust.

Table 4.2 captures the percentages of the attachment styles in the mother and father category of the IPPA in the pregnant and non-pregnant group. Figure 4.1 and Figure 4.2 illustrate the attachment styles in the father category and mother category by groups respectively. Using the classification rules in accordance with Armsden and Greenberg (1987) the attachment style was determined for (N = 100) of the respondents. The results are detailed in table 4.2.

Table 4.2 Attachment Styles Percentages in Mother and Father Categories of IPPA

Count	**F(AM)**	**F(AV)**	**F(S)**	**M(AM)**	**M(AV)**	**M(S)**
Pregnant	1	25	24	0	18	32
Non-pregnant	4	13	33	2	16	32
Total	5	38	57	2	34	64

Note. F denotes Father, M denotes Mother, AM denotes Ambivalent, AV denotes Avoidant, S denotes Secure.

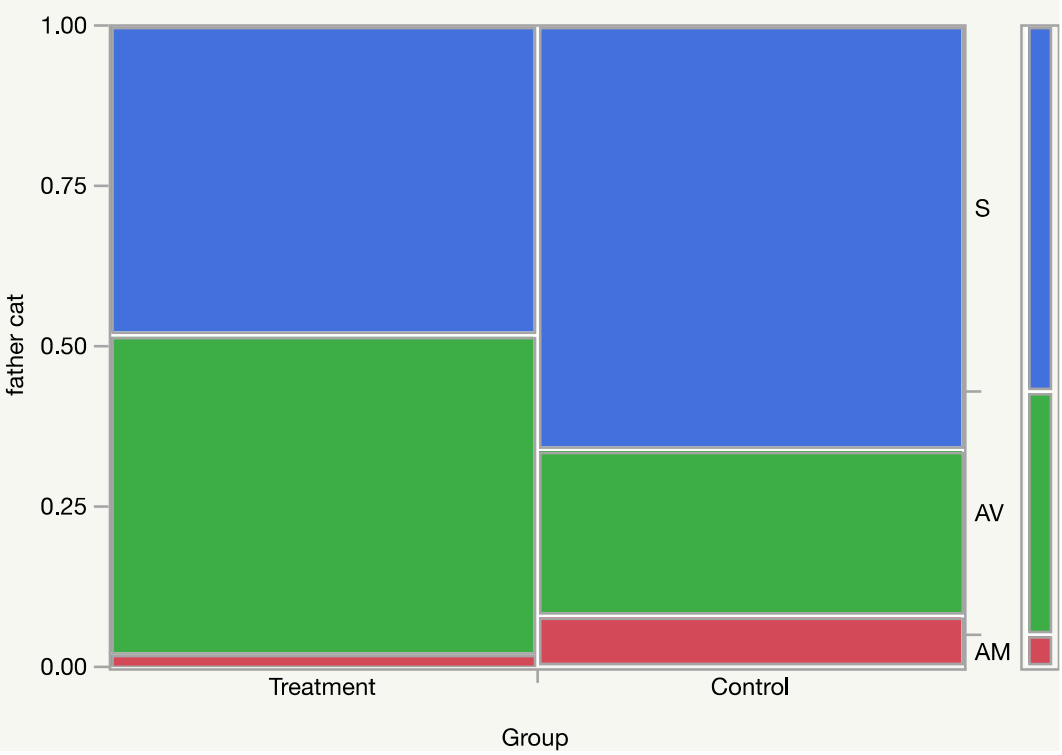

Figure 4.1. Contingency Analysis of Father Attachment Category by Group.

Note. Treatment = Pregnant, Control = Non-Pregnant

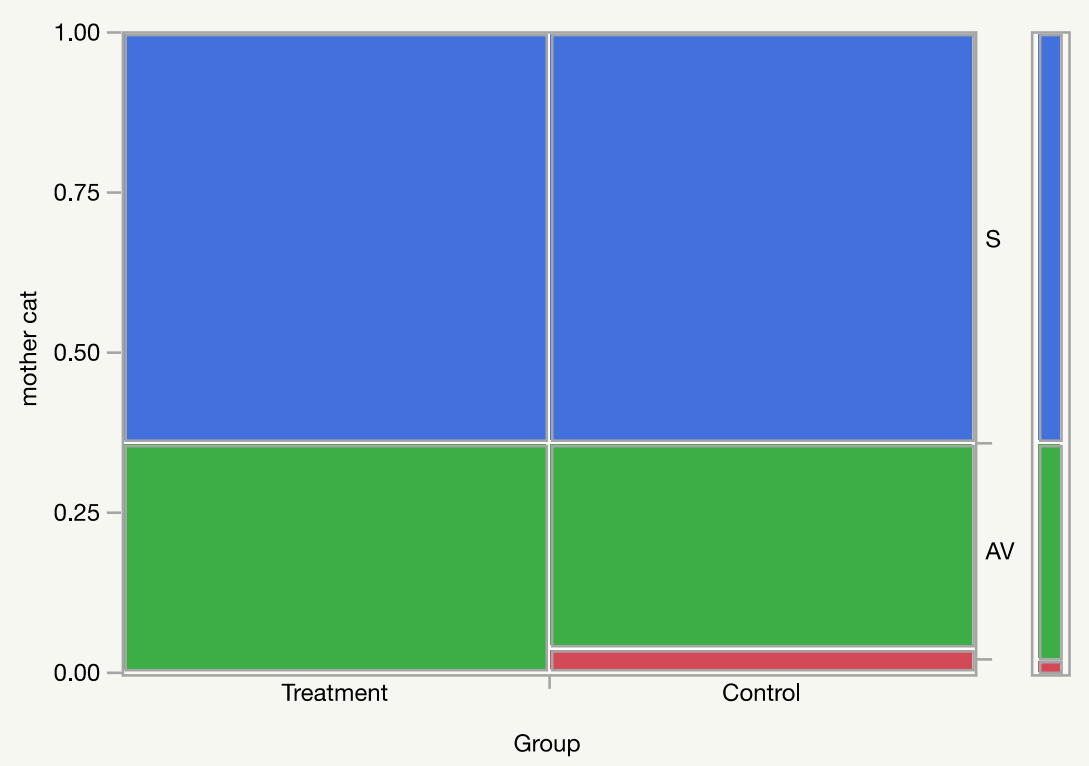

Figure 4.2. Contingency Analysis of Mother Attachment Category by Group.

Note. AM denotes Ambivalent Style, AV denotes Avoidant Style, S denotes Secure Style,

Treatment = Pregnant, Control = Non- Pregnant

A Chi-square test was conducted to test the differences in the proportions of the different groups for the attachment style of the father. The results revealed a significant relationship between the two groups (χ^2 (2) = 7.01, p = .03). The proportions of the attachment styles differ significantly between the groups, with the non-pregnant group (66%) having a more secure attachment style and the pregnant group (48%) having less secure attachment style.

A Chi-square test was conducted to test the difference in the proportions of the different groups for the mother category of attachment styles between the pregnant group and the non-pregnant group. There was no significant association found, (χ^2 (2) = 2.11, p = .34). There was no significant difference between the attachment styles in the two groups. The ambivalent style in the pregnant group was (0%) and in the non-pregnant group (4%), avoidant was (36%) in the pregnant group and (32%) in the non-pregnant group. Secure style was (64%) in the pregnant group and also (64%) in the non-pregnant group.

4.3.2 Attachment Assessment Examining Living Status at Various Ages

This section explores whom the respondent lived with from 0 – 2 years in the pregnant group as well as in the non-pregnant group, as displayed in figure 4.3.

In the pregnant group, 20(40%) lived with the mother alone, compared to 15(30%) in the non-pregnant group. While a big proportion 13(26%) in the pregnant group, lived with someone other than their parents a guardian caregiver, compared to only 3(6%) in the non-pregnant group. Only 1(2%) lived with the father alone in the pregnant group compared to none in the non-pregnant group. For the non-pregnant group, most respondents lived with both parents 32(64%), compared to 16(32%) in the pregnant group that lived with both parents. None live with the father alone at this age. Figure 4.3 illustrates whom the respondent lived with between the ages of 0 – 2 years in the pregnant and non-pregnant groups. A Chi-square test was performed to test the difference in the proportions of the different groups whom the respondent lived with between the ages of 0 – 2 years in the pregnant group and in the non-pregnant group. There was a significant difference in the proportions of whom the respondents lived with at this age, particularly with those who lived with both parents, (χ2 (1) = 13.29, p < .01). The non-pregnant group has double the proportion of the pregnant group living with both parents

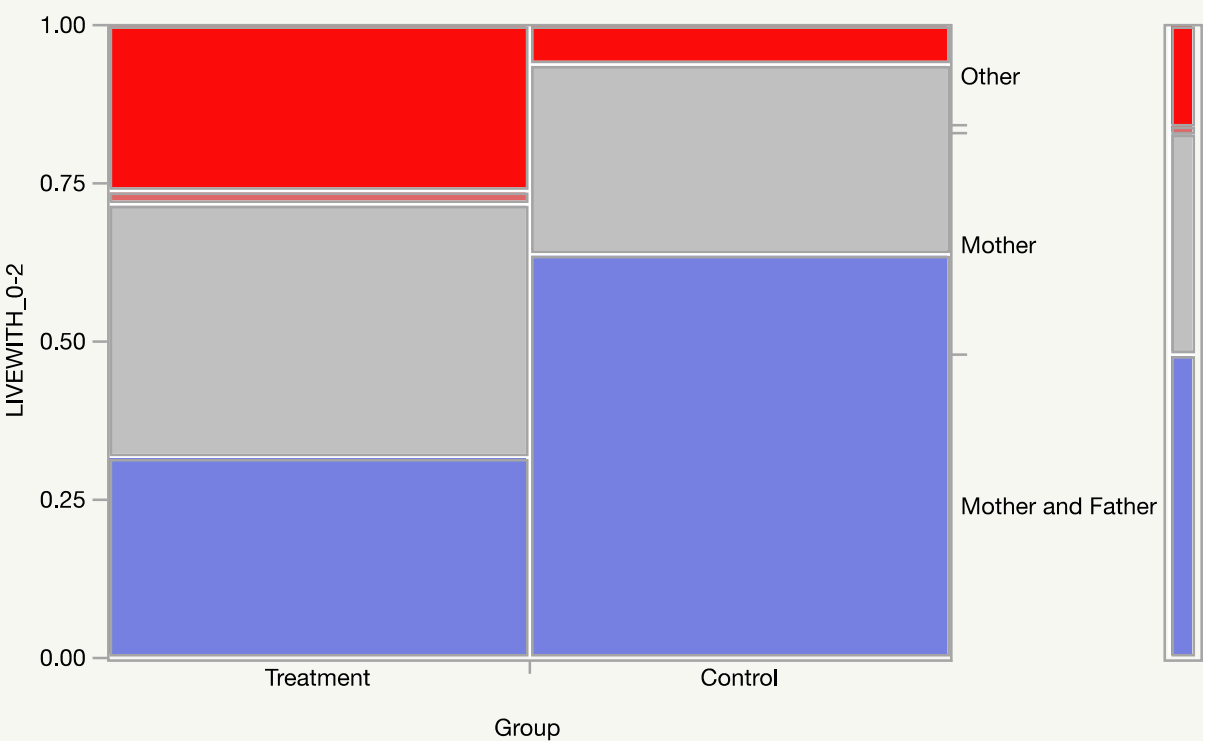

Figure 4.3. Whom Respondent Lived with Between 0 – 2 Years Pregnant and Non-pregnant Groups.

Note. Treatment = Pregnant, Control = Non-Pregnant

This paragraph wishes to highlight who the respondents lived with from the ages of 3 – 6 years as displayed in figure 4.4. For the respondents from the pregnant group, data indicated that 16(32%) lived with the mother alone, in comparison with the non-pregnant group making up almost the same percentage 15(30%) of respondents who also lived with the mother alone. There were 15(30%) that lived with a guardian caregiver in the pregnant group compared to only 8(16%) in the non-pregnant group. Only 3(6%) live with the father alone in the pregnant group while none lived with the father alone at this age in the non-pregnant group. Within the non-pregnant group, over half the large number of respondents lived with mother and father together 27(54%), compared to only 16(32%) in the pregnant group. Living with both parents may have given respondents more sense of security. Figure 4.4 shows a close comparison between the two groups on whom the respondents lived with between the ages of 3 – 6 years. A Chi-square test was conducted to test the difference in the proportions of the different groups for whom the respondents lived with between the ages of 3 – 6 years, in the two groups, ($\chi 2$ (3) = 7.97, p = .04). A significant difference was found between the two groups as was observed in 0 – 2 years.

More respondents in the pregnant group lived with the mother only and the non-pregnant group was significantly different and more of them lived with both parents at that age.

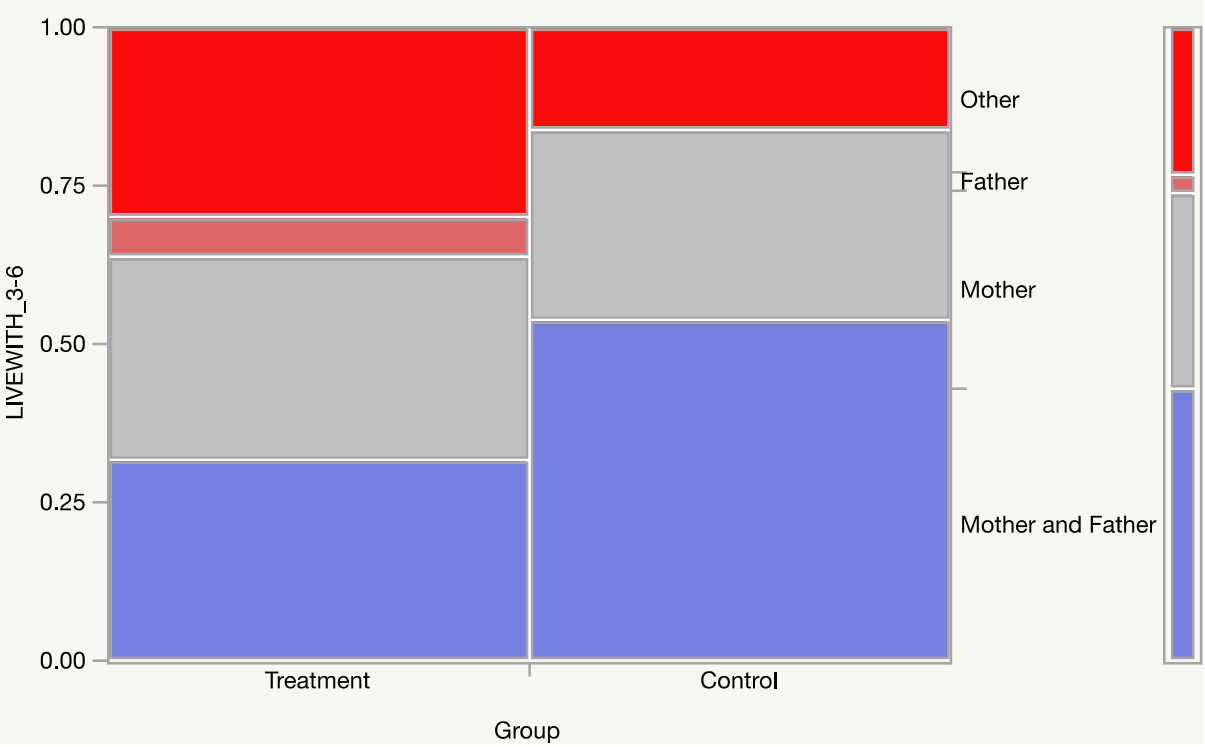

Figure 4.4. Whom the Respondent Lived With Between 3 – 6 Years in the Pregnant and Non-pregnant Group.

Note. Treatment = Pregnant, Control = Non-Pregnant

This paragraph indicates the data collected in terms of whom the respondents lived with between the ages of 7 – 14 years as displayed in figure 4.5. In the pregnant group, majority of the respondents lived with the mother alone 17(34%) compared to 15(30%) in the non-pregnant group. In the pregnant group, 14(28%) lived with a guardian caregiver, compared to 11(22%) in the non-pregnant group. Only 6(12%) lived with the father in the pregnant group compared to 1(2%) in the non-pregnant group. In the non-pregnant group, most respondents at this age lived with both parents 23(46%), compared to only 13(26%) in the pregnant group. This information is graphically displayed in figures 4.5. A Chi-Square test was conducted to test the difference in the proportions of the different groups for the results showed that there was no significant difference between with whom the respondent resided between the ages of 7 – 14 years in the two groups ($\chi 2$ (3) = 6.83, p = .07). The same trend as with between the ages of 0 – 2 and 3 – 6 years follows, in the non-pregnant and pregnant groups, but it was not as statistically significant.

