

Title:

**Examining the impact of cohabitation on fertility amongst South Africans:
An analysis of the National Income Dynamics Study Data.**

**Submitted in partial fulfillment of the Requirement of the degree
Masters (Population Studies) in the School of Built
Environment and Development Studies**

Faculty of Humanities

University of KwaZulu-Natal

Howard College Campus

Name: Ntombiziphelele Dube

Student Number: 213506401

Supervisor: Mohammed Vawda

Date Submitted: May 2019

**UNIVERSITY OF
KWAZULU-NATAL**

Declaration

Submitted in partial fulfilment of the requirements for the degree of Masters in Population Studies, in the Graduate Programme in the School of Development Studies, University of KwaZulu-Natal, and Durban, South Africa.

I declare that this dissertation is my unaided work. All citations, references and borrowed ideas have been duly acknowledged. It is being submitted for the degree of Masters in Population Studies in the Faculty of Humanities, Development and Social Science, University of KwaZulu-Natal, Durban, South Africa. None of the present work has been submitted previously for any degree or examination in any other University.

Student signature

Date

Abstract

Conducted studies on marriage patterns in South Africa have shown a clear trend towards decreasing proportions of married women and an increase in age at first marriage. Despite marriage being one of the proximate determinants of fertility, the role of these nuptiality changes on the country's decreasing fertility levels has not been adequately explored. Using data from the National Income Dynamics Survey, wave 3 this paper fills this research gap by examining the relationship between cohabitation and fertility trends among South Africans.

The aims and objectives of this study are:

1. To establish and compare fertility rates in South Africa using STATA to measure the Age-Specific Fertility Rate, Age-Specific Marital Fertility Rate, Total Fertility Rate, Total Marital Fertility Rate and Children Ever Born to get the fertility differences amongst married and cohabiting couples. Also use stata commands to analyse the National Income Dynamics Survey data, wave 3 with statistics regarding fertility rate by married and cohabiting couples.
2. To highlight the different socio-economic factors associated with fertility differences among cohabiting and married couples in South Africa.
3. To explore the change in marriage trends and unions

The decision to focus on South Africa as a study area is because research has shown that more South Africans, especially women are choosing to remain single/ never- married and those that do get married, tend to get married later in life as compared to 50 years ago.

Data analysis shows that as age increases, the number of Children Ever Born (CEB) increases meaning that possibly older women are still having children in South Africa. Singulate Mean Age At Marriage (SMAM) is lower for the age group 50-54, meaning that in South Africa most individuals who are single are younger than 50. Although South Africans spend most of their younger years single, their fertility rates show the opposite and they are high especially for the individuals that have secondary schooling. The cohabitation rates are also highest amongst this group. The data analysis also shows that the White population tends to cohabit before other races but eventually ends up getting married, unlike African who cohabit later but end up never getting married.

Acknowledgements

First and foremost I would like to thank the highest God, whom without none of this would have been possible. Ebenezer Thixo wama Zulu ungigcine kwaze kwala.

My Supervisor M. Mohammed Vawda, Thank you very much.

To all my friends and former colleagues and classmates, thanks guys for the words of encouragement, the support, and motivation.

To my family, Gogo and mkhulu your prayers have been our anchor all these years.

To my siblings, batase khaya. Let's do it for the rents.

Ngxabi, my bestie. Ngiyabonga mntu for always being there and always being my sounding board and biggest fan.

Ziphe and Phiwo, my sisters in the struggle, aluta continua. Ngiyani appreciate bo mntu.

Last but not least my parents, Mr and Mrs. Dube. Words fail me. I am eternally grateful to you guys — the love and support.

Dear self, well done for doing what seemed impossible. This is just the beginning of many great plans the Lord has in store for you. Stay focused, stay determined and most importantly never stop believing in yourself, ngeke uzisole.

All my children, you guys have been my biggest motivators and inspiration. The standard has been set; I am not expecting anything less than your absolute best from you guys.

I dedicate this dissertation to my father, Mr. Dumisani Dube. Although life did not afford you the opportunity to be a graduate, you have produced 4 graduates with over 9 degrees amongst them. Mbuyazi, Nzwakele, Khushwayo. Uyindoda emadodeni.

Acronyms

NIDS – National Income Dynamics Survey

TFR- Total Fertility Rate

SMAM- Singulate Mean Age at Marriage

ASFR- Age-Specific Fertility Rate

ASMFR- Age-Specific Marital Fertility Rate

TMFR- the Total Marital Fertility rate

CEB- Children Ever Born

SADHS- South African Demographic Health Survey

SALDRU- Southern Africa Labour and Development Research Unit¹

HIV/AIDS-Human Immuno Virus/Acquired Immuno Deficiency Syndrome

¹ Disclaimer: For purposes of this research the term ‘African’ refers to South African belonging to the ‘black’ racial group.

Table of Contents

Declaration	i
Abstract	iii
Acknowledgements.....	iv
Acronyms	v
Chapter One	1
Introduction	1
1.1. Background	1
1.2. The motivation for study and Problem Statement:	5
1.3. The rationale of the Study	7
1.4. Aims and objectives	8
1.5. Research questions	8
1.6. Theoretical Framework	8
1.7. Overview of dissertation	12
Chapter two	14
Literature Review.....	14
2.1. Introduction	14

2.2. Marriage in South Africa	14
2.3. Cohabitation	17
2.4. Cohabitation and Delayed Marriage	19
2.5. The relationship between Marriage, Education and other Factors	21
2.6. Changes in never-married	26
2.7. Fertility Trends in South Africa	27
2.8. Contraception	29
2.9. Cohabitation and Fertility	30
2.10. Factors associated with fertility decline.	31
2.11. Conclusion	32
Chapter	3
.....	33
Methodology	33
3.1. Introduction	33
3.2. Data Source: National Income Dynamics Survey	33
3.3. Study Hypothesis	34
3.4. Research questions	34
3.5. Methods of analysis	34
3.6. Comparison of wave 2 and wave 3	38
3.7. Independent and Dependent Variables for the Study	38
3.8. Conclusion	40
Chapter 4	41
Results	41
4.1. Introduction	41

4. 2. Analysis of NIDS	41
4.3. Cohabitation Trends	42
4.4. SMAM ANALYSIS.....	47
4.5. Fertility levels	50
4.6. CEB AVERAGES	54
4.7. Measures of significance between fertility, education level, residential type, and cohabitation: Pearson chi-square and t- test.....	57
4.8. Conclusion	61
Chapter 5	62
Discussion, recommendations and limitations	62
5.1. Introduction	62
5.2. Discussions	62
5.3. Implications of the Findings	66
5.4. Recommendations	67
5.5 Suggestions for further research	69
5.6. Contributions of Research Findings.....	70
5.7. Limitations of the Study.....	71
5.8. Conclusion	71
References	72
Appendix	1

Chapter One

Introduction

“I believe that the more you know about the past, the better you are prepared for the future.”

~ Theodore Roosevelt

1.1. Background

Until recently, not much was known about South African demography as demographic events, such as marriage, fertility, and mortality still had to be researched (Hosegood et al., 2009). However, more detail on South African demography emerged in 1994 when the democratic government took office. The collection of data in the first democratic South African census in 1996 enabled access to before unobtainable information on South Africa’s demographic data (Department of Social Protection, 2016). Different levels of fertility and marital patterns were observed among different racial groups, but the relationship between these two demographic phenomena was argued (Koski et al., 2017). Palamuleli (2010) explained that exposure to the risk of childbearing in any population is determined by marital stability and dissolution, this study aims to examine cohabitation trends and to explore its implications for fertility.

“Marriage is the process by which two people make their relationship public, official, and permanent. It is the joining of two people in a bond that putatively lasts until death, but in practice is often cut short by separation or divorce” (Lundberg et.al., 2016: 79). There are 5 commonly known/recognized marital types namely:

Civil Marriages

Civil marriage is where the state grants you legal recognition through documentation (marriage certificate) of your partnership (marriage) to your life partner irrespective of religious or cultural affiliation, in accordance with marriage laws of the state.

Religious Marriages

Certain states do not recognize civil law marriages because they only accept religious marriage as binding when done according to their specific religious rites and laws.

Civil Unions

South Africa was one of the first countries (2006) in the world to recognize civil union marriages/ partnerships to accommodate same-gender couples.

Customary Marriages

The Recognition of Customary Marriages Act, 120 of 1998, came into operation on 15 November 2000 and gives full legal recognition to customary marriages in South Africa. Customary marriages can be monogamous or polygamous. Polygamy means that a male older than 18 years of age can marry more than one wife. A customary marriage can only be concluded in accordance with customary law. Customary law is defined as the customs and usages traditionally observed among the indigenous African peoples of South Africa and which forms part of the culture of those people.

Common-law marriage

Common-law marriage sometimes called *sui juris* marriage, informal marriage or marriage by habit and repute, is said to have occurred when two people have been living together in a domestic partnership for a certain length of time but were never joined in a marriage during a specific marriage ritual or their marriage was never registered in a civil registry. The claim is then that when you in a common-law marriage then you can then enjoy the same rights as a married couple or even claim financially from your partner in case of a separation or death. Common-law marriage is recognised in some states but it is not recognised under South African law (Lundberg et.al., 2016: 83).

Cohabitation refers to a state when unmarried individuals i.e. it is not recognized as one of the above mentioned marital types live together and partake in activities often married couples do. The difference between cohabitation and marriage mainly is the legal element/ protection that is offered by marriage that cohabitation does not offer. Like any legal obligation, marriage is guided by the countries set laws and soon as individuals are married or make a decision to marry are legally bound by their marriage and cannot nullify the union unless formal legal steps are taken (Lundberg, 2016).

In the approaching paragraphs, the author will be focusing on past patterns and background information on marriage, cohabitation and fertility trends. Increasingly, research in developing countries showed that fertility started to decline in the late 1980s and 1990s, especially in the regions of Asia and Latin America (Swart, 2009). However, sub-Saharan Africa still lags regarding fertility decline. South African fertility is similar to those of both developed and developing countries, the White (1, 70) and Indian (1, 85) populations with total fertility rates being less than the 2.1 replacement level. The Coloureds and Africans being slightly higher than the 2.1 replacement level, that is, according to the 2011 South African Census (Department of Health, 2012). The 2018 mid-year estimates reveal that there were 1,2 million births in South African with Africans having the most number of births. The TFR was estimated at 2,4 which is a decline from 2,68 in 2008 (STATS SA, 2018). Compared to other Sub-Saharan countries, it is one of the fastest decreasing fertility rates in the region (Lehohla, 2015). The term replacement

level refers to the average number of children a woman needs to have to keep the fertility rate stable or for the population to replace itself from one generation to another (Striessnig and Lutz, 2013).

As highlighted by Hardie and Lucas (2010) cohabitation is a situation whereby a couple that is not yet married legally or under customary law lives together and shares personal resources, without having intimate relations with others. In some cases, cohabiters have a child. It is argued that, between 1965 and 1974, approximately 11% of marriages in the United States were headed by cohabitation (Reinhold, 2010 and Sweet, 1989). As from 1980 to 1984 it was discovered that this percentage increased to 44%. Moreover, in 1994 the number of couples that were cohabiting was estimated to be around 3.7 million in the United Kingdom (US Bureau of the Census, 1995).

For the most part, it is trusted that marriage in Africa is a universal establishment, however, in South Africa, recent studies on marriage patterns demonstrate that marriage is not universal (Koski et al., 2017). Marriage patterns have been changing over time. Research has shown that the number of female nuptials has been decreasing (Mazuy et al., 2014). The decrease in the proportions married is mostly driven by the number of women who do not wed. The proportions never-married and cohabiting, then again, have been increasing. Moore and Govender and Lund (2011) discovered that the number of women who were never-married increased from 58% in 1995 to 60% in 1999. Consequently the number of heterosexual couples that were cohabiting also increased from 4% in 1995 to 7% in 1999 in South Africa. These proportions additionally increased to 63 % for the never-married and 9 % for the cohabiting women in 2003 (South African Demographic Health Survey, 2003).

Racial grouping is a critical determinant of marriage patterns in South Africa as this helps to understand the contrasts in marriage patterns between racial groups. Marriage was practically common among Whites and Indians populations with 95.3% of White women and 91.8 % of Indian women aged 50 and above, married between the period 1995 to 1999 (Hosegood et al., 2009). Kalule-Sabiti and Yaw Amoateng (2013) discovered that White and Indians women will probably be married as compared to Coloureds and African women. The 2001 Census revealed that 60.5 % of White women and 55.2 % of Indian women were married which contrasted with 40.1 % of Coloureds women and 37.8 % of African women (Kalule-Sabiti

and Yaw Amoateng, 2013). The low proportions married among Africans are in all likelihood driven by the cost of bridewealth (Hosegood et al., 2009).

Between 1950 and 1970 South African fertility escalated and levelled off towards the end of that period, each woman having an average of 6-7 children. From 1980-1995 the Total Fertility Rate decreased to an average of 4-5 children per woman (Lehohla, 2015), this is likely to be associated with the socio-economic factors, racial and urban-rural differentials. Before the end of Apartheid, fertility rates across all racial groups had decreased (Williams et al., 2013). The decrease in fertility was viewed as a political and economic strategy by the Apartheid government that was rolled out in the 1970s that encouraged women to take contraceptives and join the job sector (Norling, 2015). As it is embossed in the work of scholars like (Suh, 2014) and (Moultrie and Timæus, 2012) the fertility of the whites and Indians populations decreased much faster as compared to Coloureds and Blacks. Towards the end of the 19th Century, the fertility rates of the White population had been below the replacement level, with a TFR of 1.9 children per woman (Lesthaeghe, 2010). The rate has been constant ever since. For the Indian population, TFR decreased from an average of 6 children per woman in the 1950s to 2.3 children in the mid-1990s, which is close to the 2.1 replacement level.

The TFR of the Coloureds population decreased from 6.5 children per woman in the 1960s to an average of 2.5 children per woman in the 1990s. Africans were the most disadvantaged population group, accounting for approximately 80 % of the country population, they had the lowest decrease. The African population TFR decreased from 6.6 children per woman in the 1960s to an average of 4 children per woman in the 1980s (Lehohla, 2015). In 1990, African TFR was an average of 3.3 children per woman. The politics that drive the above-mentioned differences in fertility levels among racial groups during apartheid were that the White population was given preference as compared to the other races and therefore had better access to services and family planning services (Bongaarts and Casterline, 2013). The past fertility levels and trends were estimated for all South Africans and African South Africans separately (Lesthaeghe, 2010).

Furthermore, Swartz (2009) noted, the South African policy initiatives almost invariably came from the White population due to their demographic similarities with those of developed countries. The only difference was that the White population formed an enclave in a country with a sizeable non-White population, influencing political and personal behaviour. Policies of the apartheid government promoted industrialization and urbanization among the White

minority population, this then impacted the African population within the first four decades of the century as they were not familiar with family planning programmes.

Urban-rural differentials in marriage additionally uncover that marriage is more common in rural regions than in urban zones, this is not shocking as individuals residing in rural areas are still conservative and tend to abide by norms set out by culture and religion. Indeed, even the South African DHS information demonstrated that conventional marriages are by large more favourable among rural inhabitants than common marriage also known as cohabitation (Hosegood et al., 2009).

Level of education is another factor to consider when discussing late age at first marriage. Women who are more educated opt for later marriages. According to Hindin and Fatusi (2009), there are three factors that women consider in the decision-making process of deciding whether to marry early or to delay first marriages to a later age. These factors consist of female labour force participation, women's acquisition of formal education and urbanization (Hindin and Fatusi, 2009). However, scholars like (Sonfield et al., 2013) are in disagreement with (Hindin and Fatusi, 2009) analysis of education and first marriages. According to Sonfield et al., (2013) women who are more educated and financially stable are interested in getting married.

It has been seen that cohabitation is continuously getting scrutinized by some South Africans as it does not abide by the traditional norms. It is seen as an act of rebelling against the set societal norms, i.e. getting married, living together and then having children (Buchanan, 2009). Growth in non-marital fertility is somehow linked to growth in cohabitation. Marriage and fertility in South Africa reveal an unmistakable pattern toward a decreasing number of married women. Increasing the number of women who never married and the number of women who are cohabiting, a climb in age at first marriage and growth in the number of children who end up with only one parent present (Koski et al., 2017). This dissertation, therefore, aims to highlight the unaddressed consequences of cohabitation and thus bridging the information deficit when it comes to this issue. The reason for this is because cohabitation can have some negative repercussions especially in a country like South Africa where marriage is not the norm but the exception. Marriage hypothetically helps reduce the number of fatherless children and the spread of sexually transmitted diseases such as Human Immuno Virus/Acquired Immuno Deficiency Syndrome. This is due to the assumption that once an individual is married they are only having sex with their spouse and marriage also helps ensure

that the married reproduce and therefore the population replaces itself (Bongaarts, 2017). One can then make an association between the high rate of HIV/AIDS in South Africa and the number of fatherless children with low marital rates.

1.2. The motivation for study and Problem Statement:

The average number of children per South African female declined from an average of 6.9 children per women approximately 40 years back to around 4.6 in the 1990s to a TFR of 2.67 after Census 2011 (Department of Health, 2012). These national-level fertility rates cover differences in fertility levels, as fertility in South Africa fluctuates as per demographics and socio-economic factor. For example, in the period between 2006 and 2007, impoverished women had twice the number of children when contrasted with their affluent partners (Lesthaeghe, 2010). South African Census (2001), states that the national TFR was 3.3 for a woman who has never married. Rural and urban differentials reveal 3.6 and 3.1 children for each female, separately (Williams et al., 2013).

The reduction is given driving force by the high late marriage rates in South Africa, with numerous women having their first marriage around their 28th birthday celebration, combined with an increasing number of women who remain unmarried (Jayachandran, 2017). The longer an individual remains unmarried, this tends to prolong their premarital sex engagement or increases their chances of engaging in premarital sex, which in turn increases the number of sexual partners an individual has (Lesthaeghe, 2010). In this manner, it does not just increase the likelihood of being a single parent. However, it likewise encourages the spread of the HIV/AIDS pandemic (Bongaarts, 2017). In Africa, there is a distinct relationship between HIV prevalence and late marriage. “These are some of the highest rating average first age at marriage countries in Africa 28.9 years in Namibia, trailed by 26.7 years in South Africa, 25.8 years in Swaziland and 25.7 years in Botswana that notably these countries also have high HIV/AIDS rates” (Bongaarts, 2007: 5).

South Africa has conducted three Demographic Health Surveys, and in all reviews, the number of women never-married women increased from 51.3% in 1992 to 54.3% in 2000 and 57.9% in 2006–2007 (MSouth African DHSS South Africa and Macro International Inc, 2008). The 1992 and 2000 South African DHSs both revealed that unwed women's fertility represented roughly 43% of all births and 60% of every single initial birth (SmithGreenaway, 2016). In that capacity, marriage was observed not to be a huge factor in determining fertility. Both the number of men to women and their ability to wed have diminished in South Africa. The 2001 sex proportion of 94 guys per 100 females in South Africa diminished to 90 guys

per 100 females in 2006 (MSouth African DHSS South Africa and Macro International Inc, 2008).

Young men also tend to struggle to pay ilobola or bridewealth for their prospective wives as it has become more expensive to do so and there are also high unemployment rates across all Sub-Saharan Africa countries (Posel and Casale, 2013). Before, in Sub-Saharan Africa bridewealth was paid with cows with the help of the family. These days the instalment has moved to money, and it is the sole obligation of the man who needs to wed. It is important to note that in South Africa, this is possibly the reason why most children do not use their father's surname and therefore have no access to their father's assets (Pinkley, 2015). As indicated by the 2006–2007 South African DHS (NDHS) just 5% of children underneath the age of 18 lived with only their fathers, while 33% lived with only their mother. Only 26% lived with both guardians, and 36% lived with neither parent (Jayachandran, 2017).

Outside of marriage child-bearing in South Africa has been viewed as a societal problem, as the men tend to not be present or take responsibility for their actions, leaving the mother to bear all the responsibility by herself (Rhoades et al., 2009).

Child-bearing outside of marriage is also associated with low socioeconomic status. Single parents tend to be more susceptible to being in need and being poverty-stricken as it is more popular among financially burdened families (Clark et al., 2012). Guzzo (2010) analyzed data from the Ghanaian 1993, 1998 and 2003 DHS to find out the determinants of infant mortality in 3 Northern Ghana provinces. The fundamental finding of the examination was that children born to married women had lower mortality levels as compared to children born to unwed mothers. By the previously mentioned investigation, (Barbarin and Richter, 2013), looking at premarital childbearing in Sub-Saharan Africa, agrees with Guzzo, 2010 findings and also states that unmarried women tend to abandon their children. Subsequently, never-married women's fertility represents a challenge for the mission to enhance the growth and progress of the children.

In Southern Africa, research has shown that most pregnancies are unplanned or were unintended, which is one of the reasons why so many families depend on social grants to provide for their children as they are unable to by themselves (Lwelamira et al., 2012). For instance, never-married South African women report substantial amounts of unplanned pregnancies, with these levels increasing (MSouth African DHSS South Africa and Macro International Inc, 2008; Johnson et al., 2011). In 1992, 59.7% of the unintended pregnancies

were amongst the never-married as compared to 20.4% by the married (Smith-Greenaway, 2016). This shows that unmarried women tend not to make use of family planning services to try and prevent unplanned pregnancies, and if they do, it is often after the first birth (Chandra-Mouli et al., 2014). This pattern tends to result in a vicious cycle of poverty, where the child will also have a child outside of marriage and be dependent on social grants from the government (Mbanefo, 2013).

There is concern over the number of women who have children outside of marriage, as this increases the child's potential to be born in a female-headed household and be raised by a single parent. Accessible confirmation focuses on the increasing feminization of poverty, as female-headed family households represent 40% of all families in South Africa, with a per capita wage of R 2725.20 as opposed to R 4443.38 per capita salary for male-headed family households (Clark & Hamplwa, 2011). It is good to note though that not all never-married women live in poverty. Some are independent and able to provide for their children and families.

Even though premarital childbearing poses some issues as above mentioned, having too little children is also an issue, this is the case when cohabiting couples choose to put off childbearing until they are married. Some of the main reasons presented for this are career advancement and women choosing to put off having children until later; therefore cohabitation also tends to have negative cultural and economic impacts on a broader spectrum (Angotti et al., 2009). The only way a nation can preserve itself is by populating itself, if not so it can become extinct, just like the decreasing rhino population. It will just be a tale that a particular nation once existed and risk of loss of cultural diversity (Kroager and C, 2014). Decreased fertility also means that there will be fewer people to contribute to the working force (economically active individuals) and paying tax to help cover the needs of the country. This will result in decreased GDP contributions and some individuals contributing to social security is hence resulting in more economically inactive individuals than the working force (Rhoades at al., 2009). Decreased GDP contribution causes an increase in the dependency ratio which threatens economic growth. Another possible threat is the loss of innovation and new ideas, as young individuals are mostly responsible for that.

1.3. The rationale of the Study

The rationale of the study is to explore the consequences of increased cohabitation rates and the issues it poses; this will be done by highlighting the increasing cohabitation rates and how it affects fertility. Despite marriage being one of the established proximate determinants of

fertility by Bongaarts (1978), there is not sufficient data that adequately explores the impact increasing age at first marriage has on fertility and the impact of the decreasing fertility measures. By examining the data from the National Income Dynamics Survey, Wave 3 this research will aim to fill that research gap by justifying as to why cohabitation should be considered as a determinant of fertility by Bongaarts.

1.4. Aims and objectives

“The aims/objectives of this study are:

1. To establish and compare fertility rates in South Africa using STATA to measure the Age-Specific Fertility Rate, Age-Specific Marital Fertility Rate, Total Fertility Rate, Total Marital Fertility Rate and Children Ever Born to get the fertility differences amongst married and cohabiting couples. Also use stata commands to analyse the National Income Dynamics Survey data, wave 3 with statistics regarding fertility rate by married and cohabiting couples.
2. To highlight the different socio-economic factors associated with fertility differences among cohabiting and married couples in South Africa.
3. To explore the change in marriage trends and unions

The overall objective of this study is to contribute to the study of marriage and cohabitation patterns in South Africa as this has not been adequately explored, which is an issue because without formal procedures to govern partner relations it is hard to plan for the future and well as to help understand the current context and issues associated with these rates.

1.5. Research questions

1. How have marriage trends and other forms of unions changed?
2. What is the relationship between marriage and fertility in South Africa?
3. How do the different socio-economic factors affect marriage and fertility in South Africa?

1.6. Theoretical Framework

In 1978 John Bongaarts formulated the seven proximate determinants of fertility, which he went on to explain as factors that influence an individual's fertility directly (Bongaarts, 2010). The seven determinants namely were the proportion of married women among all women of reproductive age, contraceptive use and effectiveness, duration of postpartum infecundability (or postpartum insusceptibility), induced abortion fecundability (including frequency and timing of intercourse), the prevalence of permanent sterility and spontaneous intrauterine mortality. Bongaarts proposed the determinants of fertility when it was assumed that all

fertility occurs in marriage. Hence, all his calculations are based on married women of reproductive ages (Madhavan, 2014). "(Stover, 1998: 257) then pointed out the limitations of Bongaarts old model arguing that:

“The Bongaarts proximate determinants framework is theoretically strong. However, there are several limitations. While Bongaarts’ framework on proximate determinants of fertility elucidates the relationship between the level of fertility and biological and behavioural factors, it is, of course, a simplification of reality. As mentioned earlier, it is not intended to obtain an accurate estimate of the total fertility rate. Rather, it is intended to aid the analysis and explanation of fertility differentials, by focusing interest on the links between each of the proximate fertility variables and various socio-economic and cultural ‘background’ factors. Several studies have attempted to apply the model using individual data, but it is often reported that the model does not explain all the variations in the level of fertility due to some of the above reasons or due to the model itself. However, (Johnson et al., 2011) recently applied the model to explain the variations in birth intervals between the first and second children using individual’s contraceptive calendar data from an Egyptian Demographic and Health Survey (DHS). Furthermore, it is worth noting that the framework was developed in the 1970s when individual demographic data were scarce, and some of the data, such as the data on abortion, effectiveness of contraceptive use and sexual activities, are hard to obtain accurately. Thus, some additional factors/complications are worth highlighting and may warrant consideration in certain circumstances”.