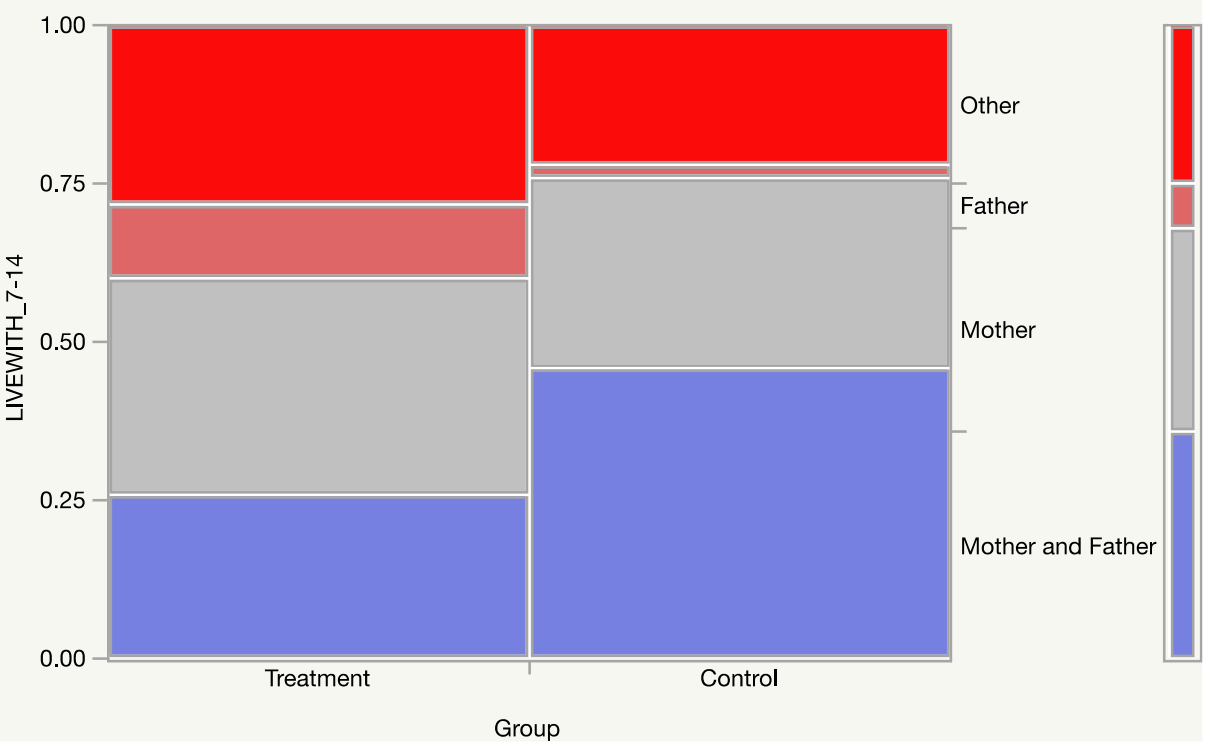

Figure 4.5. Whom Respondents Lived with Between 7 – 14 Years (Pregnant and non-Pregnant groups).

Note. Treatment = Pregnant, Control = Non-Pregnant

At the age of 15 – 19 years, 21(42%) respondents in the pregnant group lived with the mother alone, compared to 15(30%) in the non-pregnant group. While 13(26%) lived with a guardian caregiver, compared to 11(22%) in the non-pregnant group. The same number 4(8%) lived with the father alone in both the non-pregnant group and the pregnant group, there was no statistical difference. In the non-pregnant group, 20(40 %) lived with both parents, compared to 12(24%) in the pregnant group. The Chi-square test was conducted to test the differences in the proportions of the different groups and no significant difference was found between the two groups with regards to whom they lived with between the ages of 15 – 19 years, ($\chi 2$ (3) = 3.16, p = .36). The pattern of the higher percentage of the pregnant group with regards to those who lived with someone other than the parents do not exist anymore, it is no longer significant. Also, the proportion of respondents who lived with both parents at this age in the pregnant group was not significant when compared to the non-pregnant group.

4.3.3 Attachment Assessment Examining the Primary Caregiver

This paragraph indicates whom the respondents consider as primary caregivers as displayed in figure 4.6. In the pregnant group, the number of respondents who regarded

their mothers as primary caregivers were 26(52%), compared to 24(48%) in the non-pregnant group. The pregnant group have a higher percentage of those who considered a guardian caregivers as primary caregivers 11(22%), compared to 3(6%) in the non-pregnant group. Only 5(10%) regarded father alone as a primary caregiver in the pregnant group, compared to 2(4%) in the non-pregnant group. Figure 4.6 illustrates whom the respondents regarded as their primary caregivers in the pregnant and non-pregnant groups. A Chi-square test was conducted to test the difference in the proportions of the different groups and it shows a significant difference between the pregnant group and the non-pregnant group concerning whom the respondent regarded as their primary caregiver, ($\chi 2$ (3) = 11.76, $p < .01$). The percentage that regards both the mother and father as primary caregivers in the non-pregnant group is higher 21(42%) than in the pregnant group with only 8(16%).

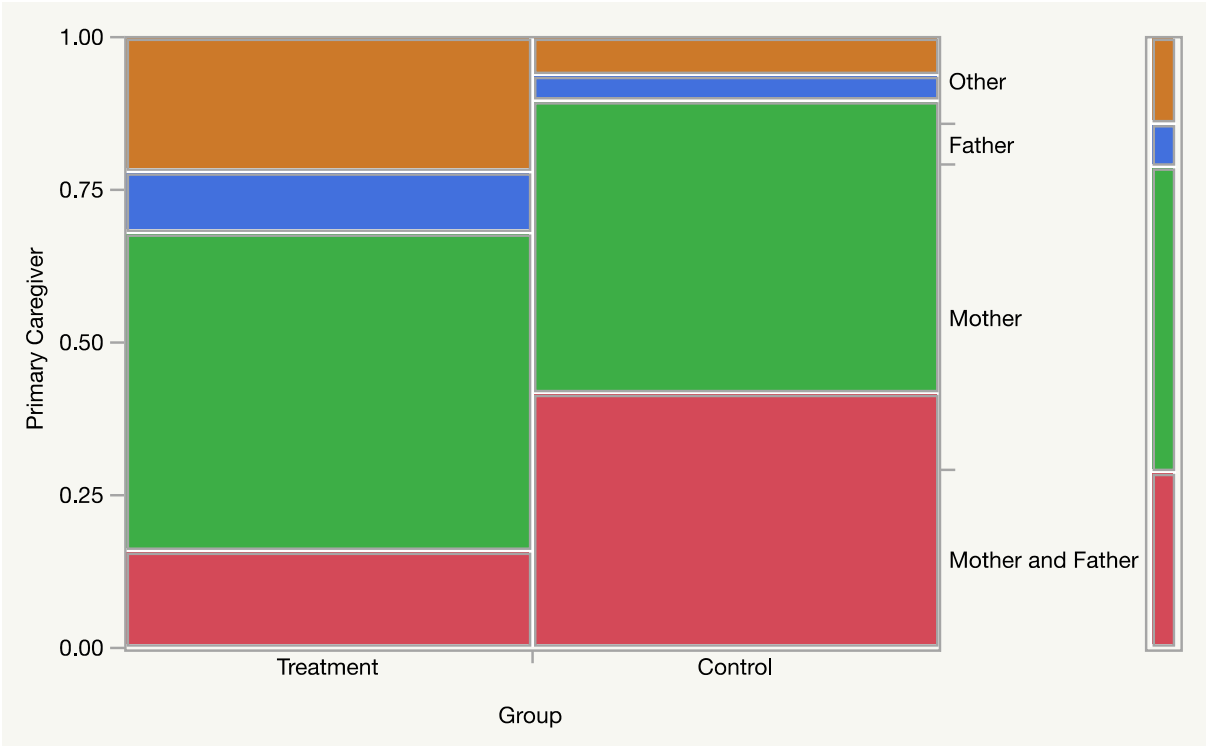

Figure 4.6. Whom Respondents Considers as Primary Caregivers (pregnant and non-pregnant group).

Note. Treatment = Pregnant, Control = Non-Pregnant

4.4 SINGLE PARENTING AND THE RISK OF EARLY SEXUAL ACTIVITY AND TEENAGE PREGNANCY

This section seeks to answer the following research question; how does single parenting increase the risk of early sexual activity and teenage pregnancy in the female child?

The findings indicated various factors that are identified in parenting, particularly single parenting and their effects on teenage pregnancy. These factors included the dominant resident parent, marital status of parent, the age of the child when parent divorced, the age of mother at first pregnancy, the age of first sexual encounter, socioeconomic status and risky behaviours.

4.4.1 Dominant Resident Parent and Risk to Teenage Pregnancy

This section seeks to determine the dominant parent that resides with the respondents; whether a single parent, both parents or none of the parents and connect it to the risk of teenage pregnancy. These findings are displayed in figure 4.7.

Regarding respondents living with a single parent, both parents and none of the parents, the pregnant group had 28(56%) respondents living with a single parent, with 11(22%) living with both parents, and 11(22%) living with none of the parents. In the non-pregnant group, 25(50%) lived with a single parent, while 17(34%) lived with both parents and 8(16%) lived with none of the parents. Figure 4.7 is a graphic illustration of the current live-in status of the respondents with regard to living with a single parent, both parents and none of the parents in the pregnant and non-pregnant groups. A Chi-square test was conducted to test the difference in the proportions of the different groups; living with a single parent, both parents, or none of the parents. No significant relationship was found, (χ^2 (1) = 1.92, p = .38).

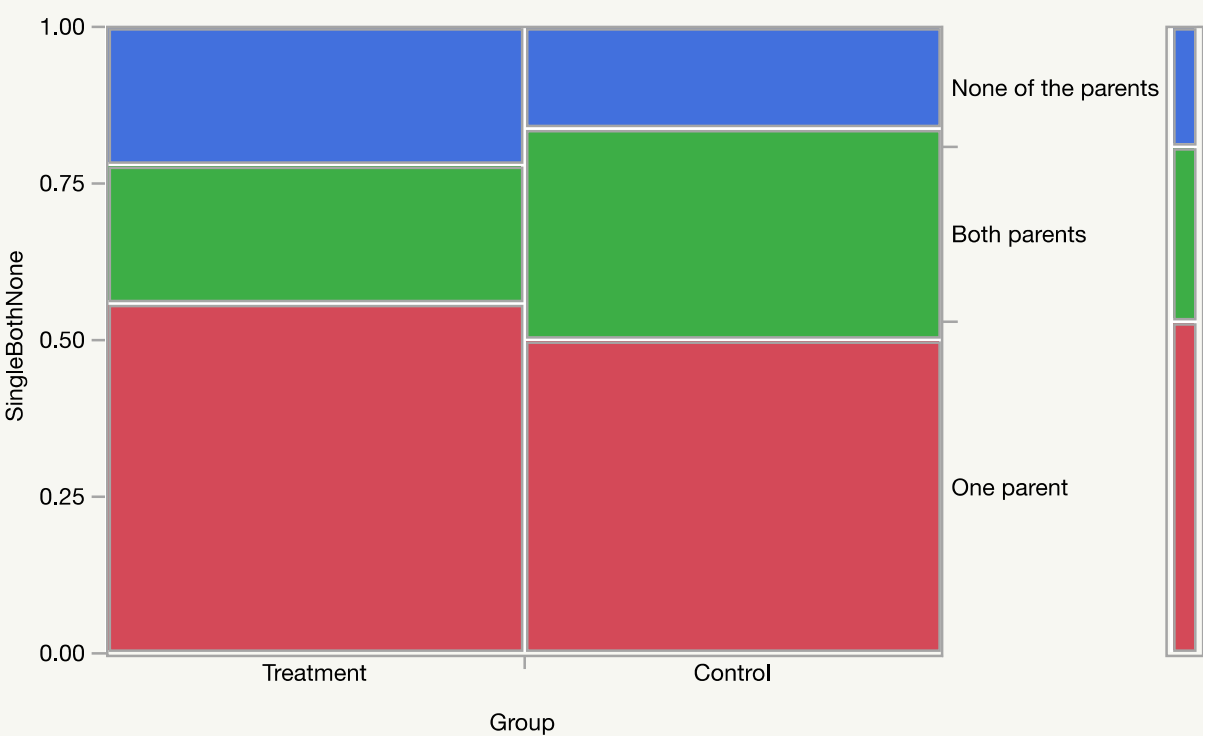

Figure 4.7. Respondent Lives With a Single Parent, Both Parents, or None of the Parents (Pregnant and Non-Pregnant Groups).

Note. Treatment = Pregnant, Control = Non-Pregnant

4.4.2 Marital Status of Biological Parents and Risk to Teenage Pregnancy

This section seeks to examine the marital status of the biological parents of the teenager and the risk to teenage pregnancy as displayed in figure 4.8.

In the pregnant group, most biological parents were never married to each other 38(76%) while 6(12%) were married to each other; 4(8%) were widowed and 2(4%) had divorced. The non-pregnant group had 25(50%) of the biological parents never married to each other, while 18(36%) of parents were married to each other, and 4(8%) were widowed, while 3(6%) are divorced. Figure 4.8 illustrates the marital status of the parents of the respondents in both groups. A Pearson chi-square test was calculated comparing the pregnant and the non-pregnant group in the marital status of the biological parents. The results revealed that there was a significant difference between the two groups, (χ^2 (3) = 8.88, p = .03). A significant difference was found between the pregnant and non-pregnant groups, with (76%) unmarried in the pregnant group and (50%) in the non-pregnant group. In both groups (8%) were widowed, while (4 %) were divorced and (6%) in the non-

pregnant group while those who lived with married parents, in the pregnant group (12%) and (36%) in the non-pregnant group.

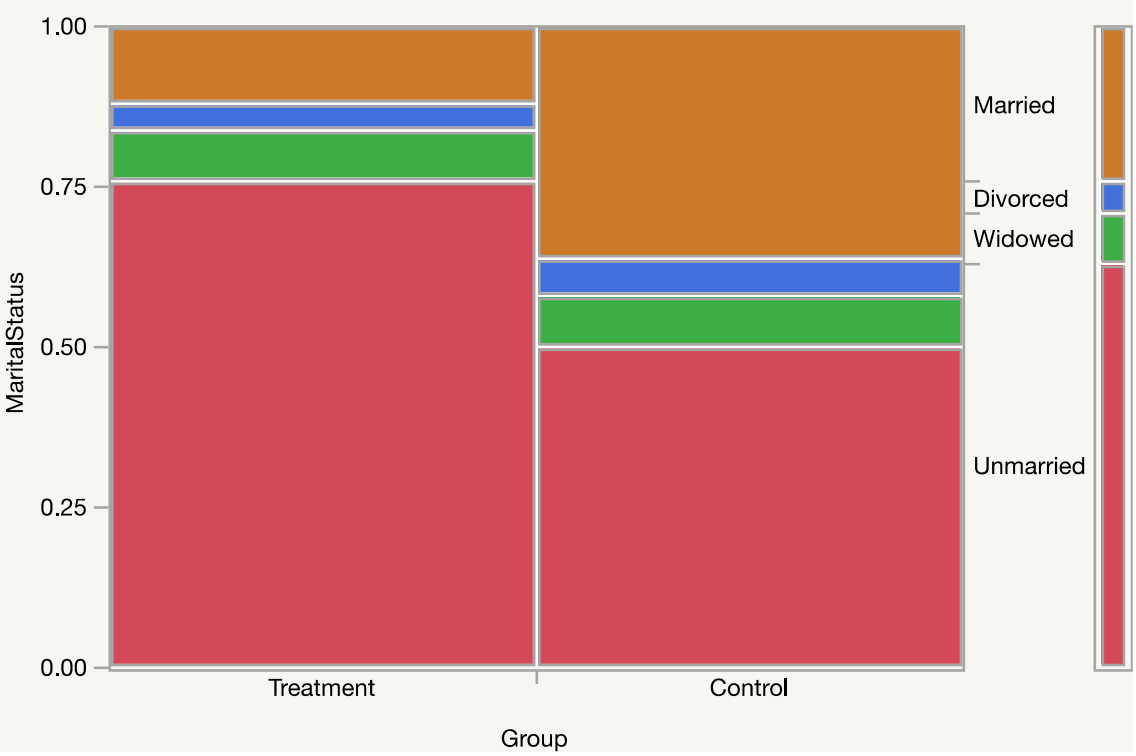

Figure 4.8. Marital Status of Biological Parents of the Respondents (Pregnant and Non-Pregnant Group).

Note. Treatment = Pregnant, Control = Non-Pregnant

4.4.3 Socioeconomic Status, Facilities Available in Respondents' Home – Flush Toilet, Electricity, Running Water and the Risk of Teenage Pregnancy

This section seeks to determine the socioeconomic status of the respondents, particularly using the criteria of facilities readily available to the respondents with a view to its risk effects on teenage pregnancy. This is displayed in figures 4.9, figures 4.10 and figure 4.11.

In the pregnant group, the findings indicated that the aforementioned facilities are not accessible to a majority of the respondents. Only 19(38%) indicated that they have access to a flush toilet at home, compared to 33(66%) that had access to the flush toilet in the non-pregnant group. Majority of the respondents in the non-pregnant group 38(76%), indicated they have electricity from the municipality in their houses, in comparison to 21(42%) that had electricity in the pregnant group. Quite a number of respondents in the non-pregnant group 29(58%) indicated having running water in the home, compared to

16(32%) that had access to running water in the pregnant group. Figure 4.9, figure 4.10 and figure 4.11 illustrate the facilities available in both groups for flush toilet, electricity and running water respectively. A Chi-square test was conducted to test the difference in the proportions of the different groups for facilities available. For the availability of a flush toilet, there was a statistically significant difference ($\chi 2$ (3) = 7.85, p < .01). For electricity, there was a significant difference between the two groups, (χ^2 (3) = 11.94, p < .05). Running water, there was a significant difference, (χ^2 (3) = 6.82, p < .05) as well.

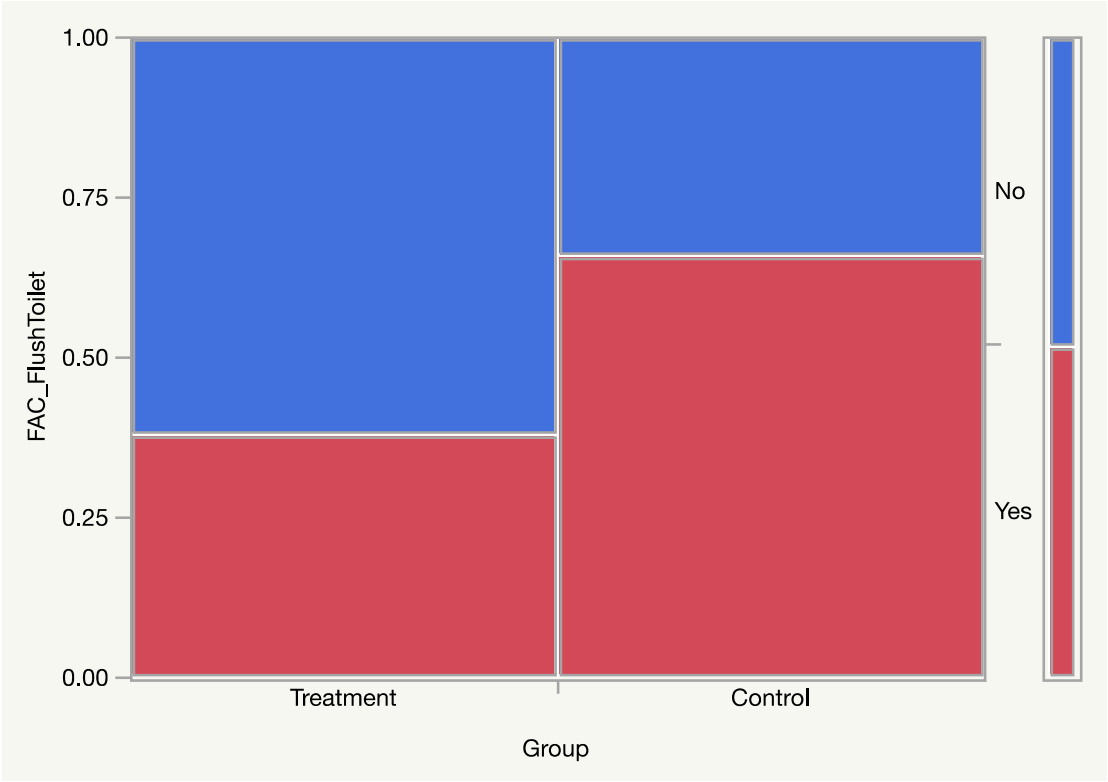

Figure 4.9. Facilities Available to Respondents – Flush Toilet (Pregnant and non-Pregnant Group).

Note. Treatment = Pregnant, Control = Non-Pregnant

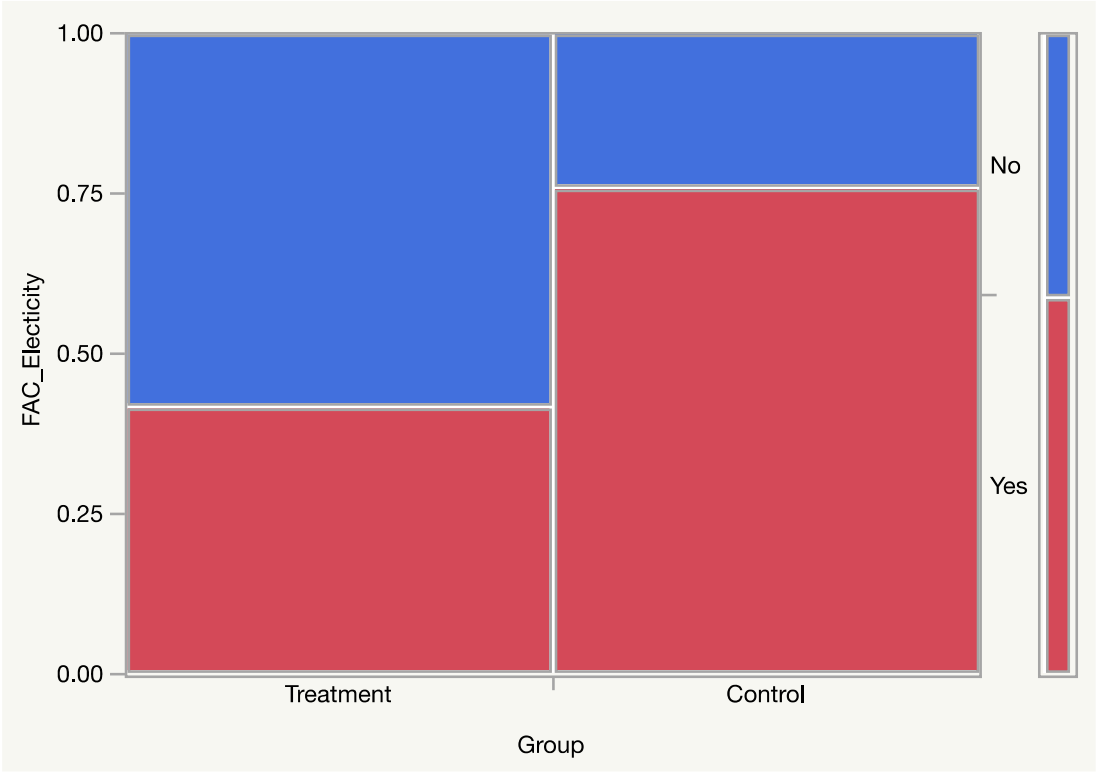

Figure 4.10. Facilities Available to Respondents – Electricity (Pregnant and Non-Pregnant Group). *Note. Treatment = Pregnant, Control = Non-Pregnant*

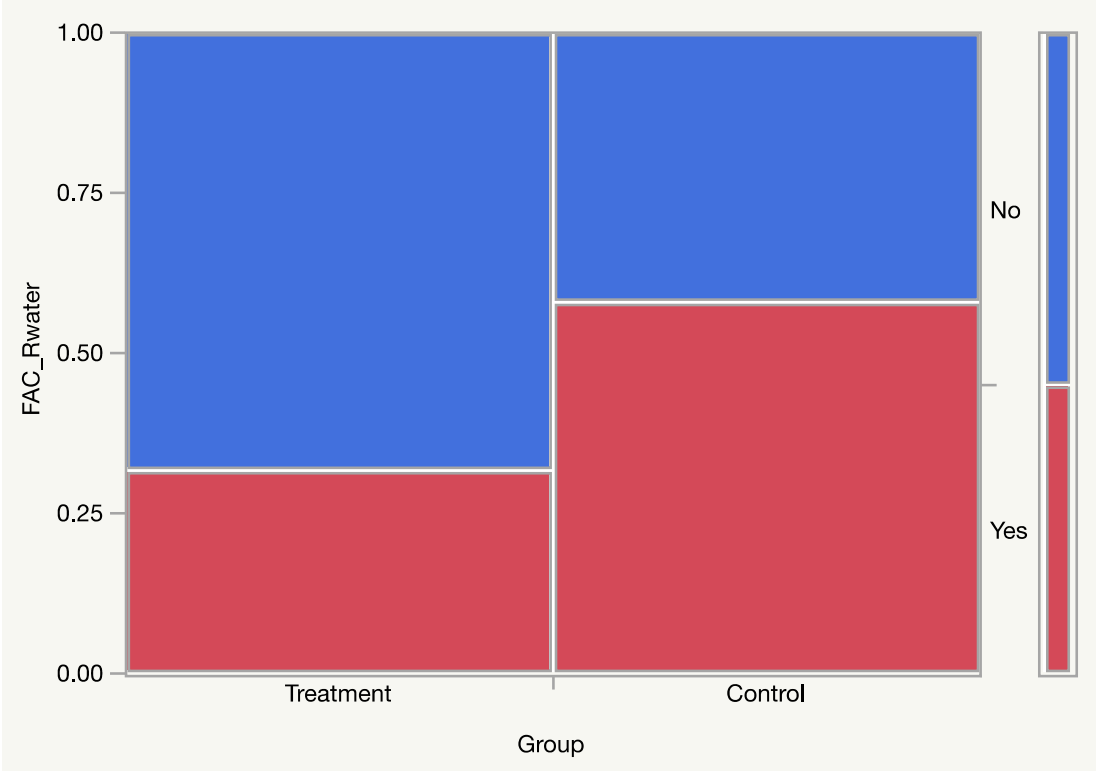

Figure 4.11. Facilities Available to The Respondent – Running Water (Pregnant and Non-Pregnant Group).

Note. Treatment = Pregnant, Control = Non-Pregnant

4.4.4 Household Monthly Income in Namibian Dollars (N$)

This section focuses on the findings of the socio-economic status of the respondent, using the criteria of the household income. It seeks to investigate the link between the socioeconomic status of the respondents and the risk of teenage pregnancy as can be seen in figure 4.12. In the pregnant group, with regards to the household monthly income in Namibian dollars 14(28%) families earned N$5000 and above, followed by 10(20%) families that did not get a regular income, 9(18%) families that earned between N$ 2000 – N$ 4999 and 7(14%) that got between N$ 1000 – N$ 1499. Six families (12%) earned between N$ 1500 – N$ 1999 and the 4 remaining families (8%) earned below N$ 999. Household income in the non-pregnant group reflected 20 families (40%) earned N$ 5000 and above, followed by 9 families (18%) with N$ 1500- N$ 1999 and 8 families (16%) for both N$ 1000 – N$ 1499 and N$2000- N$4999 respectively. In this group 4 families (8%) earned below N$ 999 and only 1 family (2%) had no regular income. Figure 4.12 is a graphic illustration of the household monthly income of the respondents in the pregnant and non-pregnant groups. A Pearson chi-square test was calculated comparing the pregnant and the non-pregnant groups' monthly household incomes. The results revealed no significant difference, (χ^2 (3) = 9.14, p = .10).

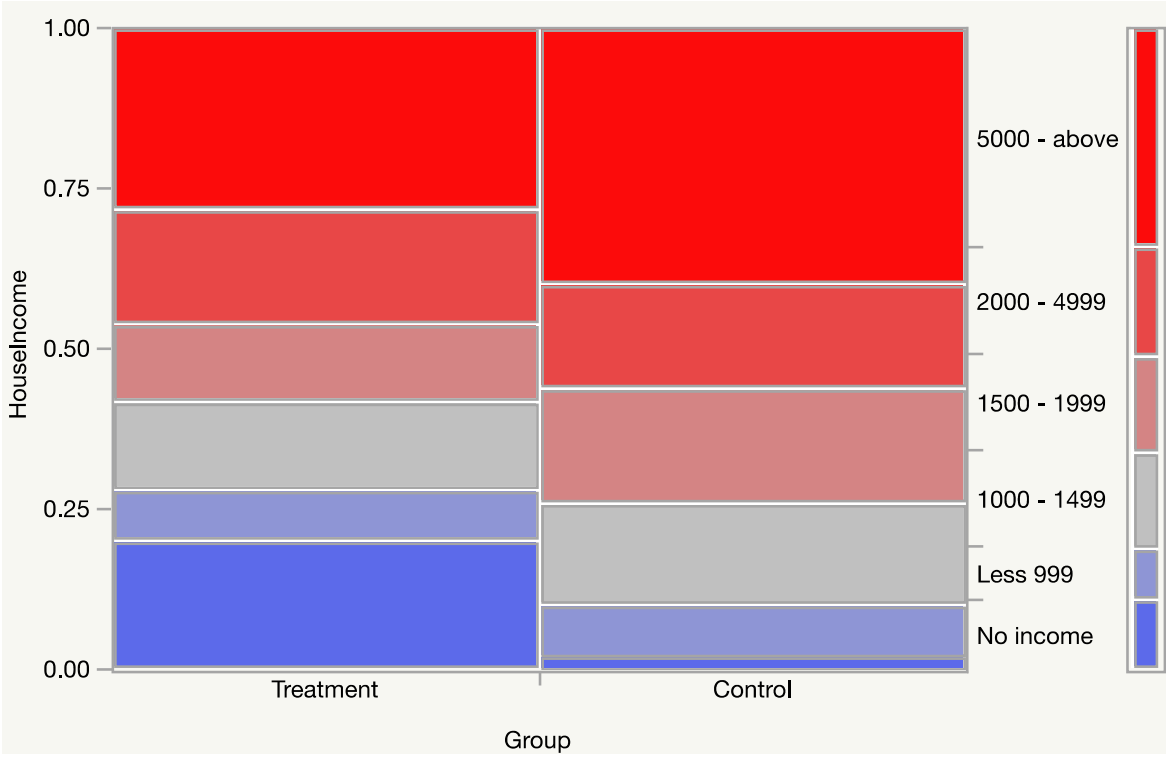

Figure 4.12. Household Income in Nam. Dollars (N$) Pregnant & Non-Pregnant Groups.

Note. Treatment = Pregnant, Control = Non-Pregnant

4.4.5 Age of Respondent's Mother at the age of First Pregnancy and the Risk of Teenage Pregnancy

In this section, the age of the mother of the respondents at first pregnancy is measured against the risk of teenage pregnancy as indicated in figure 4.13.

Thirty-four (68%) mothers of the respondents' in the pregnant group had their first child as teenagers. The mean age at which they got pregnant was 19 years (18%). The youngest age at which a respondents' mother was first pregnant was 13 years 1(2%), while the oldest age was one mother at 27 years (2%). The mean age at which the mother of the respondents' got pregnant for the first time in the pregnant group was in years (M= 19.20, SD = 3.48). In the non-pregnant group, the mean age of the respondent's mother at their first pregnancy was 22 years. The oldest age was 35years (2%), while the youngest age was 13 years (2%).

The difference between the mean ages of the non-pregnant and pregnant groups' mothers when they got pregnant, were tested for statistically significant differences by conducting an independent t-test. The assumptions of the t-test were not violated (normality and homogeneous variances). The independent t-test reflects that there was a significant difference between the means of the two groups, ($t(98) = -3.31$, $p = .001$). The age difference between the groups was statistically significant. The mothers of the respondents in the pregnant group fell pregnant earlier at (M = 19years) ages and as teenagers than the mother of respondents in the non-pregnant group (M = 22years).