Bongaarts chose to focus on marriage as an index because in 1978 there was not much data on sexual activity. Therefore the assumption made was that married women were more likely to engage in intercourse, therefore, more likely to fall pregnant. Recent data on sexual activity allows for the inclusion of sexual activity rather than using marriage as an appropriate index because sexual activity takes into consideration that unmarried women have sex and not all married women have sex. Therefore sexual activity rather than marriage is a better indicator of the determinant of fertility as it also considers single and cohabiting women. The inclusion of sexual activity can be done by depending on the reference period, e.g. (last week, last month, and last year) but this also has its limitations due to self-reporting and difficulty quantifying the results. The best solution is to quantify the frequency of sex and use a model

to relate it to fecundability (Stover, 1998). The decision to focus on South Africa is that recent evidence shows that cohabitation which was greater amongst the Western cultures is slowly becoming popular amongst African nations. Evidence from 4 Demographic Health Surveys shows that the proportion of women who are unmarried sexual engagement is higher than for those who are married (Stover, 1998). DHS conducted in Botswana (1988), Burundi (1987), Kenya (1989), Liberia (1986), Mali (1987), Uganda (1988) and Zimbabwe (1988) show that the married women reported having less frequency of sexual intercourse than those married. Hence, resulting in the now updated determinants of fertility taking into consideration the limitations pointed out by Stover.

Bongaart's update of the determinants of fertility is a theory of which this research is based on, or that helps frame the results. The updated model takes into consideration the various demographic factors such as the decreasing marital rates and fertility rates.

Though marriage and cohabitation may overlap, there are differences between them. The differences are often economic and legal. Married couples tend to have more stable and financially secure lives because they accumulate their resources together and they tend to pool their finances together which help them withstand any economic fluctuations or changes that might occur. An example is when applying for a home loan; it is easier to get it as a married couple because one can apply for a joint bond, unlike a cohabiting couple that is still recognized as two separate individuals. Unless if you can prove beyond a reasonable doubt that you have been living together for more than five years, it is not possible (Hardie et al., 2010). Cohabiting couples still tend to maintain their economic independence which makes them more vulnerable to economic changes. Legally married couples are more protected than cohabiting couples because the marriage certificate serves as a legally binding document between the couple unlike a cohabiting couple that does not have that proof which can be challenging to prove they were living with the person should they perhaps die (Pirelli- Harris and Gassen, 2012). The following updates were made by Bongaarts after consideration of what Stover said in his counter-argument:

Marriage/union/sexual exposure

Extramarital sex and pregnancy are winding up more pervasive in developed and developing nations (United Nations, 2013). The arrangement proposed here is to assess the number of women who are presented to the danger of childbearing as the whole of married women (or in consensual unions as characterized in DHS studies) and unmarried women who are

pregnant, report sex in the most recent month, utilize contraception, or are postpartum infecundable.

Contraception

As the utilization of contraception has increased after some time, the number of users that covers with postpartum infecundability has turned out to be critical in social orders with long stretches of breastfeeding or restraint (Stover 1998). The arrangement proposed here is to reject cover between contraceptive utilize and postpartum fecundability in the estimation of C_c . A moment issue identified with contraception is that the first list of contraception is gotten from the use of contraception among every wedded woman in reproductive ages 15-49. The arrangement proposed here is to utilize the age-particular PD model rather than the total model. A third issue identified with contraception is that the first total model assesses varieties in the normal level of adequacy of contraception as influenced by the strategy blend, however, it does not unequivocally represent age contrasts in technique viability (Suh, 2014). Interestingly, the first age-particular model assesses variety inadequacy by age however not by strategy. The arrangement proposed here is to amend the age-particular model by permitting variety in viability by age and technique.

Postpartum fecundability

No updates required

Abortion

The abortion file is a component of the number of women births deflected by an abortion. In the first definition, this number was evaluated in light of the level of contraceptive use with the condition that had restricted systematic establishment (Suh, 2014). Research by (Suh, 2014) has analyzed this issue, and a more precise condition for the number of women births turned away per abortion is presently accessible.

Model

The first model accepts that the proximate determinants at a point in time influence richness in the meantime. As a general rule, there is a nine-month delay between an adjustment in a proximate determinant and its effect on ripeness. Moreover, the DHS reviews frequently measure fruitfulness for a three-year time frame before the study (i.e., by and large, the TFR alludes to year and a half before the study). Accordingly, there is a jumble of 18+9 months between the planning of the estimation of the proximate determinants at the season of the study and the TFR; this produces critical inconsistencies in nations with quickly rising

contraceptive predominance. The TFR of births three years before the study will be contrasted and PDs measured 27 months before the date of the study in the applications displayed underneath to address this issue.

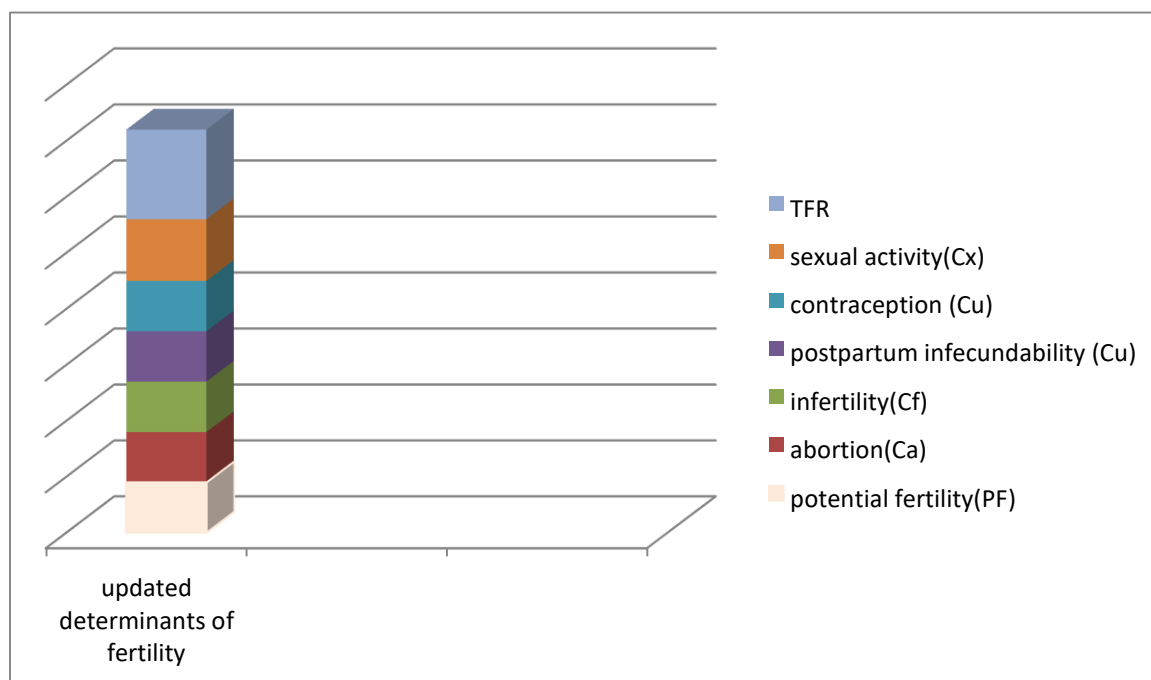


Figure 1.1: Bongaart's updated proximate determinants of fertility

Source: (Morgan, 1991: 1).

1.7. Overview of dissertation

This dissertation consists of 5 chapters. Chapter One introduces the study and research problem.

Chapter two reviews literature, providing a theoretical background on cohabitation and fertility in South Africa, this chapter has sections on the theoretical framework, marriage as a proximate determinant of fertility, impact of age at first marriage on childbearing, factors that contribute to delayed age at first marriage, social and economic changes that influence cohabitation. Marriage trends in Southern Africa and South Africa, cohabitation trends globally, in Southern Africa and South Africa, fertility trends globally, Southern Africa and South Africa. Differentials in proportions cohabiting and the relationship between cohabitation and fertility.

Chapter three describe the research methodology and methods. The National Income Dynamics Survey can be used to ascertain the prevalence and timing of cohabitation.

Measures of fertility and measures of association between marriage and fertility are also discussed in this chapter.

Chapter four summarises the grouped data and the results of the analysis (i.e. research findings) and discusses the research findings by providing direct answers to the research questions as clarified in Section.

Chapter five presents a summary of significant findings by indicating the theoretical and practical implications of the study. The chapter further presents the achievements of the study and outlines what was not achieved. It also suggests further research on the relationship between marriage and fertility. Finally, the suggestions for possible future research are presented, and conclusions are made.

Chapter two

Literature Review

2.1. Introduction

(Ogunsula, 2011) Characterizes cohabitation as a situation where people who have not married live together as husband and wife. It can be argued that several mechanisms of marriage are therefore evident among cohabiting partners in South Africa; hence, marriage and cohabitation overlap. Among other things these mechanisms consist of sharing of homes, responding to some marital duties, engaging in intimate sexual relations and sharing of economic resources (Soons and Kalmijn, 2009). (Stover, 1998) views cohabitation as a statement that puts into action the old saying “look before you leap”, before the marriage consummation. Nevertheless, traditional marriage describes the right to live together as husband and wife with legal recognition as life partners, but we are living through a period of radical change where the need for cohabitation is being felt more than ever before (Calves, 2016).

Budinski and Trovato (2010) state that, in the post-industrialized countries, the growing legitimatization of cohabitation has made it almost an expected stage in the marriage process. Since the 1970s, up to now, the marriage process has changed a great deal, possibly the most remarkable change has been the rise in the divorce rate and in the proportion of couples living together before they marry (Perelli-Harris et al.,2017). Bongaart’s updated determinants of fertility are the theoretical framework this dissertation is based on. This theory states that the proportion of women married is no longer relevant as it is not just married women who engage in sexual intercourse. Therefore sexual exposure is the better determinant. The trend of cohabitation has seen a radical change toward the latest periods of the 20th century as marriage began to be preceded by it (Budinski and Trovato, 2010). In recent times, the young adult seems to begin to consider premarital cohabitation as a pattern of courtship which is later followed by marriage should the courtship prove to be successful. This chapter will be focusing on the literature on marriage in South Africa, cohabitation, the relationship between marriage and other factors, South African fertility and the conclusion will be at the end.

2.2. Marriage in South Africa

Historically, the payment of bridewealth is made up of formal stages. Several features of these marriage practices have been carried into a modern society with different versions. In most Southern African countries, payment of bridewealth has now shifted from ‘cattle payment’ to

‘cash payment’ because of the overall process of modernization (Parkin and Nyamwaya, 2018).

One can further refer to the payment of bridewealth as the cornerstone of customary “traditional” marriage systems. Customary marriage is a type of marriage governed by systems of indigenous African customary law (Moore and Govender and Lund, 2011). (Mair, 2013) argues that customary marriage has become the most widespread form of marriage that requires rituals such as payment of bridewealth. Parkin and Nyamwaya (2018) state that contemporary partnerships need both customary marriages, represented by the completion of payment of bridewealth, and religious marriage represented by a church wedding. Furthermore, according to Parkin and Nyamwaya (2018) people who have not completed both marriage ceremonies are likely to categorize themselves as non-married. Therefore, in both rural and urban areas bridewealth remains the most important source of status because it stands as a sign of endurance with African traditions (Barber, 2018).

According to White (2016) in South Africa, most Africans in rural areas follow traditional practices. The Zulus, Xhosas, Pedis, Sothos, Tswanas, Tsongas and Swazis people are considered as the largest groups. (Moore and Govender, 2013) Further argues that each of the above-mentioned cultural groups has its customs and rituals at birth and marriage. In nearly all groups, members of the groom’s family enter negotiations with the bride’s parents and agree on the amount of bridewealth. It is called ‘*ilobolo*’ according to Zulu, Xhosa, and Swazi people, and ‘*mahadi*’ according to Tswana, Sotho and Pedi people.

Cohabitation data in South Africa have been outlined in the literature the difficulties, and imprecision with marriage (Posel et al., 2012). Despite all these problems, in most research, it has been confirmed that there has been a decline in marriage among all women (Koski et al., 2017).

Moreover, in South Africa, marital patterns are more distinct along the rural-urban divide (Moore and Govender, 2013). Furthermore, the individuals residing in urban areas are 1.3 times less likely to be married compared to the individuals living in rural areas (Brown and Schafft, 2011). As highlighted by (Doyle et al., 2012) in the sub-Saharan Africa state, there were more married women in rural areas as compared to the urban areas. Either as part of marital postponement or as an alternative form of coupling or both, cohabitation is one explanation that is put forward for the changes in marital rates (Posel et al., 2012). In South

Africa, cohabitation is mainly a singularity of the 20-40 years' age group and grew by about 50 % between 1996 and 2007 (Reinhold, 2010). The increase in cohabitation rates specifically among Black South Africans has been noted by South African scholars (Posel *et al.*, 2011). However, given the limited longitudinal panel data, it is difficult to ascertain how cohabiting rates relate to marriage rates.

In the findings of the DHS 2009, it has been established that Black South Africans in their mid-thirties are more than twice as expected to cohabit than White South Africans (Posel *et al.*, 2011). (Posel *et al.*, 2011) argued that the gap between marriage and cohabitation for Black South African women remains large, whereas marriage and cohabitation rates among White South African women have been fluctuating over the period 1995-2008. (Posel *et al.*, 2011: 110) Argued that “findings suggest that for Black South African women, cohabiting appears to be ‘the end state of a relationship’, however for White South African women, cohabitation may go before marriage, rather than replace it”. Even though cohabiting has become more popular in South Africa, the level to which it is threatening more formal coupling is unknown.

The critical determinant of fertility is marriage (Bongaarts and Potter, 2013). In most societies, marriage does not only indicate the onset of a woman's exposure to the risk of childbearing, however, it also controls the distance and pace of generative action (Mudhovozi, 2012). Marriage is often early and universal in societies where virginity is essential for the first marriage and where premarital fertility is viewed as a social embarrassment, this societal pressure to remain chaste and pure before marriage also contributes to the increase in the number of abortions as the updated determinants of fertility used as the theoretical framework states. Most girls who became pregnant before marriage, in such societies, are often required to confess the man responsible for making them pregnant so the man can marry them (Edlin and Kefalas, 2011). In the absence of contraceptive, early marriage may also lead to higher fertility. Therefore, marriage at later ages offers women on average a shorter exposure to the chance of becoming pregnant, hence late age at childbearing and lower fertility for the society (Mudhovozi, 2012).

What is mentioned above is not the case in South Africa because childbearing starts early, even though marriage takes place at later ages? The computations done by Chimere-Dan in 1997 found that 21 % of women aged 20 to 24 were never-married but, they had at least one child (Lesthaeghe, 2010), this can be further explained by the difference between the marital

and non-marital fertility of South African women. The TFR for never-married women were observed to be 3.4 children per woman in 1994, and almost as high for married women which were 3.6 children per woman (Lesthaeghe, 2010). The analysis of the 1996 census conducted by (Koski et al., 2017) confirmed this finding and indicated that TFR differences between married and non-married women are small (the difference is about 27%), particularly for the African population group.

England (2013) has elaborated this using data from a Demographic Surveillance System (DSS) and discovered that age-specific fertility rates depict a pattern of premarital childbearing that is highest among teenage girls (England, 2013). According to the South African Demographic Health Survey (SADHS) of 1998, premarital fertility is among the highest in South Africa where one-sixth of more than 26 000 children are born to African women younger than 20 years (Edin and Kefalas, 2011).

2.3. Cohabitation

Premarital cohabitation also known as trial marriage has now become a common phenomenon in modern times. (Perelli-Harris and Bernadi, 2015), rates this practice as a significant threat to marriage and family life. (Kate, 2010) breathe a ray of hope by asserting that today's society is not yet broken, despite reportedly high statistics about the increase in the rate of cohabitation over marriage and of divorce. (Kate, 2010) mentioned that shifting focus from just marriage as the primary determinant of fertility but considering other union types like cohabitation is helpful as the theoretical framework states. This then makes the theory relevant in all contexts especially in a country like South Africa where marriage is the exception and not the norm. This assertion consists with (Ogunsula, 2011) view that cohabitation growing prevalence as in part, is a phase in the ongoing social transformation of the family, preceded by declining marriage and fertility rates, postponement of marriage and increasing divorce rates.

The mainstreams of cohabiters have plans to marry their partners and therefore are involved in marriages and events that are not significantly different from what married couples have (Raab et al., 2014). Even though Raab et al., (2014) and Reinhold (2010) state that cohabitation and marriage are highly similar, however other scholars such as (Faturochman, n.d) differ with them. As highlighted by (Faturochman, n.d) cohabitation is not close to marriage and cohabitation is more like being single. (Raab et al., 2014) differ with Faturochman view that cohabitation is slowly becoming a replacement for marriage since a

non-trivial amount of cohabiters go into cohabitation with the attitude of having a permanent living arrangement outside of marriage, it is often temporary until the couple legalizes their union or separates.

For several cohabiters, cohabitation serves as a temporary substitute for marriage. However, according to (Raab et al.,2014) cohabiters' intentions to marry or not are determined by the quality of the relationship. Moreover, (Raab et al.,2014) further argue that cohabiters with marriage plans are likely to see their cohabitation as a stepping stone to marriage while those without definite marriage plans either do not have any marriage desire, as they feel cohabitation is preferable or end up separated (Raab et al.,2014).

“Cohabitation is defined as appropriate provisional prearrangement that will be left once the limitations of marriage are detached. In response to the ‘observed culture’ where couples now live together as married people outside the legal framework” (Molomo, 1995) cited in (Mokomane, 2006: 6). The first attempt made to enumerate these relationships was in the 1991 census.

Botswana revealed that in 1990 10.8 % of women aged 15 to 49 years are cohabiting compared to other Southern African countries (Lesetedi, 1988). He further showed that the percentage also increased to a high 17.4 % in 1996. The percentage of cohabiting South African women aged 15 to 49 stood at 7 % in 1998 (Guyatt, 1995). In 1992, the percentage of cohabiting Namibian women aged 15 to 49 almost equalled the 1996 percentage of Botswana, with 16 % (Katjiuanjo, 1993). Demographic and Health Surveys of Zimbabwe in the year 1994 and Zambia in the year 1996 do not have data on cohabiting women, as cohabitation is not viewed as a norm.

Evidence from the South Africa October Household Survey shows that the proportion of cohabiting is relatively high among Africans and Coloureds women, in the age group 30 to 34 years at 11 %. However, within the same age group, the proportion of women cohabiting for Whites and Indians is just below 4 % (Moore and Govender, 2013). Cohabitation is likely to be influenced by the lifestyle choices of individuals where there is flexibility; there is a greater need for individual freedom and independence (Moore and Govender and Lund, 2011). Because of the gradual increase of consensual marriages observed in many African societies, Iyigun (2009:35) stated that:

“In traditional bridewealth marriages, husbands have authority; husbands expect their wives to be obedient, and they tend to make claims on their wives’ labour and income... Hence, women’s desire to gain status through economic independence is often a source of conflict within the marriage. To avoid such conflicts, a growing group of women now try to escape male control by steering clear from bridewealth marriages. Rather than contracting a formal marriage, these women prefer unmarried cohabitation or lovers who do not live with them because this allows them to maintain liberty”.

2.4. Cohabitation and Delayed Marriage

The literature on family and social demography has highlighted transformation in family structure, from direct marriage to marriage after cohabitation. The literature shows how cohabitation, which was common in developed countries, has continued to grow unabated and has spread to other countries (Reinhold, 2010). Cohabitation allows intending couples to live together as husband and wife before they get committed to each other through legalized marriage. (Reinhold, 2010) Argue that cohabitation would screen out potential incompatible partners before commitment. Using the marital search model, (Magruder, 2011) maintains that premarital cohabitation provides a way through which intending couples would get to know each other before marriage.

While the prevalence of cohabitation is increasing in developed and developing countries, it is coinciding with the positive association between cohabitation and delayed marriage (Noack et al., 2014). A study by (Bloom et al., 2009) emphasized the role of a woman's relative income as having a positive effect on separation. They stated that the movement of relative income towards male dominance increases the risk of separations, for cohabiting couples. However, it decreases separation risks among the married. Due to economic independence, these researchers further argue that movement towards female dominance increases separation risks in both married and cohabiting couples. Explanations as to why premarital cohabitation is associated with delayed marriage, emphasizes the role of self-selection (or selectivity) (Kuperberg, 2014).

Self-selection is a favourite theme all over the literature of premarital cohabitation and delayed marriage. With regards to this study, self-selection happens when women who were most likely to cohabit before marriage also had characteristics which made them more likely to dissolve their marriage.

Controlling for the selection effect, (Rendall et al., 2011) assessed the effect of premarital cohabitation on marital stability. These authors found that couples would end their marriage earlier if they cohabitated before marriage, then couples who marry directly. A large body of social demography literature has, in addition to self-selection or cohabitation effect, observed cohabitation experience as leading to marital dissolution (Noack et al., 2014). The above indicates that the question of premarital cohabitation and delayed marriage is not a new subject throughout the literature of family demography, particularly the developed world (Reinhold, 2010).

(Noack et al., 2014) Refers to the commitment theory to try and explain the relationship mentioned above. These researchers describe cohabiting couples as individuals who fast-track the process of marriage towards marriage without initial commitment. They argue that cohabitation experience weakens commitment between cohabiting couples. (Reinhold, 2010) used National Survey of Family Growth (NSFG) data pooled from 1988, 1995 and 2002 in the United States to examine the effect of premarital cohabitation, delayed marriage and concluded that, for the recent marriage cohorts, the result has weakened. Using NSFG data for women in the United States for 1995, 2002, 2006-2010, (Kuperberg, 2014) also presented similar findings, this is because of two reasons; first, cohabitation is tolerated by a society which makes it common among the young; and second, young cohabiters are more heterogeneous than previous cohorts which make self-selection non-existent. It is because of these reasons that these authors further suggested that direct marriage is becoming uncommon and will suffer from self-selection.

Among African societies, the literature on social demography has for long underscored the importance of the family. He further emphasized that some of these include social organization, taking care of the young and the aged, social control, and as a centre for reproduction and religious activities (Firth., 2013). Such views were also stressed when (Amoeteng and Kalule-Sabiti, 2013) contended that family interruption resulting from divorce has sweeping socioeconomic consequences on individual families and society. This is because marriage serves as a gateway towards procreation. As is happening in the developed world, efforts to understand the causes of marital disruption in developing countries point to autonomy among women and other family characteristics (Firth., 2013). Women's sovereignty and independence to some extent can lead them into a premarital sexual marriage which is believed to be linked to delayed marriage.

Although the question about the association between cohabitation and marital dissolution seems to have no consensus, (Firth., 2013) using the diffusion approach suggested that as cohabitation becomes more common, the adverse effect it has on marital stability vanishes, this diffusion approach implies that as cohabitation becomes commonly tolerated in society, intending couples become less selective; instead, it is the married who may suffer from selectivity. A recent study by (Kuperberg, 2014) examined data from the 2006 to 2008 NSFG in the United States and concluded that; overall, the association between cohabitation and delayed marriage was insignificant for women. Further examination attributed this to several risk factors including premarital fertility, family structure, educational attainment and number of premarital sex partners (Kuperberg, 2014). They concluded that because many new couples cohabit first before marriage, attention should be shifted from the association between cohabitation and delayed marriage that has weakened, to heterogeneity among cohabiters.

Kuperberg (2014) states that there are control factors which are associated with marital quality, and also interrelated with the intentions to marry or not. He further specified these factors which included educational level, cohabitation duration, and the presence of children, age and marital history of the parties involved in the cohabitation. Moreover, (Lau, 2012) sees the “level of education among cohabiters as positively related to intentions and plans, while relationship duration and age are negatively associated with the marriage intentions of the cohabiters”. While on the other hand (Ross and Mirowsky, 2013) concur with the view echoed by (Kuperberg, 2014) that, the existence of children in cohabitation increases the cohabiters’ marriage intentions. Moreover, on the other hand, (Lau, 2012) argues that a considerable number of cohabiters have children while cohabitating.

Therefore, cohabiters who have children are technically “married” as identified by Rindfuss and Vanden-Heuvel differentiation of marriage and cohabitation.

2.5. The relationship between Marriage, Education and other Factors

Marriage

As stated by Hindin and Fatusi (2009) the woman’s level of education inclines to persuade the time and age at which she is willing to pledge to marriage. They further stated that, since early marriage can have damaging consequences for women and international organizations, which is why there has been an increase in encouragement groups and even some national governments delaying first marriages among women in support of this policy recommendations and programs (Hindin and Fatusi, 2009). According to Yabiku and

Schlabach (2009), three factors determine a woman's decision-making process of deciding whether to marry early or to delay first marriages to a later age. These factors consist of female labour force participation, women's acquisition of formal education and urbanization (Yabiku and Schlabach, 2009). Moreover, the views advanced by (Yabiku and Schlabach, 2009) were not new as they were embossed in the words of (Hindin and Fatusi, 2009).

However, scholars like (Sonfield et al., 2013) are in disagreement with (Hindin and Fatusi, 2009) analysis of education and first marriages. According to Sonfield et al., (2013) women who are more educated and financially stable are interested in getting married. There have been other scholars who have also congregated contradicting findings on the desire of educated women for marriage. (Hartmann et al., 2014) Also, (Magruder, 2011) similarly argue that women who have a college education and have a strong work orientation or relatively high income may delay their time of marriage. However, that does not restrict their desire for marriage.

Moreover, (Yoder et al., 2011) highlighted that, it has been proven that women with a college education have democratic marriage role prospects and this keeps increasing as they further their education because furthering their education allows them more time in looking at and selecting their desired marriage partners. The findings of (Hayward *et al.*, 1995) and (Yoder et al., 2011) are challenged by scholars like (Sassler and Miller, 2011). Hence, Gordon states that their findings cannot be adequately used to validate the apparent correlation between education and women's marital choices. (Sassler and Miller, 2011) argues that an educational level of women does not necessarily mean that women's lower desire for marriage may be highly linked to the perceived lack of high-quality mates anticipated by these women.

(Askari et al., 2010) Mention that women have a higher drive for marriage as they are very anxious about their future parental identities. Whereas, (Hammersla and Frease, 1990) proposed that men express a stronger marriage desire than women do because they are more likely to value marriage before any other life goals.

According to Dittmar (2015), young women who manage to get more education tend to avoid pregnancy that is why fertility is somehow lower among educated women in Africa.

They further discovered that from Brandon's 1984 survey that educated women in Freetown have the most extended marriage delays. Hence, (Dittmar, 2015) report supporting the argument that educated women to delay their first marriages as compared to their uneducated

counterparts. Women find just a few men they consider acceptable which makes the formal marriage market very tight for educated women; those who are single and educated tend to delay entry into marriages with the hope of meeting better husbands (Dittmar, 2015).