Figure 4.13 illustrates a one-way after analysis the age of the mother of the respondents in both groups. The diamond of the non-pregnant group is clearly higher than the pregnant group, indicating that the mothers in the non-pregnant group generally had their first pregnancy at older ages than the pregnant group

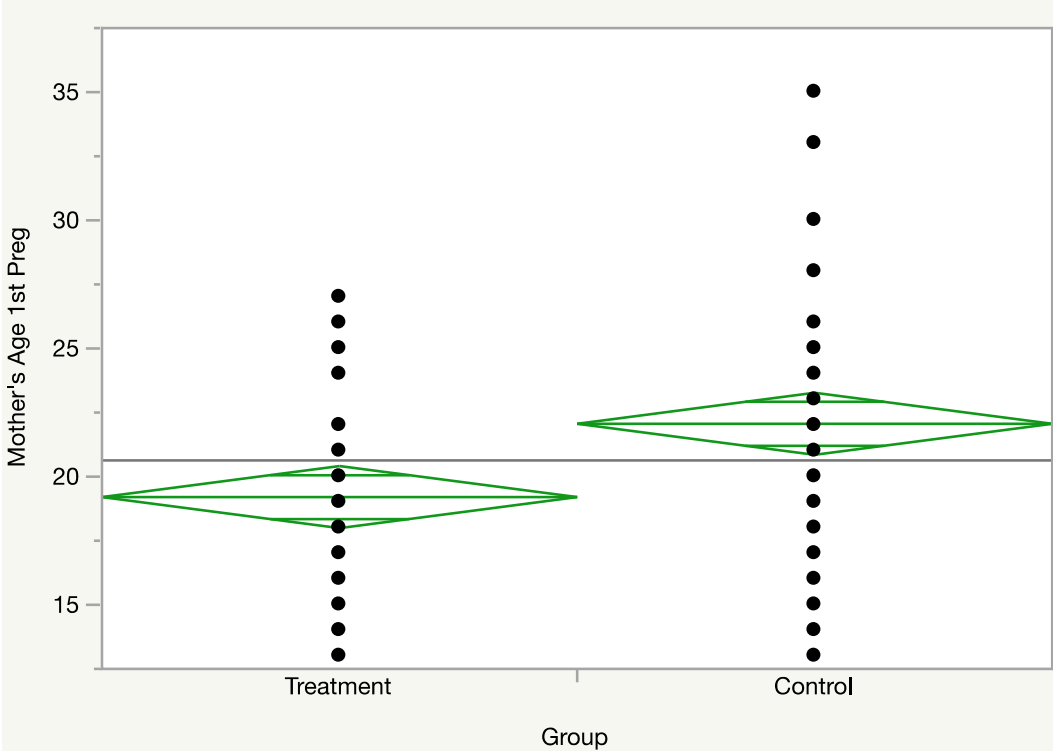

Figure 4.13. Age of Respondent's Mother at First Pregnancy (Pregnant and Non-Pregnant Group).

Note. Treatment = Pregnant, Control = Non-Pregnant

4.4.6 Level of Education of Mother of Respondents and the Risk of Teenage Pregnancy

This section seeks to determine the link between the educational levels of the mothers of the respondents and the potential risks of teenage pregnancy as displayed in figure 4.14.

The pregnant group shows that a large number of respondents' mothers 23(46%) started but did not complete their secondary school education. This is followed by 10(20%) that only had primary education and 8(16%) that had no education. Five (10%) of respondents' mothers had gone up to grade 12 and finished their secondary school and 3(6%) completed tertiary education, while (2%) began but did not complete their tertiary education. In the non-pregnant group, the level of education of the mothers of the respondents indicates that (26%) attended secondary school but did not complete it; followed by 10(20%) that finished secondary. Whereas, (26%) completed tertiary education, while 6(12%) had a primary education and 4(8%) had no education. The level of education of the respondents' mothers in the pregnant and non-pregnant groups is graphically illustrated in Figure 4.14. A Chi-square was conducted to test the difference in the proportions of the two groups for the level of education of the mothers of the respondents. A significant association was

found, (χ^2 (1) = 14.82, p <. 01). A significantly lower proportion of the pregnant group did not complete secondary school in comparison to the non-pregnant group, and a significant proportion of the non-pregnant group generally has more education than the pregnant group.

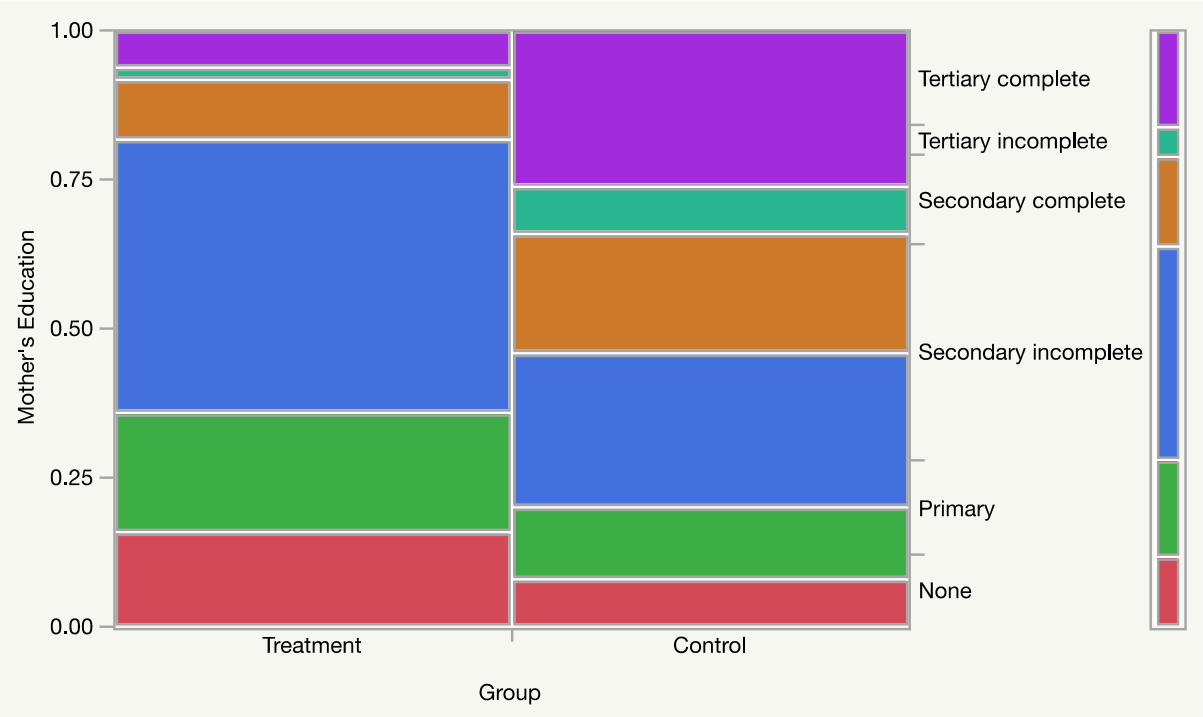

Figure 4.14. Level of Education of The respondents' mothers (Pregnant & Non-Pregnant Group).

Note. Treatment = Pregnant, Control = Non-Pregnant

A Chi-square test was conducted to test the differences in the proportions of the different groups for sexual exposure at any age as portrayed in figure 4.15. There was a significant association (χ^2 (5) = 36.98, p < .01). The non-pregnant group was less likely to be sexually exposed (46%), unlike the pregnant group (100%). Figure 4.15 illustrates sexual exposure in the two groups.

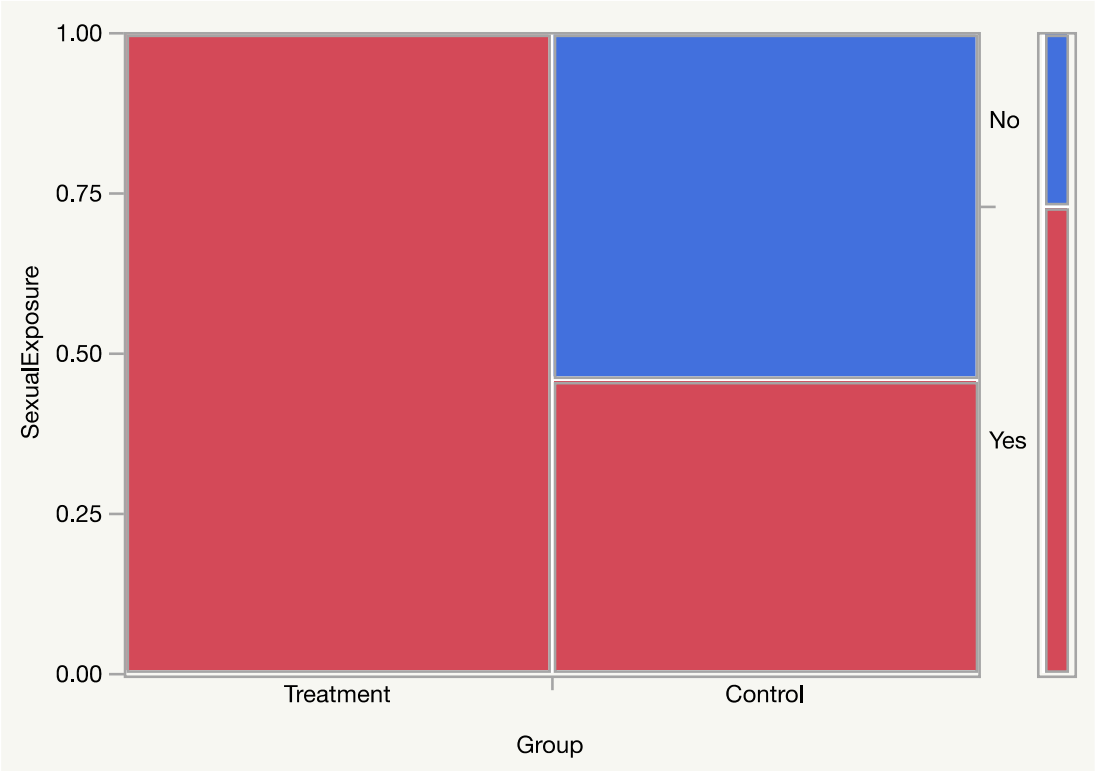

Figure 4.15. Respondent's Sexual Exposure in the Pregnant and Non-Pregnant Group.

Note. Treatment = Pregnant, Control = Non-Pregnant

4.4.7 Age of Respondent at First Sexual exposure and the Risk of Teenage Pregnancy

This section seeks to ascertain a link between the age at which the respondent was first sexually exposed and the risk of teenage pregnancy. A graphical depiction is reflected in figure 4.16.

The age of the respondents at their first sexual exposures in the pregnant group has a mean of 15.94(SD = 1.49). The oldest age at which the respondents where first exposed was 18 years, with 6(12%). The youngest age at which respondents were sexually exposed was 10 years making up (2%) of the group. In the non-pregnant group, the majority of the respondents 27(54%) had not engaged in any sexual exposure prior to the survey. While 46%) had been exposed sexually. The mean age of those who have been exposed was 17 years (SD = 1.79). The earliest age of sexual exposure for the non-pregnant group was 12 years 1(2%), however, the oldest age was 19 years 1(2%). Figure 4.16 graphically illustrates the age at which the respondent was first sexually exposed, in both the pregnant and non-pregnant groups. An independent t-test was conducted and there was no statistically significant difference (t (71) = .47, p = 0.63).

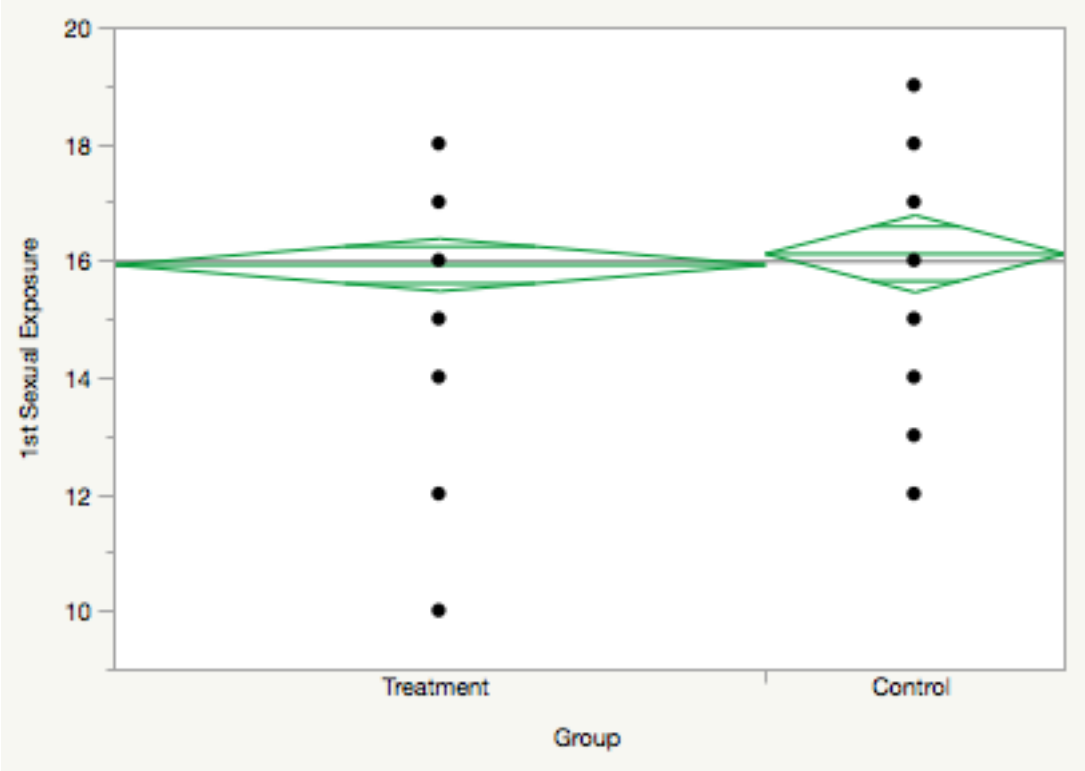

Figure 4.16. Age of Respondent's First Sexual Exposure (Pregnant and Non-Pregnant Groups).

Note. Treatment = Pregnant, Control = Non-Pregnant

4.4.8 Use of Drugs/Alcohol and Condom Prior to Sex and the Risk of Teenage Pregnancy

This section seeks to determine the link between the use of drugs, alcohol and the lack of use of condoms prior to sex, to the risk of teenage pregnancy. This is graphically depicted in figure 4.17 and figure 4.18.

On the use of drugs or alcohol prior to or with sex, the pregnant group showed 42(84%) did not make use of drugs or alcohol prior to sex, while 8(16%) did. In the non-pregnant group, 27(54%) were not sexually exposed. Of the 46% that were sexually exposed only 4.35% made use of alcohol or drugs prior to sex, while 22(44%) did not make use of drugs or alcohol. Figure 4.17 illustrates the use of alcohol with sex in both groups. A Chi-square test was conducted to test the difference in the proportions of the different groups in the use of drugs or alcohol with sex. A significant relationship was found between the pregnant group and the non-pregnant group in the use of drugs or alcohol with/prior to sex, (χ^2 (2) = 38.69, $p < .01$). Of those who did not use, the pregnant group was significantly higher (84) than the non-pregnant group at (2%).

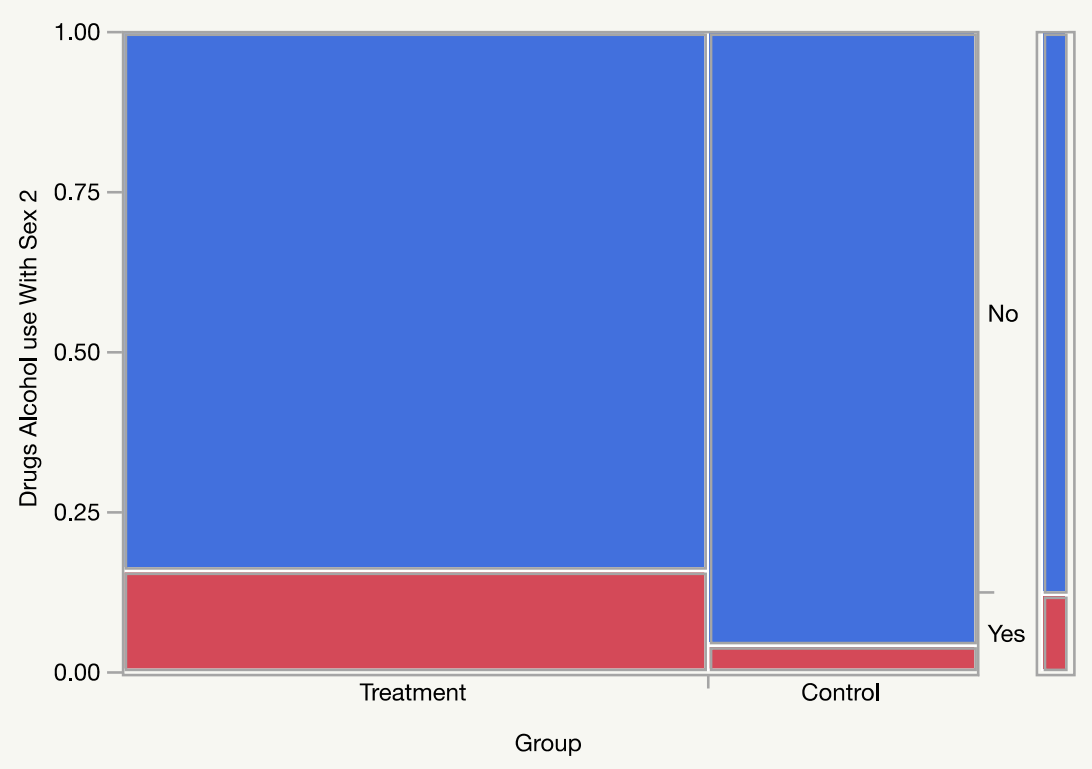

Figure 4.17. Respondents' Use of Drugs/Alcohol With Sex (Pregnant and Non-Pregnant Groups).