Racial differentials

(Posel and Rudwick, 2012) published an article of South Africa in her post-apartheid era, which described the racial differences in marriage rates. It is in that article where they explained that “*ilobolo*” remains the main reason that leads to the decline of marriage rates among young Africans in South Africa. *Ilobolo* is described as a bride price paid in the form of cattle to the bride’s family, and the number varies based on the bride’s father’s social status. Since there is a high rate of unemployment among men, the issue of *ilobola* has become a problem, and it makes it difficult for South African men to marry considering the unnecessary costs associated with taking up a wife (Posel and Rudwick, 2012). However, it has been observed over the years that there is a vast difference between Africans and the whites living in South Africa regarding marriage rates. Marriage rates are more than twice high among White women as compared to African women (Posel and Rudwick, 2012).

According to Parkin and Nyamwaya (2018) among all racial groups, the levels of marriage have fallen since the 1950s, this “flight of marriage” tends to be most pronounced among the African population. Moore and Govender and her colleagues, with the use of the October household survey, observed that, between 1995 and 1999, marriage was almost universal among Whites and Indians aged 50 and above. However, the percentage of never-married women aged 50 and above for Africans (80.4 %) and Coloureds (82.8 %) suggests that marriage was far from universal among these two. As a result, Africans were still less likely to get married than Whites and Indians because of significant differences concerning the practices of marriage between these population groups.

(Hicks and Hicks, 2019) further showed marriage differences by age group between population groups where 37 % of Africans in the age group 30 to 34 reported being married which increased to 51 % in the age group 35 to 39. For other population groups, at the same respective ages, Coloureds constituted 51 % and 60 % respectively, 72percent and 86 % for Indians and 82 % and 83 % for Whites (Lesthaeghe, 2010). These figures do not only indicate relatively low marriage rates for Africans and Coloureds but also show a considerable percentage of marriages happen towards the end of the reproductive period.

(Khomari et al., 2012) argues that in the South African context, the payment of ilobolo, whose economic value is not the primary reason for its practice has an elevated level of spirituality and lineage to the people, it is crucial to marriage. The belief that the woman will bear the man-children after the marriage is the main incentive for undertaking such extreme practice. Therefore, the man has the right to claim his cattle back from the woman's family in the case where the woman turns out to be infertile (Khomari et al., 2012). This shows that fertility and childbirth are essential and considerable for marriage in South Africa. Hence, for any black woman, whether she is educated or not, can be limited by these factors in the marriage market.

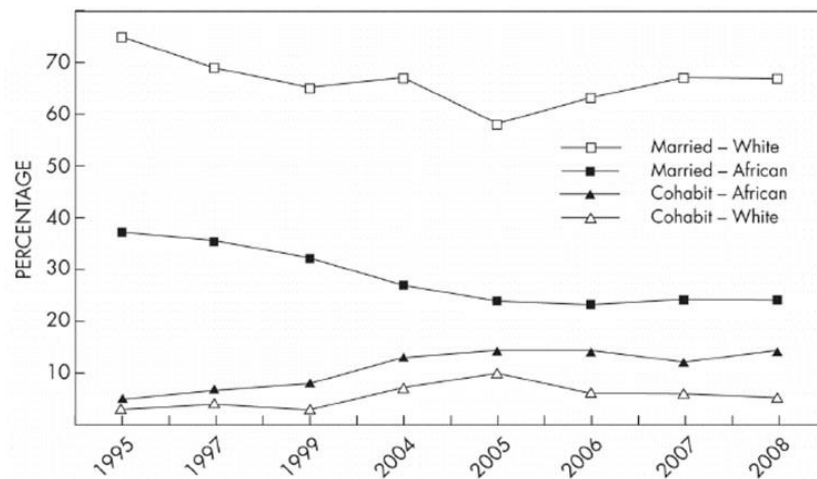


Figure 2.1: South African cohabitation and marital racial differentials

Source: (Marston *et al.*, 2009: 9).

Figure 2.1. Depicts the racial cohabitation and marital racial differences in South Africa. For the White population, marital rates seemed to have decreased from 1995-2005 from 75% to 60% and began to increase in 2005 and go back to what they were pre 2005. Following this trend are the cohabitation levels. They were relatively low in the mid-1990s but increased as marital rates decreased, soon as marital rates began to increase cohabitation rates began to decline as well. The trend can be attributed to phenomena such as women empowerment and the political and economic shifts that occurred in South Africa. PostApartheid there was a drastic economic shift, and fewer individuals could afford to get married and start a family, but also women were becoming more assertive and joined the working force which resulted in them choosing to wait to get married. Soon as the economy picked up and the women had obtained the education and desired jobs, marital rates increased again.

The marital rates amongst the African population are decreasing steadily and the cohabitation rates are also increasing steadily; this means that more African are opting to cohabit rather

than to get married now. Ilobola is another factor that plays a role in this trend and increased unemployment rates among African South Africans.

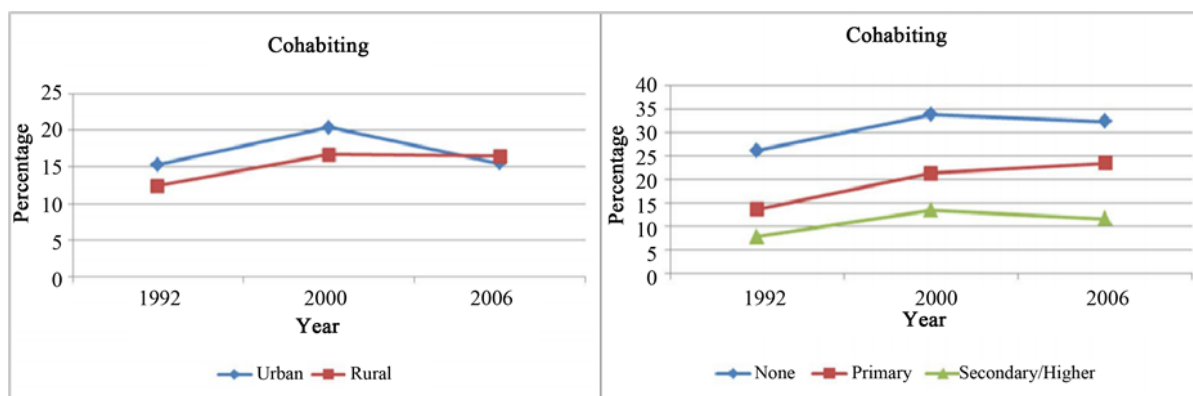


Figure 2.2: Rural-urban and education differences amongst cohabiting couples in Namibia

Source: (Pazvakawambwa and Indongo, 2017: 3).

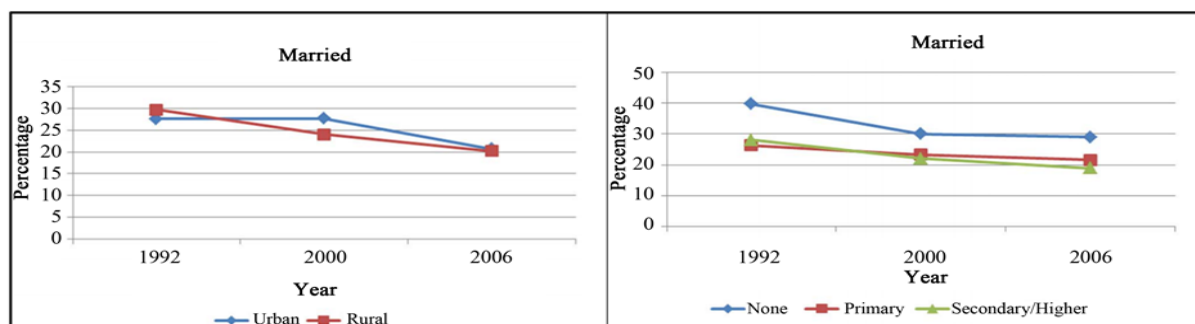


Figure 2.3: Rural-urban and education differences amongst married couples in Namibia

Source: (Pazvakawambwa and Indongo, 2017: 3).

Figure 2.2 and 2.3 depict the rural-urban educational differentials amongst married and cohabiting couples in Namibia. Figure 2.2. shows that cohabitation was higher amongst urban couples in the early years (1992- late 2000's) and slowly began to decrease at the dawn of the 21st Century. Also, the level of educational attainment seems to be on the increase post-1992, with the number of those obtaining primary education increasing steadily.

Figure 2.3 shows that the marital rate amongst the urban population seems to be decreasing steadily, but this is contrasted by the sharp increase in the urban marital rates in the year 2000. Educational levels also seem to be declining over the years.

2.6. Changes in never-married

(Iyigun, 2009) posit that in the past, marriage used to be an achievement for numerous young women, however, due to economic constraints; it has resulted in prolonged postponements in attaining this. As a result, there is a substantial proportion of never-married women due to rapidly changing social norms. As young people stay in school longer, move away from home to seek work, often in urban areas and they tend to get married later (Hicks and Hicks, 2019).

Khomari et al., (2012) noted that there be might changes regarding marriage patterns because of opportunities that emerge for young women, which include; education and employment. However, marriage is no longer considered a goal, especially among urbanized women because of the economic cost levied through the payment of bridewealth. The commercialization of bridewealth has created a dilemma for many couples, with some deciding not to marry, as they cannot afford the cost (Makiwane, 2010). As a result, the commercialization of this tradition is one of the key contributions for high proportions of never-married women in South Africa.

Certain disadvantages may also increase the risks for unmarried women, especially in the context of South Africa's high HIV statistics. The results of the ecological data, from 33 sub-Saharan African countries, revealed a strong relationship between HIV occurrence and the mean age at first marriage as well as between the HIV prevalence and the interval between first sex and first marriage. (Bongaarts and Potter, 2013) found that the risk of HIV infection, per year of exposure among sexually active women, is higher before marriage than after the first marriage. Therefore, the longer the marriage is delayed, the longer the period of premarital sex.

Southern African countries are an excellent example of showing the relationship between marriage and the HIV epidemic. In Botswana (25.7), Swaziland (25.8), South Africa (26.7) and Namibia (28.9) the highest median ages at first marriage were found. It has been revealed that some of the highest HIV epidemic rates in the world are from these countries (Bongaarts, 2007). Women who remained unmarried for a prolonged period in South Africa tend to have children outside of marriage; this also has its own social and economic disadvantages as mentioned in the previous chapter.

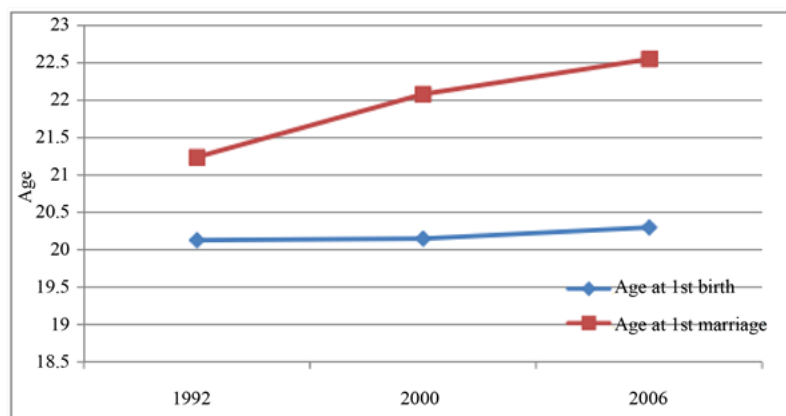


Figure 2.4: age at first marriage and birth

Source: (Pazvakawamba and Indongo, 2017: 1).

Figure 2.4 depicts the first age at marriage and birth in the study years 1992, 2000 and 2006. The age at first marriage is increasing steeply from 1992 to 2006. It was just above 21 years in 1992, 22 years in 2000 and 22, 5 in 2006 which shows that more women are opting to get married later as compared to before. The age at first marriage remained about the same and increased slightly in 2006. These estimates show that more women are choosing to get married later, but there are still high levels of fertility meaning that there is an increase in premarital fertility.

2.7. Fertility Trends in South Africa

South African fertility has been in decline for almost 30 years and is currently the lowest among sub-Saharan Africa. (Moultrie and Timaeus, 2002 as cited by Makiwane and Udjo, 2014: 10) used the age distributions from the 1970 and 1996 censuses to estimate the South African fertility trends from 1955 to 1996. Their observation showed that the fertility transition of South Africa began in the mid-1960. However, between 1950 and 1970, the fertility of South Africa was high and stable with the estimated average of 6 to 7 children per woman. Since the early 1980s, the pace of decline has accelerated with average estimates of 4 to 5 children per woman between 1980 and 1995 (Sedgh et al., 2012). Currently, in South Africa, the total fertility rate is at 2.4 children per woman (STATS SA, 2018).

For Whites and Indians, the decline occurred at a much faster level compared to Africans and Coloureds. As of the end of the nineteenth century, the Whites experienced a long and sustained fertility decline until reaching the below-replacement level of 1.9 children per woman by 1989 (Makiwane and Udjo, 2014). The fertility of Indians declined steadily, from

a TFR of 6 children per woman in the 1950s to 2.7 children per woman in the late 1980's Coloreds also experienced a decline in fertility, from a TFR of 6.5 children per woman in the late 1960s to 3 children per woman by the late 1980s. African fertility is estimated to have decreased from a high of 6.8 children per woman to 3.9 children per woman between the mid-1950s and the early 1990s (Makiwane and Udjo, 2004). Even though there has been a remarkable fertility decline within population groups, Africans fertility is still among the highest compared to other population groups.