Note. Treatment = Pregnant, Control = Non-Pregnant

Figure 4.18 depicts the use of condoms' pattern in the pregnant and non-pregnant groups. In the pregnant group, 29 (58%) did not use condoms, while 21(42%) made use of condoms. In the non-pregnant group, 27 did not respond to this question as they were not sexually active, and it was not applicable to them. Of those that it applied to, which was 23 of the respondents in the non-pregnant group, 10 made use of condoms while 13 did not. The non-pregnant group reported more condom use than the pregnant group. A Chi-square test was conducted to test the difference in the proportions of the different groups for condom use. A significant difference was found, (χ^2 (2) = 36.99, $p < .01$). A significantly higher proportion of the pregnant group made use of condoms (42%) compared to the non-pregnant group (20%). Also (58%) did not use condoms in the pregnant group, compared to (26%) in the non-pregnant group.

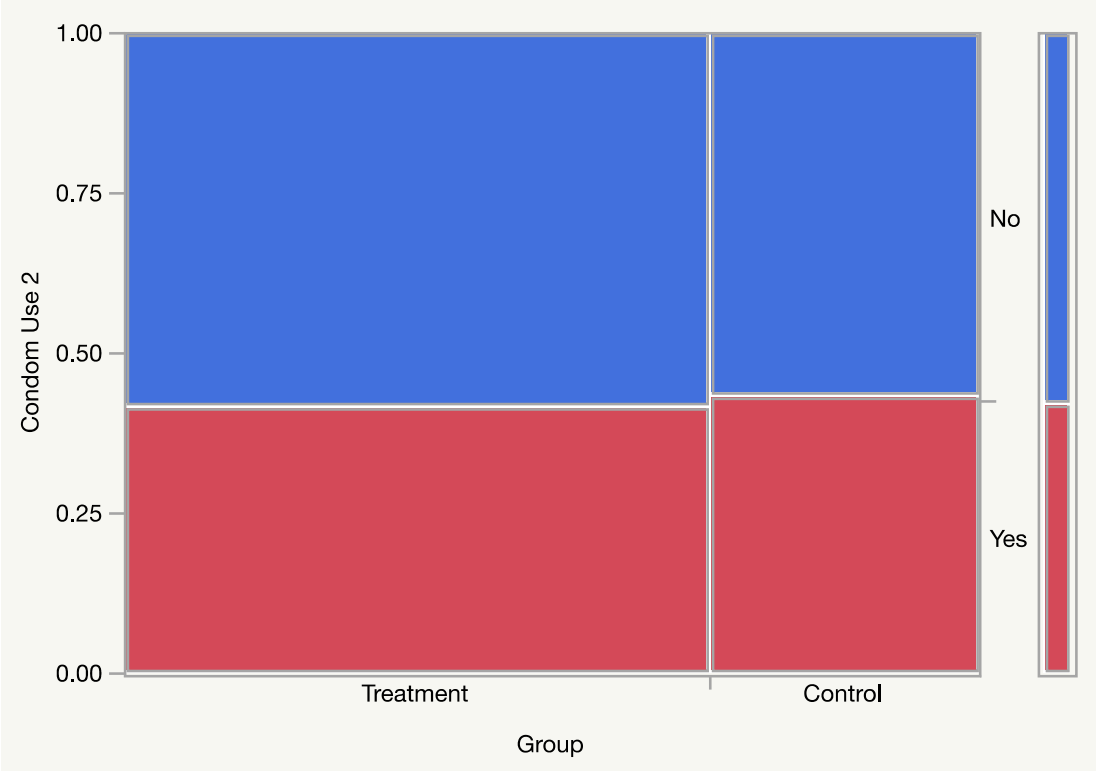

Figure 4.18. Respondent condom use pattern (pregnant and non-pregnant group).

Note. Treatment = Pregnant, Control = Non-Pregnant

4.4.9 Alcohol Consumption / Risky Behaviour and the Risk of Teenage Pregnancy

This section seeks to examine the link between alcohol consumption and other risky behaviours to the risk of teenage pregnancy as is graphically depicted in figure 4.19.

In the pregnant group, 29(58%) did not consume alcohol, while 21(42%) did. All respondents that consumed alcohol took it occasionally and mostly as a social habit with friends and family. One respondent preferred to drink alone. In the non-pregnant group, 36(72%) of respondents had never consumed alcohol, while 14(28%) did. Of those that did, they all took it occasionally, and mostly as a social habit with friends and family. Three preferred to drink alone. Figure 4.19 depicts the consumption of alcohol in both groups. A Chi-square test was conducted to test the difference in the proportions of the different groups for the consumption of alcohol of the respondents in the pregnant and the non-pregnant groups. The relationship between these groups was not statistically significant (χ^2 (1) = 2.15, p = .14) for alcohol consumption. With regards to how often alcohol was consumed by the respondents, there was no statistical significance (χ^2 (1) = 2.10, p = .14). Considering taking alcohol as a social habit by the respondents, there was no statistically significant difference (χ^2 (2) = 4.23, p = .12). There seemed to be a

tendency for the non-pregnant group to consume less alcohol, but the difference was not statistically significant.

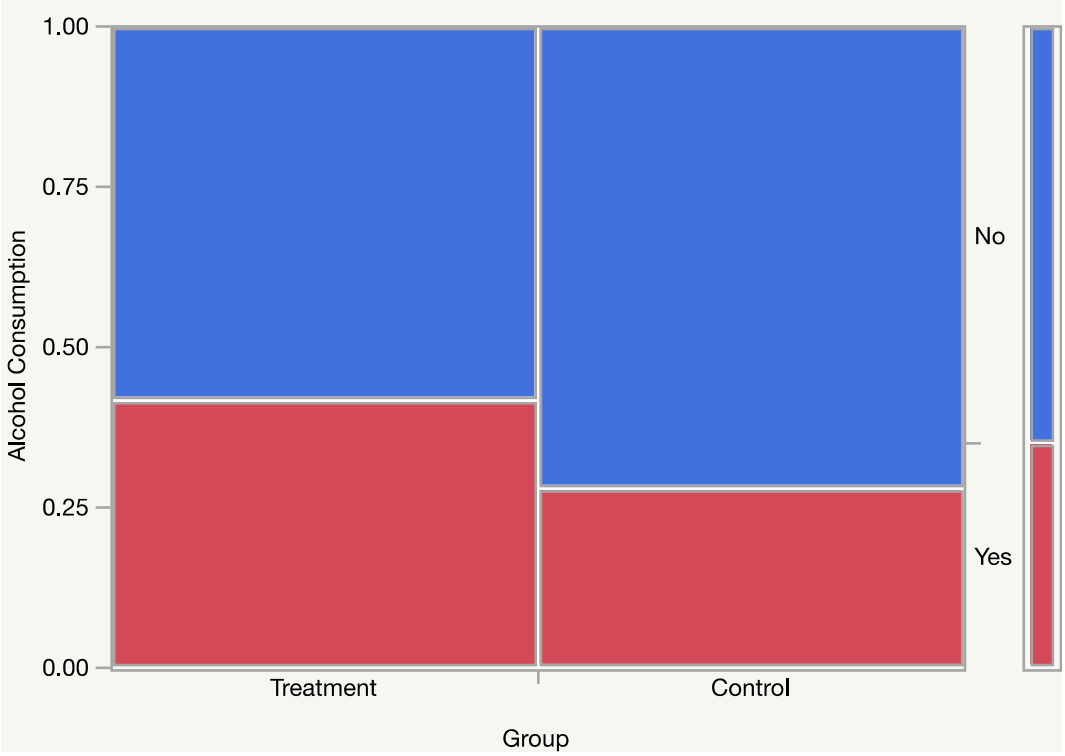

Figure 4.19. Respondents' Alcohol Consumption Pattern (Pregnant and Non-Pregnant Groups).

Note. Treatment = Pregnant, Control = Non-Pregnant

The cigarette and drugs intake habit of the pregnant and non-pregnant groups was assessed. Of the pregnant group, 46(92%) had never smoked, 1(2%) smoked occasionally and 3(6) smoked regularly. On drugs intake in the pregnant group, 48(96%) had never taken drugs, 1(2%) took it occasionally and 1(2%) took it regularly. Within the non-pregnant group, none of the respondents had ever smoked or taken drugs. A Chi-square test was conducted to test the difference in the proportions of the different groups for cigarette use. The relation between the groups was not significant, (χ^2 (2) = 4.16, p = .12). For the use of drugs socially, the relationship between the two groups was also not significant (χ^2 (2) = 2.04, p = .36). The study shows a tendency for the non-pregnant group to use fewer drugs and cigarettes, but the difference was not statistically significant.

4.5 CONCLUSION

An analysis of various data has been made using various techniques to answer the research questions and to verify the hypothesis of the study. The researcher further highlighted the main findings of the study used to investigate the effects of attachment styles on teenage pregnancy. Multiple analyses were conducted to determine the prominent attachment styles within the groups as well as other analyses to answer the research questions. This includes the use of independent t-test, Pearson Chi-square test and basic descriptive statistics. The findings of this study as discussed in the next chapter form the basis of the conclusions and the recommendations for future research work that are proffered.

CHAPTER 5

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

The purpose of this study was to examine the relationship between attachment styles of the single parents and their daughters getting pregnant as teenagers. This was done with a population sample of two groups of 50 teenage girls each. The pregnant group (consisting of pregnant teenagers) and the non-pregnant group (consisting of non-pregnant teenagers). The findings of the study are discussed in this chapter. The discussion incorporated the existing literature, based on theoretical conceptualisation, with a view to reflecting practical implications. The challenges and limitations of the study are described and possible recommendations for further studies are made.

5.2 DISCUSSION OF THE RESULTS

5.2.1 The Predominant Attachment Styles of Single Parents

This study attempted to describe the predominant attachment styles of single parents. The result of this study reflects two main attachment styles, namely secure attachment and insecure attachment styles. The latter is subdivided into two identified styles, namely avoidant attachment style and ambivalent attachment style. The findings of this study show 60.5% to have a secure attachment, 36% with an insecure-avoidant attachment and 3.5% with an insecure–ambivalent attachment. The secure attachment style was, therefore, the predominant attachment style in the sample population.

The findings of this study are in consonance with previous research. One of the pioneers of attachment theory Ainsworth, states that middle-class groups had a secure attachment range of 67% (Ainsworth et al., 1978). This compares well with other studies, where over two-thirds (67%) of the sample were rated as securely attached, in keeping with proportion in many cross-cultural studies (Ding, Xu, Wang, Li, & Wang, 2012). It also compares well with a study done in South Africa, a third world country like Namibia, characterized by poverty and inequality. Just like here, the rate of secure attachment was found to be 61.9 % (Pritchett, Rochat, Tomlinson & Minnis, 2013). The implication is that as in a normal population distribution, there should be a predominance of people with a secure attachment style than an insecure attachment style. The rate of secure attachment rarely

falls below half of the population this is an essential level of security for the survival of a community. Insecure attachment style is usually about 40% of the population (Huber, 2014).

The relationship between mothers and their teenage children were measured, and the most predominant attachment style found was secure attachment style (64%). The proportion of the insecure attachment style (36%), is however relatively high compared to a normal population, and particularly higher with the pregnant group that consisted of pregnant teenagers. This would indicate less trust, communication and high alienation between parents and children. This has a generally negative outcome in the community. Avoidant attachment style makes up most of the insecure attachment category at 36% with a few ambivalent attachment styles (3.5%). The participants reflect a more secure attachment style with the mother (64%) than with the father (57%).

In the mothers' category of the Inventory of Parent and Peer Attachment [IPPA] (Armsden & Greenberg, 1987) both the non-pregnant and the pregnant group had a similar attachment to their mothers. In both groups, about two-thirds, 64% of the participants had a secure attachment style with the mother. The reminder had an insecure attachment style with the mother in both groups.

In the fathers' category of the IPPA, which reflects attachment between the father and the teenager, the secure attachment style is the most predominant attachment style with a little over half, 57% of the sampled population. The proportion of insecure attachment styles make up 43%. The percentage of insecure attachment style is quite high. In the father's category, the avoidant attachment style makes up most of the insecure attachment style, with a few ambivalent attachment styles. The study reveals more secure attachments with the non-pregnant teenagers and their fathers with 66%, compared to only 44% of pregnant teenagers that had a secure attachment to their fathers. This reveals that a secure attachment style would lead to positive developmental outcomes, while an insecure attachment style poses a risk of negative developmental outcomes including teenage pregnancy. This agrees with other studies that show that children who have a secure attachment style to their fathers tend to have improved developmental outcomes (Carlson & Magnuson, 2011).

When the pregnant and non-pregnant group are compared in the father's category of the IPPA, the non-pregnant group clearly has a larger proportion of the participants having a secure attachment with their fathers, with about three quarters having a secure attachment

style with their fathers. The others have an insecure attachment style with their fathers. On the other hand, the pregnant group, which consist of pregnant teenagers, indicated that only half of the participants in the group had a secure attachment style with their fathers, while the other half had an insecure attachment style with their fathers. In general, there was distinctly a greater attachment to the mothers than to the fathers, participants had more sense of security with their mothers.

Influence of Family Structure on Teenage Pregnancy

The findings in this study reveal that a larger proportion of the sample population lived with a single parent. The general trend among the pregnant teenagers was that most of them, up to 76%, lived with a single caregiver. Of this number, a larger portion lived with the mother alone. However, with the non-pregnant teenagers, 64% of the participants, lived with both parents.

Mothers made up most of the single parents' homes. There were up to 40% of pregnant teenagers living solely with their mothers. In agreement with this study, literature confirms that households headed by mothers made up over 40% of family structures (Holborn & Eddy, 2011). The findings in this study reveal that living with a single parent may increase the risk of negative outcomes in the development of the child which could result in negative outcomes, including risky behaviour, early sexual initiation and teenage pregnancy.

This study reveals that the mother is the primary caregiver of choice from birth. The current study reveals secure attachment with the mother in both groups, indicating that the teenager's perception of attachment with their mothers was mostly secure. The study shows that mothers are present at the crucial age of attachment development which is key to secure attachment development. According to Bowlby's theory, mother-infant attachment is established over the first 2 years of life (Bowlby, 1969).

The findings of this study reflect that the relationship with the father influences the attachment style that developed between the father and the child as well as perceptions of such attachment. The findings of this study report on whom the participants lived with at various ages and whom they typically regarded as their primary caregiver. It invariably determines whom the participants feel more secure with and defines the attachment style of the participants with the parent. Up to 68% of fathers were absent in the lives of the pregnant teenagers' group. The current study found that fathers' absence may have caused an insecure attachment to develop between the father and the child, which eventually lead

to negative effects on the teenager's life, including risk-taking behaviours resulting in teenage pregnancy among others. Other literature confirms that a father's absence can harm a child's psychological development (Kruk, 2012). This study reveals that in both groups, the father is not typically regarded as the primary caregiver.

The participants in the pregnant group had a remarkably larger proportion of those who lived with the father as a caregiver alone at different age ranges than the non-pregnant group. Generally, the proportion of those who lived with the father only was quite low, with 2% at birth. However, the number increases up to 16% at the age of 19. It was in fact, the lowest of all the caregiver groups. This corresponds with the general trend worldwide, where only 16.1% of single-parent households are headed by fathers (U.S. Census Bureau, 2017). The proportion of father-headed households in the current study is lower than in other studies. However, it is becoming more 'acceptable' to be a single father and there are more single-father households in the western context than in the African context. In the African context, children of the father might be sent to the father's mother or another female relative to take care of them.

In contrast, none of the participants in the non-pregnant group lived with the father alone in the early formative years from birth to six years old, and only one lived with the father alone between the ages of 7 – 14. By the ages between 15 to 19 years, the number of participants living with the father alone is almost the same in both groups. Reasons for this trend were not directly indicated by the study. Children may have relocated to stay with the father for schooling conveniences and upkeep.

The current study reveals that living with both parents may have a positive developmental outcome for the child. The non-pregnant group had up to 64% of participants living with both parents. This may have greatly influenced the outcome of less risky behaviour and non-pregnancy in their teenage daughters. Existing literature confirms that in two-parents' families, a strong parent-child relationship is associated with reduced early sexual initiation (Parkes, Henderson, Wight & Nixon, 2011).

Literature substantiates the findings in the study that as in the non-pregnant group where the proportion of married couple families is more than half of the sample population and the teenagers are not pregnant, both parents being married is a predictor of a more secure parent-child relationship. Whereas when the parents are not married there may be more negative parent-child relationship and negative outcomes. Other studies confirm that

teenagers from single-parent homes are more likely to display problem behaviour than children from married parent homes (Carlsund, Eriksson, Lofstedt & Sellstrom, 2012).

With regard to caregivers that are neither the father or mother, the proportion of participants that lived with them at different age ranges was generally lower than any of the other categories of caregivers lived with, except for the single-father proportion. The pregnant group generally had higher proportions than the non-pregnant group, with the exception of the two later age groups 7 to 19, where the proportions were similar. Up to 22% lived with other caregivers, who were not their parents.

Living with a caregiver, other than one's parents may expose the child to negative outcomes, including risk-taking behaviours. In some cases, they are taken care of by elderly grandparents with a limited capacity of parenting, or some form of foster care that may put the child at risk. The current study records a case of an orphan who had been taken on by an organisation. She got pregnant as a teenager and had moved out of foster care to live with the boyfriend. Previous literature suggests that orphans may be more susceptible to becoming HIV infected through abuse, sex work, and high-risk relationships because of emotional instability (Naswa & Marfatia, 2010).

In both groups, a high proportion of the participants regarded their mother as the primary caregiver. This could account for the similarity of a larger proportion of secure attachment in the mother category for both groups. The pregnant group has 58% of the teenagers that regard the mother as the primary caregiver while the non-pregnant group has 48%. Secure attachment is more likely to be formed with the parent who is physically present and in contact with the child in their formative years. The study reveals that mothers make up a higher proportion of that parent in the sample population.

The main difference between the groups is reflected in the proportion that regarded both parents as their primary caregivers. In the non-pregnant group, this accounts for a much higher proportion than in the pregnant group. This could account for the high proportion of secure attachment in the father category for this group as well. This signifies the close attachment bond and a high sense of security the participants have for both parents. In the pregnant group, the proportion of those who regard both parents together as primary caregivers is relatively small.

The findings reveal that divorce has an influence on attachment between child and parent. The age of the child at the time of the divorce, separation or death of a parent happened could have affected the child and their sense of security, and therefore, their attachment to the parent. Twenty-six percent (26%) of the teenagers in the sample population came from families that had experienced divorce or the death of a parent. This places the teenager at more risk of behaviours that could lead to teenage pregnancy. Literature suggests that teenagers from divorced families in the United States experienced teenage birth rates of 33% in comparison to birth rates of 11% for teenagers whose parents were not divorced (Carr & Wolchik, 2015).

Female teenagers from divorced families in New Zealand are more likely to experience teenage pregnancy than those that come from married families. Wallerstein et al., (2013), indicated that those from divorced families displayed more risky behavioural patterns as that which predispose them to early sexual exposure (Carr & Wolchik, 2015). The absence of a parent caused by death or divorce could affect the sense of security of the child. Literature suggests that children experiencing their parents' divorce at an earlier age may put the child at a higher risk of risky behaviour especially in adolescence (Morin, 2018).

5.2.2 Effects of Attachment Style on Female Teenagers

Attachment style affects the bond between a child and a parent. Insecure attachment with the child may place the child at risk to search for affirmation elsewhere. When bonds are insecure, there is low self-esteem, and thus a constant search for approval. Secure bonds, on the other hand, breed higher self-esteem. Existing literature confirms that the attachment bond is key and influences the quality of the parent-child relationship as a child, as a teenager and as an adult (Berk 2013). Bowlby (1969) theory of attachment recognises the infant's emotional tie to the caregiver as a response that promotes survival (Berk, 2013)

The children develop an enduring affectionate tie that they can employ as a secure base in the absence of the parents. This becomes an 'internal working model' by which there are expectations about the availability of the caregiver they are attached to and their availability and reliability of providing support in times of stress. The internal working model is an important part of the development of the personality, serving as a guide for all future close relationships (Berk, 2013).

Attachment of child and parent has significant effects on children that affect them throughout their lives. It affects the relationship with the parents and others in the future. Previous literature state that attachment has been evident in influencing the child's development including social and behavioural competence (Hong & Park, 2012). When there is a secure attachment between fathers and daughters, it has a positive influence on the daughter's development. Insecure attachment has a negative influence on the daughter's development. Secure attachment is crucial to good health, emotional well-being and flourishing of the teenager.

Bowlby argued that early attachment processes lead to a model of relationships that continues to shape the child's interactions with other people as the child matures (Bowlby, 1969). An insecure attachment style can lead to serious difficulties in handling romantic relationships, work relationships and friendships later on in life. A secure attachment maintains healthy proximity to other people. There is no fear of closeness and intimacy and there is no pathological dependence on the relationship. An insecure attachment leads to avoidance of closeness and creates pathological existence. Parental unavailability and harsh rejection are associated with insecure attachment style

People with an avoidant attachment style do not care about close relationships and prefer not to be dependent on other people and vice versa. They also tend to have difficulties with intimacy and closeness and are more likely to engage in casual sex than to have sex in a monogamous relationship. Sex is a kind of non-pregnant or proof of their attractiveness or status.

Children who grow up with secure attachments develop more a positive social-emotional competence, cognitive functioning, physical health and mental development. On the other hand, children with insecure attachments are more at risk of negative outcomes in these sectors of life. Secure attachment is associated with less engagement in high-risk behaviours, fewer mental health problems and the development of enhanced social skills and coping strategies (Potard, Courtois, Réveillère, Bréchon & Courtois, 2017). Other studies display that teenagers that have insecure attachments are likely to engage in less condom use and risky sexual behaviour (Paulk, 2013). Securely attached children readily seek their caregivers if distressed but feel safe enough to explore their environment at times of low stress.

This study reveals that the quality of father-daughter relationships also impacts on daughter's social development. Father-daughter attachment in adulthood is significantly related to the daughter's emotional regulation in general (Nielsen, 2014).

5.2.3 Attachment Style Experienced and the Contribution to Teenage Pregnancy Risk

Attachment style as experienced between parents and teenagers does add to the risk of teenage pregnancy. There are two attachment styles displayed in this study. Those with insecure attachment are more at risk of teenage pregnancy, while those with a secure attachment are less at risk of teenage pregnancy.

In the pregnant group which consisted of pregnant teenagers, more than half (58%) of its sample population have an insecure attachment with the father; while more than a third (36%) have an insecure attachment with the mother. The non-pregnant group, on the other hand, had three quarter (66%) of its sample population indicating a secure attachment with the father, and 64% had a secure attachment with the mother. Attachment to the father can be seen therefore, as significantly related to teenage pregnancy, while attachment to the mother is not significantly related to teenage pregnancy. Insecure attachment can also be said to be more predominant in the single parent family than in the two-parent family. It can, therefore, be said that having an insecure attachment with the parent puts the child at risk of teenage pregnancy, the pregnant group which was made up of teenagers that were pregnant had a large number that were insecurely attached with their parents. This agrees with literature, which indicates that pregnant teenagers were more likely to have an insecure attachments and in danger of mental health problems (Satyanarayana, Lukose & Srinivasan, 2011).

5.2.4 The Dynamics of Attachment Style Contribution to Teenage Pregnancy

It has been established in this study that the predominant attachment style is the secure attachment style, particularly within the mother's category. In the fathers' category, however, there is a difference in the two groups; the pregnant group have over half of the sample showing insecure attachment. On the other hand, the non-pregnant group there is a larger proportion with secure attachment than in the pregnant group.

The attachment type reflects the level of security or insecurity the child feels with a parent and which affects other outcomes in life is what is determined. When a child is secure,

they are able to go out and explore and return to their base. There is a display of confidence in the attached person and feeling of security in coming back. When a child experiences insecure attachment, they lack a sense of security and constantly feel a sense of lack.

Three constructs were used as sub measurements to measure the attachment types. They are trust, communication and alienation (Armsden & Greenberg, 1987). Trust is very essential to the bond between child and parent. It allows the child to go out and explore and come back with a sense of security. When there is none or little trust, the child may always feel insecure, and keep searching for security elsewhere, which then poses danger to the teenager and exposes them to risky behaviours, including early sexual initiation and teenage pregnancy.

Communication between the parent and child is essential to their relationship. In a secure attachment, communication is high, while in an insecure attachment communication is poor. Lack of communication is a major contributing factor to teenage pregnancy, while good communication is synonymous with secure attachment. The findings of this study reveal trust and communication with the mothers to be higher than trust and communication with the fathers. The study shows that communication in the family is important for secure attachment and poor communication may result in teenage pregnancy. Other literature confirms that communication is essential for a secure attachment (Levy & Orlans, 2014).

In line with previous studies, there is a larger proportion of participants in the non-pregnant group that have a secure attachment with their caregivers. Supportive practices such as good parent-child communication especially about sexual activities led to a reduction in risky sexual behaviours (Biddlecom, Awusabo-Asare & Bankole, 2009). Communication for secure attachment is essential and relatively high as was measured in the current study and confirmed by other studies. It is stipulated that family functioning variables such as communication are influenced by the attachment that the teenager has with their caregiver (Gibson- Davis, & Gassman- Pines, 2010).

Secure attachment is displayed in the pattern in which the caregiver and teenager communicate and are emotionally close and more engaged. On the other hand, an insecure attachment between the caregiver and teenager make them relatively less communicative, less emotionally close and less engaged. Other studies confirm that securely attached daughters have higher communication satisfaction than insecure daughters (Jain, 2015).

As in cases in this study, where the fathers are absent, daughters do not have the opportunity to interact with their fathers and thus an insecure attachment pattern develops and is a major contribution to teenage pregnancy. Absent fathers do not allow for bonds to be formed between them and their teenage daughters because of their absence. There is little or no trust between father and daughter and minimal to no communication. This creates a high sense of alienation which is noted in the findings of this study. The pregnant group again displays a high proportion of insecure attachment with the father category. Participants have insecure attachments with their absentee fathers.

When there is only one parent present, attachment with the one parent could also be challenged by various factors affecting the parent including sole financial responsibility for the family, responsibility and daily obligations of raising a child alone. This places a strain on the single parent and the attachment to the child and thus put the child at risk of teenage pregnancy as she seeks comfort and companionship elsewhere.

Teenage mothers have a tendency to develop an insecure attachment to their children. They are usually unprepared for parenting, especially the strains of responsibility, and even when they do take care of the children, they might lack the bond that instils security in the child. This predisposes the child to risky behaviours that might lead to teenage pregnancy. The non-pregnant group had a greater proportion of secure attachment to both the father and mother. There were more married couples in the non-pregnant group, making the father physically more available and able to form a bond with the teenager. This could account for there being less risk-taking behaviours and no teenage pregnancy in the non-pregnant group. Communication is high with secure attachment. Other studies confirm these findings, stating that a greater level of communication is expected between parents and child in a two-parent home than in a single parent home. Alienation is a major feature of insecure attachment as the child does not feel secure. Secure attachment is high on levels of trust, high on levels of communication and low on levels of alienation, while insecure attachment is low on trust, low on communication and high on alienation.

5.2.5 Father Daughter Relationship and Teenage Pregnancy

The current study has observed that the relationship with the father is key and has great effect on their daughters and consequences to teenage pregnancy. Even when other effects of coming from a single parent family are taken into account, it is still found that the absence of the father on its own also translates to insecure attachment with the father. This puts daughters at risk of teenage pregnancy.

The father daughter relationship is very important for daughters to feel secure and confident as women. The father has the responsibility of advising the daughters about how men are, what they value and how they respect women (Romero, 2014).

When fathers have a secure relationship with their daughters, particularly as a result of their being physically and emotionally present. They encourage such daughters to compete, to take risk, and how to manage their emotions (Romero, 2014).

Fathers that have a secure attachment with their daughters, have daughters who are more likely to be self-confident and ready to explore their environment and take risks, having less fear of failure (Hill, Proffitt Leyva & Delpriore, 2016).

Father daughter relationship when secure, also indicates the fathers' investment of time and money on their daughter. This indicates more positive social outcomes, including better chances of a high academic achievement, a higher socio-economic status (SES), and a general increase in social prospects (Hill et al., 2016).

When there is a secure attachment between father and daughter, the daughters are less likely to get pregnant as teenagers (Meyers, 2019). They usually do not engage in sexual relationships early, but wait to get married, and their marriages are usually long lasting (Meyers, 2019).

When the father is absent physically or emotionally and does not give nurturing as a father, the daughter may be insecure and attempt to seek for the fathers' love from other men. A Physically or emotionally absent father will have an insecure relationship with the daughter and such a daughter is most likely to have low self-esteem, may not be able to maintain relationships, may have low self-worth, and may find it difficult to socialize (Romero, 2014).

The relationship between a father and daughter may determine future relationships the daughter may have. Romero (2014) describes three love relationships that could evolve from an insecure relationship with an emotional or physically absent father.

Multi – Faceted relationships: In this relationship, the woman does not have a sense of validation of themselves and may seek for it by having sex with men which makes them have a sense of being accepted (Romero, 2014).

'Marrying Daddy': The woman seeks older men in this relationship in the attempt of having the father they did not have (Romero, 2014).

‘Avoiding Engaging Emotions’: The woman tends to avoid emotional involvement with the man, but rather focus on taking care of others, their career, service to God, sibling’s children. Also, sexual engagements that do not involve feelings (Romero, 2014).

When there is an insecure attachment between father and daughter particularly because of the physical or emotional absence of a father, it could affect the daughter in many ways including the following:

Self – esteem of daughter is affected by the father’s relationship or lack of it with the daughter. The daughter’s confidence in her abilities can be reduced in all spheres of her life if there is an insecure relationship with the father (Meyers, 2019).

Father – daughter relationships determine to a large extent future relationship the daughter will have. Where there was an insecure relationship particularly as a result of father’s absence, the daughter may struggle to build or maintain relationships in the future (Meyers, 2019). This may be out of not wanting to be hurt again. When they do get close to other men, they might be promiscuous, and do it as a way of gaining attention from men (Meyers, 2019).

The father daughter relationship could affect daughters emotionally. The daughters become prone to depression (Meyers, 2019). They may have a fear of abandonment and rejection and thus keep to themselves. When father daughter relationships are insecure, the daughter is at an increased risk of developing eating disorders.

Father daughter relationships have a great effect on the sexuality of their daughters. Studies have shown that daughters who have an insecure relationship with their fathers are more likely to get pregnant as teenagers (Meyers, 2019). They are in fact 4 times more likely to get pregnant as teenagers (Meyers, 2019). Studies have also shown that over 70% of teenage pregnancies are seen in daughters that have an insecure relationship with the father primarily because they are emotionally or physically absent (Meyers, 2019). These daughters tend to begin to have sex at an early age and are more likely to be involved in risky sexual behaviour (Meyers, 2019).

When fathers have an insecure relationship with their daughters, the daughters are at more risk of getting addicted to drugs or alcohol (Meyers, 2019). The daughters are more likely to turn to drugs or alcohol to help numb the feeling of pain. They are at risk of alcohol or drug abuse (Meyers, 2019).

It is hoped that more studies would be made into examining the father daughter relationship, particularly to encourage and build bonds between fathers and daughters, attachment bonds that will cause daughters to be secure and confident women that will have lasting relationships in the future. This is likely to avert teenage pregnancies and other negative outcomes that tend to have spiral effects on future generations.

5.2.6 Significance of Early Pregnancy of Mother of Teenager, Risky Behavior and Socioeconomic Status on Teenage Pregnancy

In this study it is observed that the early pregnancy of the mother was an influence and put their teenage daughters at risk of getting pregnant also as a teenager. A large number of the mothers of the respondents in the pregnant group 34(68%) had their first child as teenagers. This confirms previous studies which indicate that early pregnancy in a mother could put the children more at risk of teenage pregnancy (Morin, 2019). On the other hand, the mothers in the non- pregnant group were relatively older when they had their first child with a mean age of 22 years.

In this study it is observed that the socioeconomic status of the teenage family influenced and put the teenage daughter at risk of teenage pregnancy. This study used the availability of facilities of running water, electricity and flush toilet as indicators of the socioeconomic status of the family. The pregnant group shows a large number of the respondents do not have access to these basic facilities, flush toilet (62%), Electricity (58%) and running water (42%). Since they did not have these facilities they would be regarded as having a low socioeconomic status. The non-pregnant group seemed to indicate a higher socioeconomic status. This can be seen to have a significant impact on families and increases the risk of teenage girls in households with such status getting pregnant. Previous studies have indicated that low socioeconomic status increases the risk of teenage pregnancy (Taylor, 2017).

Risky Behaviours measured in this study were drug and alcohol abuse. In this study, both groups indicated not much of use of alcohol or drugs prior to having sex, in the pregnant group 16% and in the non-pregnant group 4.35%. Previous studies indicate risky behaviour as increasing the risk of teenage pregnancy (Pflugradt, 2018).

These factors all contribute, individually to teenage pregnancy since in a lot of instances they occur together; further increasing the risk of the teenage daughter getting pregnant.