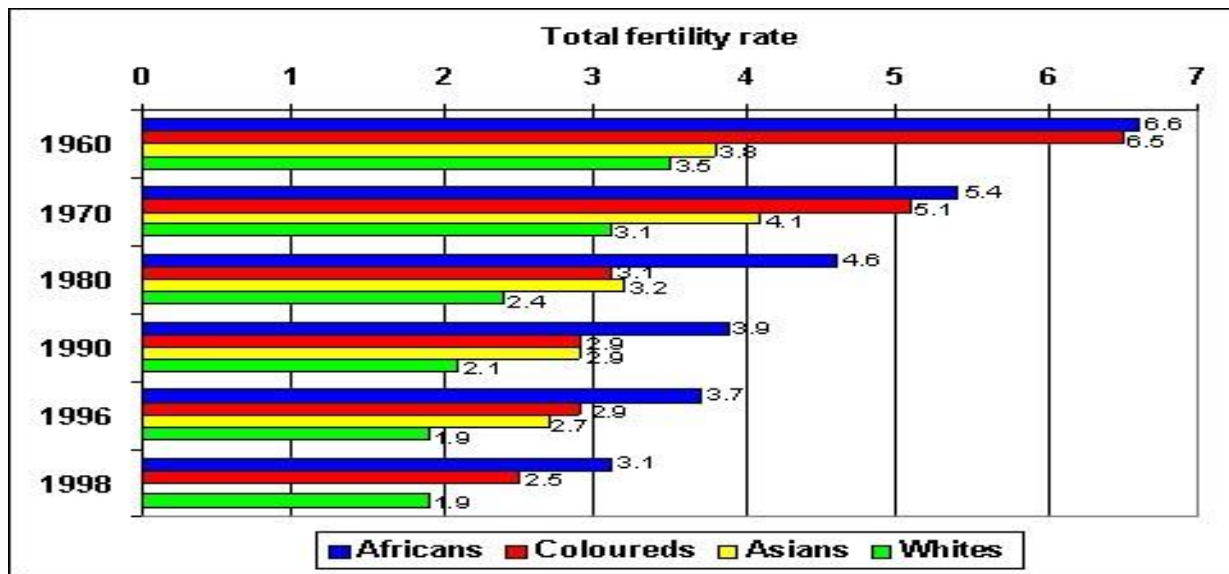


Figure 2.5: Total Fertility Rate of the South African population

Source: (Marston *et al.*, 2009: 2).

Figure 2.5 shows the TFR amongst the South African population. Across the spectrum, fertility rates have decreased tremendously from 1960 to 1998 from being above the replacement level for all the races before 1960 to be below the replacement level post-1990 for the White population and Asian population. TFR for black South Africans decreased from an average of 6.6 children per female in the reproductive years in 1960 to 3.1 in 1998.

2.8. Contraception

Contraception is an important proximate factor responsible for keeping fertility low. The theoretical framework states that contraceptive use helps control fertility as it gives women the freedom to choose when they want to have children, they have autonomy over their bodies. Currently, male contraceptives are being explored as well, as currently, the only option available for men is vasectomy which is permanent (Mkize, 2018). The family planning programs in South Africa started in the early sixties, and its success has had a massive impact

on the population. High and consistent use of contraceptives has led to low levels of fertility. Between 1988 and 1998, the South African Demographic and Health Survey collected data about knowledge and use of contraceptive methods and found that 97 % of all women had heard of at least one modern contraceptive method (Edin and Kefalas, 2011).

The use of modern contraception requires good access to family planning services to enable women to achieve their goals of either spacing or curtailing childbearing. However, contraceptive use tends to differ by racial groups, level of education, location, and marital status of women. For example, the contraceptive prevalence rate (CPR) in South Africa has increased from 55 % in 1990 to 60 % in 1994 (Edin and Kefalas, 2011). In 1998, the South African Demographic and Health Survey further indicated that CPR was the highest among Indian women with 80 per cent, followed by Whites with 76 per cent, then Coloureds with 69 %, and finally African women, with the least CPR with 59 per cent.

The current use of contraception is, according to Mudhovozi (2012) expressed as the proportion of currently married women who report they are using a method at the time of the survey. A study done by (Swart, 2009) found that married women tend to have more children than unmarried women of the same age because births to unmarried women were traditionally not accepted in most societies. As a result, women began their childbearing after marriage and continued throughout their reproductive years for as long as they are married. (Emina et al., 2014) further found that non-married women use contraceptives more, as compared to the married women.

(Lesthaeghe, 2010) revealed an increasing trend of contraceptive use among never-married women and married women, by age group. He found 43.3 % of the never-married women in the age group 15 to 19 used contraceptives as compared to 13.6 % of married women.

Contraceptive use for never-married women increases to 65.2 % in the age group 30 to 34 as compared to 47.2 % of married women. The high prevalence of contraceptive use among never-married women relates to the increased use of contraceptives after first birth (Emina et al., 2014).

As the never-married women and married women grow older, contraceptive use declines (Emina et al., 2014). As a result, pregnancies for older women are mostly desired and planned.

Therefore, contraceptive use for older women after childbearing depends on the desired number of children. In Agincourt, (Emina et al., 2014) found no proper count of birth order by marital status because of most cases of higher parity (2+) among women below age 20, were apparently among those who were already married.

The high use of contraceptives in the age group 25 to 29 and 30 to 34 are driven by factors found to be influencing marriage patterns, such as female labour force participation, women's acquisition of formal education and urbanization. For example, employment may provide economic resources to delay marriage and a financial incentive for parents to encourage their daughters to remain single during this economically productive period of young adulthood (Zafar and Malik, 2016).

Rural-urban migration among males in the same age groups has affected lower marriage rates among Africans because women whose husbands migrated to urban mining areas are forced to make their own decisions about family maintenance and reproduction. Such circumstances force them to limit childbearing and practice family planning without their husbands or partners approval.

2.9. Cohabitation and Fertility

As highlighted by (Udjo, 2000) it has been suggested that South African fertility relies less on marriage compared to other African countries. High rates of childbearing inflate the difference between marital TFR and total TFR in cohabiting marriages, and this was discovered in Census of 1996. Since the consideration of cohabitation, the difference between marital and non-marital fertility was reduced from 29 % to 9 %, which indicated that most of the non-marital childbearing occurs within cohabiting marriages. In addition to this, Udjo showed that “cohabiting relationships among Africans mainly consist of individuals that have commenced marriage negotiation processes”. In sub-Saharan African societies, cohabitation is viewed as the last and temporary phase before marriage (Kroeger and Smock, 2014), this situation is mainly because cohabiting couples can get to know each other in daily life situations to test their compatibility. As Iyigun (2009:2) noted, “men from sub-Saharan societies usually postpone a formal marriage until they have proof of their prospective wives' fertility”. Therefore, cohabitation can be “considered a trial marriage during which pregnancy becomes a means of testing the relationship”.

2.10. Factors associated with fertility decline.

America's total fertility rate is around 1.9 children for each woman, a noteworthy low however close to the replacement rate of 2.1. Women need to average two children for the population size to be steady (Hayford, 2009). The increase in the use of contraceptives as noted by the theoretical framework is another contributing factor to fertility decline as effective and efficient use of contraceptives prevents pregnancy.

If the present fertility rates drop and move towards the rates of the United States, the country will encounter population decline (Hayford, 2009). A few sections of the world are far below 2.1 replacement level and may experience population declines later on, including China, Japan, Germany, Ukraine, and others. There is developing dialogue in many low fertility nations about the negative consequences of having less youthful persons. In wealthier countries, retirement wages and therapeutic care of the elderly are to a great extent financed by taxes of the younger working population (Hayford, 2009).

Low birth rates, in the end, prompt fewer men and women of working ages, and thus a little tax base to back social security instalments, unless the fewer youngsters conceived have high incomes (Hayford, 2009). Although the negative impact low fertility might have on a country's GDP and social security stability is the most emphasized issue, there are other issues worth noting (Hayford, 2009).

Low fertility lessens the rate of scientific and different advancements since developments predominantly originate from younger people. The huge dominant part of nations has had developing populations amid the previous 250 years as total populace developed at exceptional rates (Rindfuss and Sweet, 2013).

OECD Secretary-General Angel Gurría stated, "With the financially dynamic population falling because of a low birth rate and maturing population, Korea's potential development rate is ceaselessly diminishing"(Nargund, 2009: 3).

2.11. Conclusion

In African countries, early marriage is characterized by high fertility when most of the births are likely to occur within the first two years of marriage. South Africa is found to reveal a unique case where late marriage among women occurs with a considerable number of

remaining unmarried throughout their reproductive life. Delayed age marriage is found to be characterized by preeminent levels of education urbanization, and cohabitation. Moreover, the existence of economic constraints to marriage is one explanation for why Africans are significantly more likely than Whites to associate being married with a better standard of living, only Africans who are relatively better off can afford to marry. The finding that among Africans, acceptance of cohabitation with marriage intentions rises as self-assessed economic status falls is also consistent with a constraints argument. However, if there are financial constraints to marriage, then it is curious that more African couples do not cohabit, particularly following childbirth. A feature of family formation in South Africa is that among single mothers, African women are far less likely to be in a cohabiting relationship than White women

Chapter 3

Methodology

3.1. Introduction

Given the study's primary objective to analyze the consequences of cohabitation and the issues it presents, quantitative data obtained from the National Income Dynamics data, wave three was utilized. The reason for choosing to do a quantitative, desktop analysis is because STATA allows for the analysis of data faster and more accurately as it is a computer system, therefore this allows for a less bias analysis by the author. The first part of the chapter provides a brief description of the data source, namely the National Income Dynamics Survey, wave 3. The sampling design and data collection method are also reviewed, this is followed by exploring the different socioeconomic variables that influence fertility, and the chapter concludes with an overview of the research question and the chapter.

3.2. Data Source: National Income Dynamics Survey

3.2.1. Background

“The National Income Dynamics Study (NIDS) is the first national household panel study in South Africa. It is part of an intensive multi-million rand effort on the part of the government to track and understand the shifting face of poverty” (Southern Africa Labour and Development Research Unit, 2008: 1). NIDS examines the livelihoods of individuals and households over time. It also provides information about how households cope with positive or negative shocks, such as a death in the family or an unemployed relative obtaining a job. Other themes include changes in poverty and well-being; household composition and structure; fertility and mortality; migration; labour market participation and economic activity; human capital formation, health, and education; vulnerability and social capital (Southern Africa Labour and Development Research Unit, 2008).

3.2.2. Sampling strategy

The Southern Africa Labour implements the National Income Dynamics Study and Development Research Unit (SALDRU) based at the University of Cape Town's School of Economics. Professor Murray Leibbrandt, Ingrid Woolard, Cecil Mlatsheni and Nicola Branson lead the research team currently with operational delivery led by Mike Brown (Southern Africa Labour and Development Research Unit, 2008). The study began in 2008 with a nationally representative sample of over 28,000 individuals in 7,300 households across the country. The survey continues to be repeated with these same household members every

two years. Wave 3 study was conducted in 2012 and consisted of 37436 individuals and 219 fieldworkers.

NIDS questionnaires cover a range of themes, where amongst those themes fertility and nuptiality of the same groups of individuals are recorded under some questions such as Section B, part B3 “(1) what population group do you belong to?, B4.2. (2) Are you formally married or living together, interested in those living together. B5.2. (3) How many years living together? B6.1. (4) Have you ever been married? Section C1: Children Ever Born. C1.2. (5) Have you ever given birth? (6) How many children have you given birth to in total? C1.3. (7) How many children have you given birth to in total?” (South African National Income Dynamics Study, 2012: 6). These questions will be measuring the number of individuals that are cohabiting, the racial differentials of the South African population and cohabiting couple. The participant’s response to the number of children they have will also be used to analyze the relationship between fertility and cohabitation.

3.3. Study Hypothesis

If cohabitation increases in South Africa, then fertility will decline.

3.4. Research questions

1. How have marriage trends and other forms of unions changed?
2. What is the relationship between marriage and fertility in South Africa?
3. How do the different socio-economic factors affect marriage and fertility in South Africa?

3.5. Methods of analysis

3.5.1. Marriage trends and levels

The study aimed to analyze the change in marital and cohabitation rates in South Africa using data from the National Income Dynamics Survey, wave 3. However, to show marriage trends as well as marriage levels of South African women, more than two data sources were used.

3.5.2. Marriage timing

3.5.2.1. Singulate Mean Age At Marriage (SMAM):

Marriage timing is often measured using SMAM as it is the most accurate and reliable measurement type (U.N., 1990). The purpose of SMAM is to measure the historical variations in marriage patterns. Therefore the SMAM measurement compares the age-specific of the

“never-married” with those who are married. SMAM calculates the average number of years lived in a single state by those who marry before age 50 (U.N., 1990). The measurement assumes that women by age 50 who are not married never marry, this measure was being measured with SMAM from previous years to note if there is a visible difference. The reason for using SMAM to analyze the relationship between fertility and cohabitation is because SMAM allows for the calculation of the number of years a female of reproductive years spent in the single state, there unmarried. By doing so, one can analyse how many of those females who were single as determined by SMAM were actually cohabiting and therefore had just as high possibility of falling pregnant as those women who are married as one can assume that the exposure to sexual intercourse for them is as high as those for married women with their spouses. Therefore the updated determinants of fertility that help frame this study states sexual exposure as a better fitting determinant of fertility as compared to marriage as cohabiting females, that would befall under the single category have a high level of exposure to sexual activity/intercourse.