5.2.7 Single Parenting and the Risk of Early Sexual Activity and Teenage Pregnancy

The findings in this study revealed that over half (56%), of the total sample population lived with a single parent. There were considerably more who lived with a single parent in the pregnant group than in the non-pregnant group. Proportionally (76%), a greater number of the parents of the pregnant teenagers were unmarried. Comparatively 50% of the non-pregnant teenagers had unmarried parents. The parents of the non-pregnant teenagers had a large proportion (36%) of participants with parents that were married to each other accounting for about half the sample population, taking into account those that had been divorced or widowed which made up 14%. The pregnant teenagers' group, on the other hand, had only 12% of the parents married; that is almost a third of married parents in the non-pregnant teenagers' group. The difference between these two groups is statistically significant, $p = .03$. Both groups had a similar number of parents that were widowed or divorced.

The study demonstrates a strong association between single parenting and teenage pregnancy, particularly in the pregnant teenagers' group. In this group there is clearly a greater proportion of single parents. This is supported by other literature which states that with single parenting there is more likelihood of the risk of teenage pregnancy. The study also reflects that where the parents are married there is less likelihood of the teenager getting pregnant in their teens as reflected in the non-pregnant group. This is supported by existing literature which states that teenagers who live in two-parents' homes are less likely to ever have sexual intercourse than those living in single-parent's homes (Parkes et.al., 2011).

Children from single families display lower quality of parent-child attachment than teenagers in dual families (Carsund, Erikson, Lofstedt & Stellsstrom, 2012). Nearly half of the United States's children spend time in a single parent home before the age of 18 years (Kennedy & Bumpass, 2008). Closer to Namibia, literature confirms that in South Africa, over 39% of children live with a single parent headed by a mother (News 24, 2013; South African race relations, 2011).

Single Parent Teenage Mother

The findings on the age of the mother of the participant at first pregnancy make an interesting revelation. Over three quarters (68%) of the mothers of the participants' in the pregnant group, were pregnant as teenagers with a mean age of 19years. The non-

pregnant group had 66% of the mothers of the participants having their first pregnancy at a more mature average age of 22years and only about a third were pregnant as teenagers. The findings are significant with a t-test showing a significance level below alpha. The findings indicate that teenagers who were born to teenage mothers are more likely to be pregnant as teenagers. Other studies confirm the findings of the present study; teenage children of mothers who gave birth as teenagers are at higher risk of themselves becoming pregnant as teenagers (Hoffman & Maynard, 2008; Wall-Wieler, Roos, & Nickel, 2016).

In another study, findings also confirm the outcome in the present study, that those born to teenage mothers are twice as likely to become teenage mothers themselves. There is a greater risk for the female children of a teenage mothers to themselves become parents at an early age (Meade et al., 2008; Wall-Wieler, Roos, & Nickel, 2016).

Being a teenage mother has a lot of challenges including the tendency of the father of the first child not marrying the mother. There is a recurrence of this phenomenon in the study as the teenage mothers remain unmarried. This is supported by previous literature which states that teenagers are less likely than older women to be married (Martin, Brazil, & Brooks - Gunn, 2013). Another study states that fathers to the children of teenage mothers are unlikely to remain involved in the life of their children (Saleh & Hilton, 2011). The findings also confirm that most teenage mothers end up as single parents as can be seen distinctively in the pregnant group. As single teenage parents, their daughters are at risk of becoming pregnant as teenagers.

Mothers of the Participants' level of education

The findings reveal that the level of education of the mother of the participant and the age of the participant in the pregnant group, which is an indicator of age at pregnancy, show a significant association in the chi-square test of less than alpha. This signifies an association between the level of education of the mother of the participant and teenage pregnancy. The study group with pregnant teenagers reflects that the majority of the mothers of the participants (81%) did not complete their secondary school education, and only 6% have a tertiary education. Reasons were not exposed in this study, but it could be suggested that teenage pregnancy may have interrupted, and in many cases, caused them to drop out of school. This is supported by other literature which states that teenage mothers are likely to drop out of school (Grant & Hallman, 2008; Mankani, 2017). Other studies also suggest the mother's level of education could be a determining factor that affects teenage pregnancy. Teenage mothers tend to have lower education than older

mothers (WHO, 2012). Higher levels of education may reduce the risk of teenage pregnancy (Viner et al., 2012).

The current study revealed that teenage mothers are more likely to have attained a lower level of education than other teenagers in the same population. In another study, more than 50% of teenage mothers never graduated from secondary school (Mankani, 2017). The mother's level of education determines the type of jobs available for her as well as the level of income which determines her socioeconomic status. This in turn, affects the mother and children and the socio-developmental outcome for the child. The finding in this study is confirmed by existing literature which stipulates that teenage mothers with low levels of education are most likely going to live in poverty (South & Crowder, 2010).

The non-pregnant teenagers' group in the study, on the other hand, has a higher proportion of mothers that completed secondary school education and some who completed tertiary education. This has direct bearing to which jobs are available for the mothers and eventually the socioeconomic status of the family. This finding was significant, $p < .01$. The developmental outcome for this group is more positive as can be reflected in the daughters not yet being pregnant. Literature agrees with the trend in the non-pregnant group. In families where the mother has a tertiary education, children related better with both parents (Zhang, 2012).

Socioeconomic Status – Facilities Available & Household Income

Parameters that were used to measure the socioeconomic status of the respondents in this study include facilities such as flush toilets, electricity and running water availability in the home as well as the monthly household income. These facilities are regarded as basic essentials which could reflect the socioeconomic status of a family. There was a statistically significant difference between the two groups in the availability of these facilities in the home. In the group with pregnant teenagers, about three quarters of the sample population did not have any of the facilities at home while in the group with the non-pregnant teenagers, they were available to over three quarters (76%) of the group.

The prevailing socioeconomic status was clear in this study. It reflected the pregnant teenagers' group as having a prevailing low socioeconomic status, while the non-pregnant teenagers' group had a higher prevailing socioeconomic status. The findings suggest that the socioeconomic status of a family could have an impact on the likelihood of a female teenager to get pregnant. The poorer the circumstances, the higher the teenager is at risk of getting pregnant. Other studies confirm the findings of this research, that teenagers who

live in poverty or come from less privileged homes are more likely to become pregnant as teenagers (Stapleton, 2010).

A number of studies concur with the results in this study and show a strong association between poverty and the teenage mother in pregnancy. Stapleton (2010) stated that teenage mothers are most likely to come from poor families. Pregnant teenagers are more likely to have been brought up and currently live in deprived areas than their older counterparts (Stapleton, 2010). An estimated 60% of pregnant teenagers live in poverty (Lombardo, 2018). Stressful family events such as retrenchments could indirectly affect and impact the child (Cummings & Merrilees, 2009).

Teenage daughters of teenage mothers are likely to become pregnant themselves and to live in poverty, continuing the cycle of poverty (Ferraro, Cardoso, Barbosa, Da Silva, Faria, De Ribeiro, Bettiol & Barbieri, 2013; Meade, Kershaw & Ickovics, 2008).

In the United States of America, daughters of teenage mothers had a 51% likelihood of getting pregnant as teenagers compared to non-teenage mothers (Wall-Wieler, Ross & Nickel, 2016). There was a greater attachment to the mother than the father, participants had more sense of security with their mothers.

Socioeconomic Status – Household Income

The current study reveals that the environmental and socioeconomic status of the teenage girls may contribute to higher risks of teenage pregnancy. Monthly income is also a reflection of socioeconomic status. Income may be a significant determinant of environmental and geographical location and structure of where a family may live. Findings in this study reveal that those in the lower income bracket lived in areas displaying low socioeconomic status, while those in the higher income bracket lived in areas of higher socioeconomic status. Other studies confirm that teenagers from lower socioeconomic status are more likely to live in single-parent homes (Moore, Redd, Burkhauser, Mbwana and Collins, 2009).

The non-pregnant teenagers' group had households in the higher income bracket with up to 72% earning above the minimum income level in Namibia. The pregnant teenagers' group earned below the minimum income level, including a few without any specified expected income. Findings in the current study point to a majority of those in the pregnant teenagers' group living in families with low socioeconomic status indicating a higher probability of risky behaviours or tendency in the environment they live in. It also shows

them being surrounded by models that may influence them negatively and put them at risk of teenage pregnancy. Living in a neighbourhood where poverty is rife can have consequences as it also leads to a lack of role models and social isolations. There could be a number of contributors to how the monthly income is used, including the number of people a family is relying on for that income. As such, a single parent is more likely to bring in less income than that brought in by a combined effort of both parents. A sole parent income may be challenged to meet all the needs that combined efforts would have taken on.

Age of Participant at First Sexual Exposure

The findings of this study reflect a correlation between the age of the participants and the age of their first sexual encounter. This is statistically significant in the pregnant group, where sexual exposure at an early age is a clear indicator of the higher risk of getting pregnant as a teenager. This is significant, particularly in the pregnant group, where age also reflects the age at which the participant is presently pregnant.

In the non-pregnant group, over half of the sample population had never been sexually active before. Fifty-four percent of the group had never been sexually exposed. The findings reveal the difference between the groups, as calculated by a t-test, to be statistically significant. The average age of sexual exposure was significant $p < .01$. It was 16 years for the pregnant groups and 17 years for the non-pregnant group. The study confirms that the delay in age of sexual exposure causes a higher likelihood in the delay of age in the first pregnancy.

The findings in the study reflect that the earlier a child is sexually exposed, the more at risk the child is of getting pregnant as a teenager. It also reveals that delay in sexual exposure could be a safeguard against teenage pregnancy.

Another study reveals that almost fifty percent of teenagers in the United States are sexually active (CDC, 2018). This compares well with the current study. Previous studies also agree with this study as it was found that about 63% of 18 – 19-year-olds are sexually active (Martinez et al., 2011). Sexual exposure increases the chances of pregnancy, infection with sexually transmitted infections (STIs) and chances of infection with HIV/AIDS. The commencement of sexual activity at an early age is a major contributor to teenage pregnancy.

Risky Behaviour

Condom use reflects acceptable behaviour. In the pregnant group, the proportion of participants who did not use condoms was fifty-eight percent, which reflected that they were inclined to risky sexual behaviours. In the non-pregnant group, over half of the group, fifty-four percent did not engage in sexual activities, indicating non-risky behaviour. Findings were significant with $p < .01$, which indicates that the findings were not by chance. Findings in this study show that when a condom is not used, the risk to get pregnant is quite high. This is supported by other studies, which found that teenagers who have unprotected sex have a 90% chance of getting pregnant within a year (Sanchez, 2012).

Risky behaviour places teenagers at the risk of pregnancy. As the findings in the study reveal, the pregnant group which has a larger proportion displaying risky behaviours are pregnant. This is confirmed by other studies which found that risky behaviour in teenagers can increase the risk of teenage pregnancy (Schofield**,** Bierman, Heinrichs & Nix**,** 2008; Morin 2018). In the current study, it is found that participants in the pregnant group have a large proportion coming from single-parent homes and a large proportion of them also showed a tendency towards risky behaviour. It could be said that a single-parent home increases the chances of risky behaviour including risky sexual behaviour by the teenager which may eventually lead to pregnancy.

Alcohol consumption is a risky behaviour which affects teenagers. In this study alcohol consumption in the pregnant group is quite high compared to the non-pregnant group. It is not however statistically significant. The findings in this study show that the alcohol consumption and use of illicit drugs and cigarette smoking are forms of risky behaviour and are teenagers that use them regularly are highly at risk of getting pregnant in their teenage years. Other studies confirm these findings, stating that high school students that smoke, drink and make use of drugs are likely to become pregnant (Dryden, 2011). Another study also states that there is a strong association between the use of alcohol and risky sexual behaviour that lead to teenage pregnancy (Connery, Albright, & Rodolico, 2014). Another study shows that teenagers in South Africa's KwaZulu-Natal province who consumed alcohol or smoked cigarettes were 2 to 3 times more likely to be sexually active, increasing the chances of teenage pregnancy (Jonas, Crutzen, Van den Borne, Sewpaul, & Reddy, 2016).

5.2.8 The Link between the Single Parent Family Attachment Style and Teenage Pregnancy

Children and teenagers seem to be more prone to problem behaviour that display insecure attachment when raised by a single parent (Carlsund, Eriksson, Lofstedt & Sellstrom, 2012).

The children from a single parent family have a strong correlation with drug use, poverty, school failure and teenage pregnancy (Baras, 2015).

When there is insecure attachment between parent and child, the child grows up with a difficulty in trusting that the world is a safe place, as well as a difficulty in trusting other people. These form the risk of insecure attachment, including unpredictable parental behaviour, childhood abandonment, physical, verbal or emotional abuse and unrealistic parental expectations. These make a child believe that people around her cannot be trusted and her world may not be safe.

Such a child could be termed neglected and tends to develop an insecure attachment style. The insecure attachment style could lead to difficulties in relationships later in life, including not maintain a healthy proximity to other people. This could in turn lead to a lack of definite commitment in relationship or too much clinging in a relationship. This may result in being involved in casual sex and having multiple partners within a short space of time which eventually could lead the teenager to more risks of teenage pregnancy.

Secure attachment styles would usually maintain a healthy proximity to other people. These people are not afraid of being close or intimate to people, but do not also depend on intimacy in a pathological way. Teenagers with insecure attachment styles would rather avoid closeness with other people and when they are close they seem to be ‘clingy’ like their lives depended on those people.

5.3 LIMITATIONS OF THE STUDY

There are a number of limitations in this study. Firstly, the sample is small and homogenous; and as such may not be a representative enough of the general population and may thus be difficult to generalize to the whole population. However, care was taken to obtain the sample from an area and an institution that usually attracts people of all walks of life and ethnic groups. The small sample size could also have increased the risk of error variance, which in turn could have influenced the outcome of different analyses employed in the study. Owed to the latter, the analyses should be interpreted with caution.

As for the instruments used in the study, a shortened version of the Inventory of Parent and Peer Attachment was used whereby the peer section was completely omitted as it was not relevant to the study. It is therefore possible that the IPPA used could be less reliable. However, internal reliability reported by the Cronbach's Alpha was quite strong. The other instrument used, the Biographic Questionnaire was self-developed and may, therefore, have less reliability as it had not been tested elsewhere. However, the pilot study minimized possible flaws.

Time and fund constraints reduced the inclusion of other factors that may also affect teenage pregnancy, hence the emphasis on attachment styles.

Only one location was selected for data collection. This could limit effects on those in rural versus urban areas. It is, however, hoped that being an intermediate referral hospital it will have provided for a comprehensive population, reflective of the average teenagers in Namibia, because of referrals from peripheral regions.

It was expected that the respondents might be cautious in answering questions wanting to sound socially acceptable. The interviewer attempted to limit this by endeavouring in each case to put respondents at ease with an assurance that nothing they said would be used against them.

A single parent may have got married to a spouse who is not a biological parent of the child. For the purpose of this study, however, never married will indicate marital status at birth and up to five years of age.

Limitations of Self-Reporting

Self-Reporting was used in this research for the following reasons which are common in psychology research and investigations. It is a relatively cheap way to get data, both in time and cost. They were found to be easily applied to larger samples such as this study had. In cases where the constructs might have been difficult to obtain, otherwise for example by observation, self-reporting is very useful, for instance to determine risky behaviour in the respondents (Hoskin, 2012). The researcher used self-reporting as identified by Hoskin in 2012. Self-reporting as used in this study has several limitations including the following:

Ability to judge self – The respondents may not have been able to be good judges of themselves and so may not have provided accurate information concerning themselves in some instances.

Honesty – Self-report relies on the respondent being honest, as in the case of this study. Respondents may be sensitive and less honest with questions regarding sexual behaviour and other risky behaviours.

Bias of Response – Respondents may tend to respond in a biased way such as answering yes for every question.

Understanding – Respondents may not fully understand questions and may not interpret questions correctly especially on abstract concepts and as such answer wrongly.

Rating Scales – The questionnaire may use rating scales such as is used in the IPPA. Respondents have a tendency to indicate extremes only, while others have the tendency to only indicate midpoints.

Ordinal Measures – Most self-reporting produces ordinal data. Ordinal data can only be ranked but may not be able to indicate the measure between one level and another.

Sample Control – Self reporting reduces the involvement of the researcher, as respondents can complete the questionnaire without the researcher being present (Hoskin, 2012). In this research, however, the researcher was present for all the collection of data in order to minimize limitations.

5.4 IMPLICATIONS OF FINDINGS

The presence or absence of fathers has a direct impact on the outcome of their teenage daughter's risk of getting pregnant. It impacts the daughters' sense of security and affects the way they choose to relate to the opposite sex. Presence or absence of fathers affects the socioeconomic status of a family, which in turn could influence the environment in which daughters grow up and may put them at risk of becoming pregnant as teenagers.

The study has shown that being raised by a teenage mother increases the chances of girls becoming pregnant as teenagers. The teenage mother is less likely to have the skills to raise a child and form a secure attachment. It is not likely that she will get married to the father of her first child or complete her education. These will have an impact on the kind of job she gets which may be of low income. All these factors combined will impact her and her family's socioeconomic status.

Teenage pregnancy has a great impact on the level of HIV/ AIDS in the country. Teenage pregnancy implies that sex had been unprotected and most pregnancies unplanned,

causing teenagers to be most vulnerable to STIs causing HIV/AIDS and other health implications. Implications for the nations' economy are quite vast. The workforce of the nation is drastically reduced in number by teenage pregnancy and opportunistic HIV/AIDS. While the nation expects a youthful vibrant workforce, they may be incapacitated by the responsibility of child rearing before they are ready, thereby reducing the ability to be employed because of the lack of education and experience. Such teenagers may also get sick and sometimes die in their youth from diseases like HIV/AIDS. Previous studies reveal that AIDS is the second cause of death in teenagers globally. It is the main cause of death in Africa (WHO, 2018). The study reveals that insecurely attached teenagers are more at risk of engaging in risky sexual practices, which increases their chances of getting infected by HIV/AIDS.

Teenage pregnancy poses health challenges to both the mother and the child. The rate of complications in pregnancy is high for pregnant teenagers, including low birth weight and premature babies. Postpartum mental illness is also a challenge. Teenage mothers may have a number of poor outcomes including premature birth, low birth weight and death during infancy (Dennis & Mollborn, 2013). This study reveals that securely attached girls are less likely to get pregnant as teenagers, thus there is a reduction of these health issues.

5.5 RECOMMENDATIONS

5.5.1 Recommendations for Further Studies

Future studies could use longitudinal research designs, which is appropriate for intergenerational analysis and could examine the effects of the study from one generation to the next. There is a need for research that will employ a mixed method design, employing quantitative and qualitative methods, so that more insight may be gained into reasons for perceived attachments. Future research may consider further examining attachment between fathers and their daughters and the developmental outcomes.

The results of this study suggest that further investigation on the impacts of teenage pregnancy on the infection rate of HIV/AIDS may be worthwhile.

5.5.2 Recommendations for Government and Other Stakeholders

Government and other stakeholders could develop activities such as sports, volunteering to take care of animals or elderly people and other after-school activities that may keep teenagers active and positively occupied. This might reduce the negative associations that elevate risky behaviour and teenage pregnancy. Government and other stakeholders could develop systems that will assist in keeping pregnant teenagers in school, thus reducing the cycle of teenage mothers having daughters who will also get pregnant as teenagers. This could be done by encouraging that the pregnant girls go back to school and the school system have school guidance counsellors that will assist them to get back into the system. Education is a great tool for breaking the cycle of poverty and teenage pregnancy.

Grants should be made available for the infants, to alleviate poverty and responsibilities of maintenance by the mother, thus increasing the possibility of the teenagers returning to school and hopefully completing their education. The government and policy makers should develop programmes which will empower teenagers to cope with challenges they may face in adolescence particularly in relationships they may have and how to avoid unwanted sex. The government and policy makers could also develop programmes in and outside of the school that will focus on sex education, including prevention of pregnancies, prevention of sexually transmitted disease, self-esteem and being goal oriented.

There should be intensive prevention programmes to minimize teenage pregnancies and contracting HIV/AIDS or other health related problems and challenges. Such programmes could include massive promotion of abstinence from sex, condoms and other contraceptive use through Information, Education and Communication (I.E.C.). Marriage should be encouraged and promoted. It should be promoted by respected members of the community, from homes to teachers, to the church and leaders of society. Breakups should be prevented. Fathers should be encouraged to be involved with their children and bond with them, creating channels of communication even if they do not live in the same household as the children.

Counselling sessions with parents should be made available, where the counsellor can encourage the parent to engage with the child to heal or improve an insecure attachment to become more secure. This could be done for example by encouraging more quality time spent with the child , helping the parent understand that the seemingly “aggressive stance” of the teenager may just be a way of the child “asking for comfort” thus building trust and

communication which are key to secure attachment. Communication between parent and child could help develop secure attachment (Leidy, Guerra & Toro, 2010) which will in turn reduce the risk of teenage pregnancy.

Parenting classes for teenagers that are pregnant would increase the chances of the development of a secure attachment between the mother and the unborn child. This may likely prevent a spiral circle of teenage pregnancy and other negative outcomes.

Counselling could be promoted in the community as a wellness campaign. There the parents and the community would be taught how to acknowledge their children's feelings and how to help the child in understanding those feelings and dealing with them. There should be a raising of public awareness on the importance of the link between parent-child attachment styles and teenage pregnancy. This could be done through social media agencies such as the radio, television and role play dramas for example.

Health facilities and health facility workers should be made and trained to be more 'adolescent friendly' more approachable so the teenagers can feel free to come to them. They would then be able to obtain counsel and be guided, with a focus on making the child feel secure and be open to communicate and trust the service providers in such agencies. This would result in positive outcomes of avoiding getting pregnant as teenagers.

Workshops on sex education be made available in the community, particularly focused on community members including parents and guardians as well as the children. These workshops should include prevention of pregnancies, prevention of sexually transmitted diseases, developing of self-esteem and motivating people to be goal-oriented. Also workshops that will improve parent-teenager communication should be held.

Psychologists and health therapists should be encouraged to use the understanding of attachment styles in the parent-child relationship while counselling clients, with emphasis on building effective and secure attachment bonds.

5.6 CONCLUSION

Teenage pregnancy is a pandemic with grave consequences to the mother and the child which affects nations worldwide. There have been global efforts to curb teenage pregnancy in many ways such as an increase in sex education in schools and other areas targeting young people. There has also been a rise in the drive for pregnancy prevention

and prevention of sexually transmitted diseases such as HIV/AIDS by increasing the supply and availability of contraceptives and condoms in the health and education systems in the nation and the world at large. Teenage pregnancy, however, does not seem to have been reduced significantly, there is therefore the need for other interventions to be sought to combat it from all angles. Investigating attachment styles and its influence on teenage pregnancy will lead us to seeking and promoting an attachment style between the parents and the child in which teenagers are less likely to get pregnant in their adolescent years. Based on this study, this would be the secure attachment style.

This study was carried out with an interest to see if efforts to curb teenage pregnancy could be initiated at the family level and thus the investigation into attachment styles of the parents and the increasing risk of teenage pregnancy. Efforts to reduce teenage pregnancy in the nation and the world need to involve investigating all possible causes, including examining attachment styles, of the parents and what impact it could have on teenage pregnancy. Through that a focused intervention may be obtained with new strategies that could reduce and contain the rate of teenage pregnancy and the negative impacts on the mother, child and the nation at large. In a developing country like Namibia, teenage pregnancy rates are quite high and seem to be difficult to curb. Single parenting is also very high with many adverse effects on teenage pregnancy. Early bonds formed by parent and child, are a proven determinant for the late development and social outcomes in life, including behavioural tendencies that may encourage teenage pregnancy. Socioeconomic status, teenage parenting, absent fathers, marital status of parent and child residence with the parent are all determinants of single parenting. These in turn affect attachment bonds between the parent and child and consequently impact on determining levels of risky behaviour including sexual, social and ultimately, teenage pregnancy. Worthy investments should be incorporated to form bonds that are lasting with a solid impact on generations to come.

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Enquiries: Ms. F.M. Shiweda

Date: 24 May 2017

OFFICE OF THE MEDICAL SUPERINTENTED

Ms. Lilian Nwagboso
University of South Africa (UNISA)
P.O. Box 4125
Windhoek, Namibia

Dear Ms. L. Nwagboso

RE: SINGLE PARENTING ATTACHMENT STYLES AND HOW IT AFFECTS TEENAGE PREGNANCY RATES IN NAMBIA.

The above mentioned subject refers:

This office hereby grants you permission to do research single parenting attachment styles and how it affects teenage pregnancy rates in Namibia at Intermediate Hospital Katutura, Khomas Region.

Thank you

Yours in health

.....

DR. A. MUKENDWA
ACTING MEDICAL SUPERINTENDENT

APPENDIX A

APPENDIX B

REPUBLIC OF NAMIBIA

Ministry of Health and Social Services

Private Bag 13198
Windhoek
Namibia

Ministerial Building
Harvey Street
Windhoek

Tel: 061 – 203 2562
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E-mail: hnangombe@gmail.com

OFFICE OF THE PERMANENT SECRETARY

Ref: 17/3/3
Enquiries: Dr. H. Nangombe

Date: 16 May 2017

Ms. Lilian Nwagboso
University of South Africa (UNISA)
PO Box 4125
Windhoek
Namibia

Dear Ms. Nwagboso

Re: Single parenting attachment styles and how it affects teenage pregnancy rates in Namibia

1. Reference is made to your application to conduct the above-mentioned study.

2. The proposal has been evaluated and found to have merit.

3. **Kindly be informed that permission to conduct the study has been granted under the following conditions:**

3.1 The data to be collected must only be used for academic purpose;

3.2 No other data should be collected other than the data stated in the proposal;

3.3 Stipulated ethical considerations in the protocol related to the protection of Human Subjects should be observed and adhered to, any violation thereof will lead to termination of the study at any stage;

APPENDIX C

LETTER OF INTRODUCTION

My name is Lilian Nwagboso, and I am doing a study as part of the requirements for my training for a Master's degree in Psychology (dissertation) at the University of South Africa.

The aim of the study is to find out if parenting styles of parents particularly single parents affect / contribute to their teenage girls in getting pregnant. This study is important as understanding of attachment styles and the effects on teenage pregnancy may help reduce teenage pregnancy by identifying and seeking to change attachment styles in the future.

The researcher will conduct interviews with you, as well as require you to complete a questionnaire. These will take place at the Katutura State hospital, at a convenient time to you. The interview and the questionnaire together will last for about 15-20 minutes. Participation in the study is of your own free will. Your taking part or not will not affect you in any way.

All information will be regarded as confidential, and you will not be identified by name or otherwise in the study. All information taken will be used solely for the research and would be kept safe. Free counseling would be available from the Women and child Abuse Center. The telephone number is (061)-2039111

If you agree to take part in the study, please sign the attached form. For any questions or queries you may contact me on 0812534775)

Thank you

Yours sincerely,

Lilian Nwagboso

APPENDIX D

Participant Informed Consent Form

I have read and understood the information sheet and I am aware of the nature of this study. I hereby voluntarily consent to being interviewed by NL Nwagboso for her study on single parent attachment style and how it affects teenage pregnancy in Namibia.

Please tick

☐ Participation in this interview is completely voluntary.

☐ I may refuse to answer any questions I would prefer not to.

☐ I may withdraw from the study at any time.

☐ I understand that there are no direct risks or benefits to participating in this study. No information that may identify me will be included in the research report, and my responses will remain confidential.

☐ The researcher may use direct quotes taken from my interview, in the research report, provided no information that may identify me is included.

☐ I will receive a summary of the research results if requested. The researcher will assist me in contacting relevant counselling services should I feel that I require such services as a result of my participation in this study.

…… ……

Parent/Guardian/Participant's signature Date

Researcher's signature Date

APPENDIX E

QUESTIONNAIRE

1. How old are you? .....

2. Who did you live with when you were?

Age	Mother &Father	Mother	Father	Other	Specify
0-2					
3-6					
7-14					
15-19					
20 +					

3. Who do you consider to be your primary caregiver (someone who takes care of you?)

Mother & Father	Mother	Father	Other	Specify if other

4. How many children do you have?

0	1	2	3	4	5

5. My children live with

Grandpa | Parents | Myself | Others

6. What level of education do you have?

8 & | 9 - | 12 | Tertiary incomplete | Tertiarycomplete

7. Available facilities at home

Flush | Electricity | Running

8. Do you live at home with one or both parents presently?

one | both | none

9. If one indicates why | Never | Widow | Divorced/Separated | Married |

If divorced/separated how long? .....

10. Are you working? | yes | no |

11. What type of job are you doing? _____

12. What is your main source of financial support?

Own job	partner	parents	Other specify

13. Household monthly income in Namibian Dollars

No Income	Less 999	1000 – 1499	1500 - 1999	2000 - 4999	5000 - above

14. What was your mother's age at her first pregnancy? _____

15. Mother's level of education?

none	Primary	Secondary incomplete	Secondary complete	Tertiary incomplete	Tertiary complete

16a. Have you ever had sex Y/ N

16. How old were you when you had sex for the first time _____

17. Did you drink alcohol or use drugs the last time you had sexual intercourse yes/ no

18. Did you or your partner use a condom the last time you had sexual intercourse yes / no

Take	Yes	no

19. Do you take alcohol?

How often	Every day	Once a week
With who	Alone	With friends

20. Do you smoke cigarette? never occasional regularly

21. Do you take drugs? (e.g. marijuana) never occasional regularly

APPENDIX F

INVENTORY OF PARENT AND PEER ATTACHMENT (IPPA)

Authors: Gay Armsden, Ph.D. and Mark T. Greenberg, Ph.D.

This questionnaire asks about your relationships with important people in your life; your mother, your father, and your close friends. Please read the directions to each part carefully.

Part I

Some of the following statements ask about your feelings about your mother or the person who has acted as your mother. If you have more than one person acting as your mother (e.g. a natural mother and a step-mother) answer the questions for the one you feel has most influenced you.

Please read each statement and circle the ONE number that tells how true the statement is for you

	Almost Never / never true	Not very often true	Some-times true	Often true	Almost always/ Always true
1. My mother respects my feeling.	1	2	3	4	5
2. I feel my mother does a good job as my mother.	1	2	3	4	5
3. I wish I had a different mother.	1	2	3	4	5
4. My mother accepts me as I am.	1	2	3	4	5
5. I like to get my mother's point of view on things I'm concerned about.	1	2	3	4	5
6. I feel it's no use letting my feelings show around my mother.	1	2	3	4	5

7. My mother can tell when I'm upset about something.	1	2	3	4	5
8. Talking over my problems with my mother makes me feel ashamed or foolish.	1	2	3	4	5
9. My mother expects too much from me.	1	2	3	4	5
10. I get upset easily around my mother.	1	2	3	4	5
11. I get upset a lot more than my mother knows about.	1	2	3	4	5
12. When we discuss things, my mother cares about my point of view.	1	2	3	4	5
13. My mother trusts my judgment.	1	2	3	4	5
14. My mother has her own problems, so I don't bother her with mine.	1	2	3	4	5
15. My mother helps me to understand myself better.	1	2	3	4	5
16. I tell my mother about my problems and troubles.	1	2	3	4	5
17. I feel angry with my mother.	1	2	3	4	5
18. I do not get much attention from my mother.	1	2	3	4	5

19. My mother helps me to talk about my difficulties.	1	2	3	4	5
20. My mother understands me.	1	2	3	4	5
21. When I am angry about something, my mother tries to be understanding.	1	2	3	4	5
22. I trust my mother.	1	2	3	4	5
23. My mother doesn't understand what I'm going through these days.	1	2	3	4	5
24. I can count on my mother when I need to get something off my chest.	1	2	3	4	5
25. If my mother knows something is bothering me, she asks me about it.	1	2	3	4	5

Part II

This part asks about your feelings about your father, or the man who has acted as your father. If you have more than one person acting as your father (e.g. natural and step-father) answer the question for the one you feel has most influenced you.

	Almost Never / never true	Not very often true	some-times true	often true	Almost always/ always true
1. My father respects my feelings.	1	2	3	4	5
2. I feel my father does a good job as my father.	1	2	3	4	5
3. I wish I had a different father.	1	2	3	4	5
4. My father accepts me as I am.	1	2	3	4	5

5. I like to get my father's point of view on things I'm concerned about.	1	2	3	4	5
6. I feel it's no use letting my feelings show around my father.	1	2	3	4	5
7. My father can tell when I'm upset about something.	1	2	3	4	5
8. Talking over my problems with my father makes me feel ashamed or foolish.	1	2	3	4	5
9. My father expects too much from me.	1	2	3	4	5
10. I get upset easily around my father.	1	2	3	4	5
11. I get upset a lot more than my father knows about.	1	2	3	4	5
12. When we discuss things, my father cares about my point of view.	1	2	3	4	5
13. My father trusts my judgment.	1	2	3	4	5
14. My father has his own problems, so I don't bother him with mine.	1	2	3	4	5
15. My father helps me to understand myself better.	1	2	3	4	5
16. I tell my father about my problems and Troubles	1	2	3	4	5
17. I feel angry with my father	1	2	3	4	5

18. I don’t get much attention from my father.	1	2	3	4	5
19. My father helps me to talk about my difficulties.	1	2	3	4	5
20. My father understands me.	1	2	3	4	5
21. When I am angry about something, my father tries to be understanding.	1	2	3	4	5
22. I trust my father.	1	2	3	4	5
23. My father doesn’t understand what I’m going through these days.	1	2	3	4	5
24. I can count on my father when I need to get something off my chest.	1	2	3	4	5
25. If my father knows something is bothering me, he asks me about it.	1	2	3	4	5