To calculate SMAM the researcher will look for marital status, tab, describe and codebook it. Calculating the above will help the show and separate the different people who are married, never married, living together all the different marital status variables. Then proceed to tab marital stat if the marital status is those individuals living with their partners. Doing so will help find the people that are cohabiting. Tab the different races using the best race command and restrict the ages to between 15-49 as we need the person-years lived single for individuals within this age cohort. From this, one will get the sum of all the never-married individuals which researcher will add 15 to and multiply by 5 to get “A” person-years lived in the single state. Then analyze the dataset again to find people who have never until they were older than 50, the researcher did this by changing best age restriction to ≤ 50 , and once you get this, you divide it by 2 using the hand calculator tab state. This then gives us “B” which is the proportion left single after 50. To get “C” use calculator to minus “B” from 1. To get “D” one must multiply the answer for “B” by 50. Then to get the SMAM, it is “A” minus D, divided by C. SMAM calculated as follows:

1. Calculate the person-years lived in a single state which can be represented as A.

$$A = 15 + \sum_{a=15-19}^{45-49} S_a * 5$$

Where S_a is the proportion single in age group a .

2. Estimate the proportion left single at age 50 represented as B.

$$B = (S_{45-49} + S_{50-54})/2$$

If the proportion single in the age group 50 -54, S_{50-54} , is not available, then

$$B = S_{45-49}$$

3. Estimated proportion married by age 50 represented as C

$$C = 1 - B$$

4. Number of person-years lived never married represented as D

$$D = 50 * B$$

5. Therefore SMAM IS: $SMAM = (A-D)/C$

(U.N., 1990: 2)

3.5.3. Measures of fertility

3.5.3.1 Age-Specific Fertility Rate and Total Fertility Rate

The age-specific fertility rate measures the annual number of births to women of a specified age or age group per 1,000 women in that age group (U.N., 1990). By calculating the ASFR, the fertility level for each age group can be determined and compared with the cohabitation rates for that similar age group to determine if there is a relationship between the two. To calculate the ASFR state, the researcher will use the look for a command to look for gender and fertility. Tab best gen to get the women and fertility of those that do have children. Restrict the age cohorts to five year age group from 15 to 49 and analyzed according to various racial groups.

$$ASFR_i = \frac{B_i}{W_i} \times 1000$$

$ASFR_i$ Is the age-specific fertility rate for the five year age group i

B_i Is the number of births to women in the five-year age group i

W_i Is the total population of women in the age group i .

Total fertility rate refers to the number of children who would be born per woman (or per 1,000 women) if she/they were to pass through the childbearing years bearing children according to a current schedule of age-specific fertility rates (measure evaluation, n.d). To calculate the TFR, the researcher will calculate the sum of all the ASFRs and multiply by 5. The formula for calculating the Total fertility rate (TFR) is given below:

$$TFR = 5 \times \sum_{i=15-19}^{50-54} ASFR_i$$

3.5.3.2. Age-Specific Marital Fertility Rate and Total Marital Fertility Rate

ASMFR is measured as some births per year in a given age group to the total number of married women in that age group at mid-year (U.N.,1990). By calculating the ASMFR, it can be removed from the initial ASFR which gives us the ASFR for unmarried, divorced and widowed women. Usually, I have restricted to ages 15+ & 5-year age groups. The measure can be refined by restricting denominator to single, and divorced or widowed women.

$$ASMFR_i = \frac{B_{im}}{W_{im}} \times 1000$$

$ASMFR_i$ is the Age-Specific Marital Fertility Rate for the five year age group i

B_{im} is the number of marital births to the women in the five year age group i

W_{im} is the number of married women in the five year age group i

- TMFR is an overall summary measure of marital fertility and is obtained by summing the age-specific marital fertility rate for each age of the childbearing span (U.N.,1990). Computed by summing ASMR overall reproductive ages.

$$TMFR = \sum_{a=15}^{54} ASFR_a$$

$ASMFR_a$ is the Age-Specific Marital Fertility Rate for the age a

The fertility rates were to be compared with the marital specific rates to distinguish the difference between the marital fertility rates and population fertility rates.

3.5.3.3 Children ever born

CEB is a crude measurement of fertility. It measures the average number of children born to women of reproductive ages in a specific age cohort, this crude measurement helps to draw a general picture of fertility in a country, in this case, South Africa (measure evaluation, n.d). It illustrates whether fertility in a country is in the negatives (-) which means fertility is low or positives (+) which means fertility is adequate, the i.e. population is replacing itself or high. CEB is calculated as the total number of children divided by total women in the age cohort.

$$CEB = \frac{B}{W_{ra}}$$

W_{ra} is the total number of women within the reproductive ages

3.6. Comparison of wave 2 and wave 3

Do this to get an idea of changes in marital trends and unions.

3.7. Independent and Dependent Variables for the Study

The use of dependent and independent variables in this study is to aid in the analysis of NIDs data and drive the author to pursue the study to its maximum capability. Analyse how the different independent variables influence the dependent variable of fertility as the study's main aim is to see if there is a relationship between marriage, cohabitation and fertility and if there is, what is it.

3.7.1. Dependent Variables:

Fertility

Fertility is the outcome of action often sexual intercourse which occurs amongst a man and a woman. Cohabitation or marriage increases the chances of fertility for partners as it increases the frequency of sexual intercourse.

The dependent variable will be derived from a question about fertility in the questionnaire.

C1.2 have you ever given birth? Represented

by variables

- 1- Yes
- 2- No
- 8- Refused
- 9- Don't know

The following dummy variables were created for the analysis:

1-Yes

3- Other responses

C1.3 How many children have you given birth to in total?

The total number of children ranges from 1 to 11 which is represented by dummy variables:

1: 1-5 children

2: 6-10 children

3: 11+ children

3.7.2. Independent Variables:

Cohabitation

Cohabitation is the independent variable of this study or the influencing variable as it influences the dependent variable fertility.

Focusing on the response of those derived from dummy variable 2- living together in question B4.2. Are you formally married or living together?

Marital status

Marriage is a proximate determinant of fertility, therefore is essential for the understanding of fertility. Populations, in which age at first marriage is low, tend to have early childbearing and high fertility; this is not the case in South Africa. Childbearing begins early even though marriage takes place at later ages. The importance of marriage in determining the overall level of fertility is consistent with the changes that are taking place with the institution of marriage (Palalumeni et al., 2007). Marital status is measured by the proportion of women aged 15 to 49 who are married, never-married, and cohabiting.

Section B, question 4.2 of the questionnaire has the following question: Are you formally married or living together? Moreover, is expressed in the following dummy variables

1-formally married

2-living together

3-not living together

-8- Refused

-9- Don't know

Educational Attainment

Educational attainment commonly works in combination with labour force participation to delay marriage. Both labour force participation and wages for women who are employed have

increased since 1994. As a result, women have become less dependent on marriage as a source of financial support for themselves and their children. Social norms around women's roles have led to greater acceptance of cohabitation unions, childlessness, and single parenthood (Gubernskaya, 2010). Education also increases a woman's ability to regulate their fertility as it is positively associated with contraceptive knowledge and with greater decision-making power in areas related to contraceptive choice (Hindin and Fatusi, 2009).

Educated women are found to be marrying less and using contraceptives more than uneducated women; this results in educated women having fewer children because of their knowledge they have with regards to the use of contraceptives and autonomy over their bodies (Bongaarts, 2010). The pool of a woman's potential marriage partners decreases with higher formal education attainment because they often marry men, educated like themselves, which further increases the chance of having fewer children. Therefore, educational attainment is measured by the level (no education, primary, secondary, and tertiary education) of education a woman has, and the number of years a woman spends in school.

Race

Racial marital, cohabitation and fertility rates are very different in South Africa. The white tends to have higher marital rates and lower fertility, followed by the Indian population with fertility rates below the replacement level. The African population still has fertility above the fertility level, low marital rates and higher cohabitation compared to the other races.

3.8. Conclusion

This chapter's purpose was to describe the research methodology and variables used in the study, research questions and hypothesis and the methods of analysis used. Using the third wave of the National Income Dynamics Study the researcher was able to investigate the impact of cohabitation on fertility.

Chapter 4

Results

4.1. Introduction

The amount of literature that aims to explore the impact of cohabitation on fertility adequately is in paucity in South Africa, and it is only post- Apartheid that South Africa began to have adequate demographic data (Joubert et al., 2012), this chapter presents the results of the analysis performed on the National Income Dynamics Survey, wave 3 data. Marriage is an important determinant of fertility, however in South Africa that is not the case (Magagula, 2009). In South Africa, especially amongst the African/black population, women tend to have marriage at younger ages, delay marriage and there tends to be a big age difference between the first birth which occurs in the early adolescent ages and the second birth which tends to happen once she is more mature and older (Kuperberg, 2014). The chapter begins with an overview of the racial, residency, age and gender demographic distribution of the sample in section 4.1, this is followed by the analysis of the NIDS data in section 4.2. Section 4.3 will investigate the prevalence of cohabitation and fertility, and the remainder of the chapter focuses on the SMAM and fertility level differentials which will examine the relationship between cohabitation and fertility. Using the t-test and chi-square analysis a comparison of the cohabitation and marriage averages will be conducted and categorical comparison of marital status against fertility, the number of children and residential type.

4. 2. Analysis of NIDS

This study focused on both males and females between the ages of 18- 45 for the analysis. The fertility levels of this cohort were derived by use of stata commands to derive how many individuals in this age cohort are male and how many are female, then from there, a variable was created for 18-45 and female and also 18-45 and female. A command was run to derive the gender and fertility status by first creating a variable for fertility and The reason for this is because it is individuals within this age cohort that are still having children, mostly and more likely to be entered cohabitating or already cohabiting. Therefore, this then gives a clear indication of the impact of cohabitation on fertility. About the gender distribution of the sample data, there are more females than males in every age category. Percentage distribution of females is 54.21% and 45.79 % for the males. Nine thousand four hundred nineteen males are younger than 18 years of age, 6994 18 to 45 years of age and 14157 above 45 years of

age. There are 12453 females younger than 18 years of age, 8270 between 18 to 45 and 15491 older than 45 years of age.

The African population is the most dominant race with 30253 of the participants being African, 5183 are Coloureds, 475 are Indian/Asia and 1525 are White.

South Africa also has low marital rates as the analysis displays that 10936 participants have never been married, 4606 are married, and 1284 are cohabiting, of those Africans have the highest cohabitation rates.

The analysis of NIDS also shows that cohabitation and marriage simultaneously affect fertility in the sense that, as Cohabitation increases, marriage decreases but the fertility do not seem to decrease. The t-test comparison of cohabitation and marital fertility is similar both averaging at just above 3.

4.3. Cohabitation Trends

4.3.1. Comparing cohabitation for five year reproductive age groups

This section investigates the rates of cohabitation and marriage living together across different age groups; this investigation was necessary to find out whether age groups were an essential consideration in the regression models. Figure 4.1 below shows the variation of the percentage of those living together and married in different five year age groups.

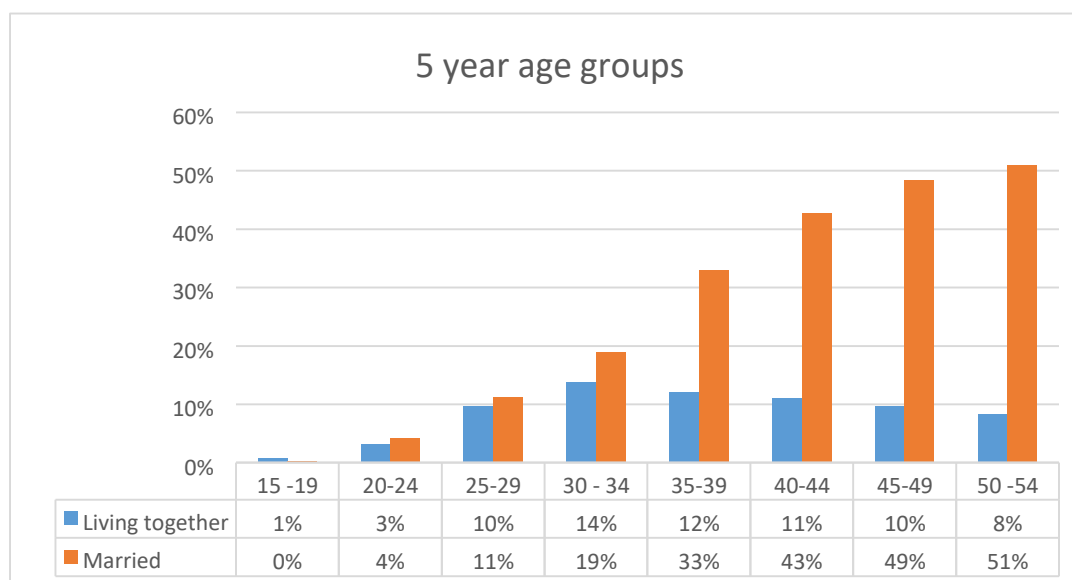


Figure 4.1: Living together and Marriage by five year age groups

The rate of cohabitation was the highest for those within the age groups 30 to 34 years (13.8%). The cohabitation rate peaked at this age group and after that slowly declined. The cohabitation rate was the lowest in the youngest age group of 15-19 years (0.7%). The marriage rate was the highest for those within the age group of 50 to 54 years (50.9%). The marriage rate generally increased as age increased.

4.3.2. Comparing cohabitation for racial groups

The research study investigated the cohabitation rates and marriage rates across different racial groups. Figure 4.2 below of the cohabitation and marriage rates for the different racial groups.

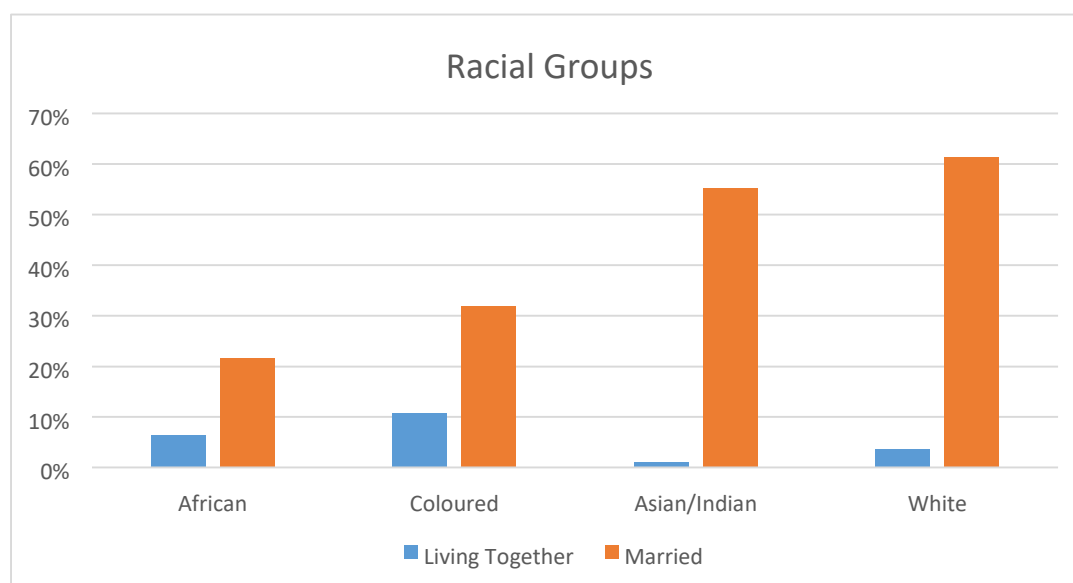


Figure 4.2: Living together and Marriage by racial groups

The Coloureds racial group had the highest rates of cohabitation (11%) while the Indian racial group had the lowest rates of cohabitation (1%). Although the Indian racial group had the lowest rates of cohabitation, it had the second-highest rate of marriage with slightly over half being married (55%). The White racial group had the highest rate of marriage (61%) while the African racial group had the lowest rate of marriage (22%). Generally, the rates of cohabitation were low across most of the racial groups being less or close to one-tenth.

Furthermore, the research investigated the cohabitation rates across different five year age groups for the different racial groups, and this is presented in Figure 4.3 below

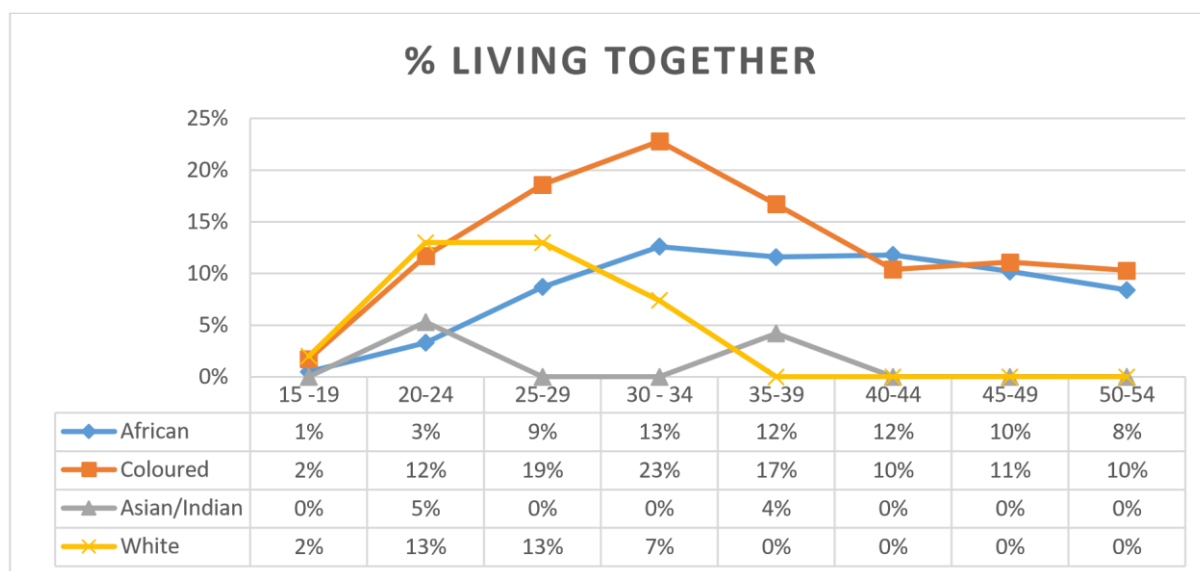


Figure 4.3: Living together and not married by racial groups and age groups

The white racial, age group had the highest rate of cohabitation for those that were 24 years and younger. The highest rate of cohabitation for the white racial group was in the 20 to 24 year age group (13%). For the white racial, age group over the age of 29 years the rate of cohabitation generally declined and for ages 35 years and older, there were no people in the white racial group living together and not married. For most of the age groups above 24 years, the Coloureds racial group has the highest rates of cohabitation. The highest rate of cohabitation for the Coloureds racial group was in the 30 to 34 year age group (23%). For the age group of 40 to 44 years, the African racial group has the highest rate of that cohabitation (12%). The highest rate of cohabitation for the African racial groups was in the 30 to 34 year age group (13%). The Asian/Indian usually did not cohabitate while not married like most of the age groups had no people living together, this indicates that there is a very low tendency for the Asian/Indian race to live together while not married. Generally, there is a polynomial trend for cohabitation and age for all the racial groups with an upward trend for the younger age groups and the downward or constant trend for the older age groups. The trend lines are shown in the appendix.

Also, the research investigated the marriage rates across different five year age groups for the different racial groups, and this is presented in Figure 4.4 below

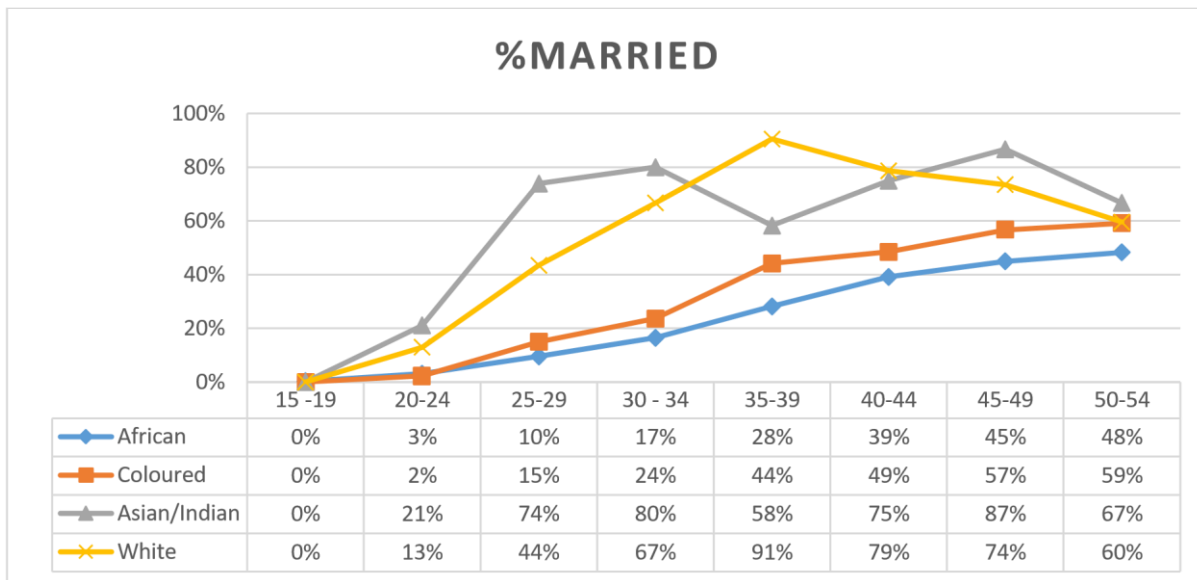


Figure 4.4: Marriage rate by racial groups and age groups

For the age groups, 34 years and younger and the age groups 45 years and older the Asian/Indian racial group had the highest marriage rates compared to all the other races. The highest marriage rates for the Asian/Indian racial groups were in the 45 to 49 year age group (87%). The African racial groups had the lowest marriage rates compared the all the other racial groups for all ages above 24 years. For the age group of 40 to 44 years, the white racial group reported the highest rate of marriage compared to all the other racial groups (91%). There is an upward linear trend for the African racial group ($B = 0.077$, $R^2=0.98$) and the Coloureds racial group ($B = 0.096$, $R^2=0.96$).

4.3.3. Comparing cohabitation by the level of education

The research investigated the cohabitation rates across different levels of education attained. Figure 4.5 below shows the rates of cohabitation and marriage across the different education levels attained.

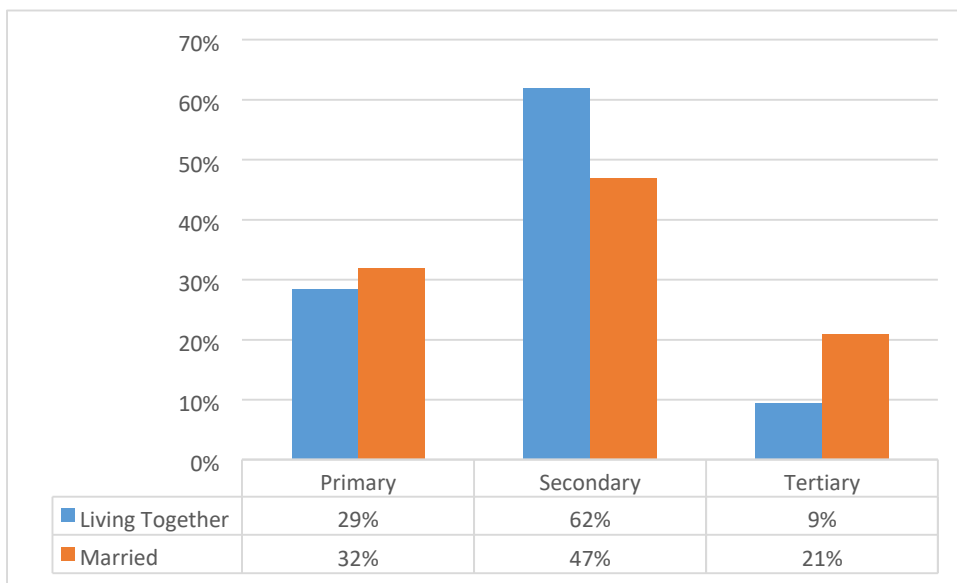


Figure 4.5: Marriage rate and Cohabitation rate by education

The cohabitation rate and the marriage rate were highest amongst those with secondary education. The lowest cohabitation rates were amongst those with tertiary education. For those with secondary education, the rates of cohabitation were higher than the rate of marriage. For those with tertiary education and primary education, the rate of marriage was higher than the rates of cohabitation.

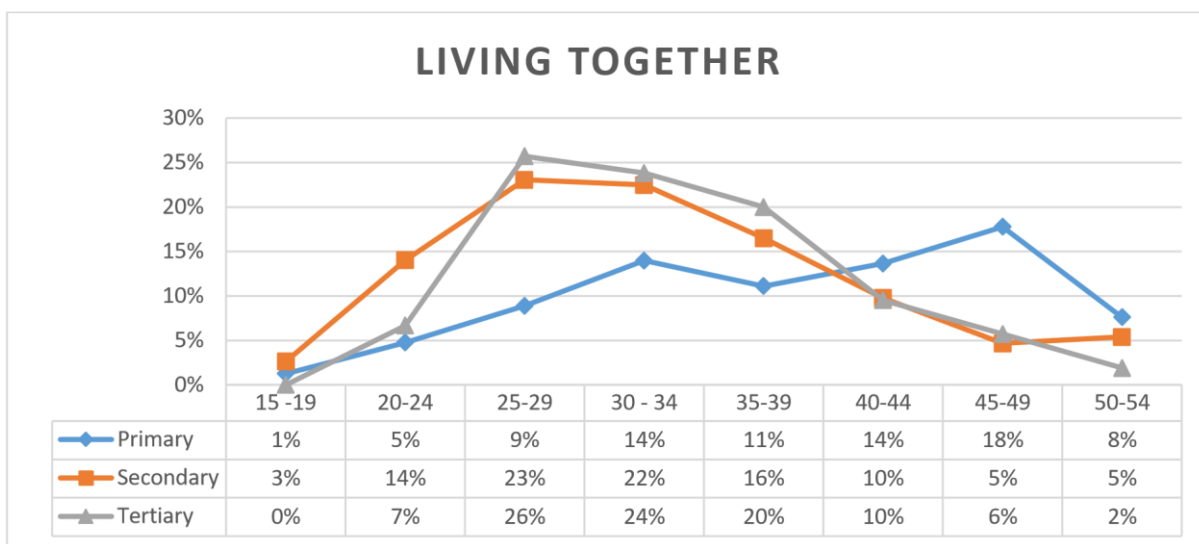


Figure 4.6: Cohabitation rate by education and age

For age groups between 25 years and 39 years, those with tertiary education had high rates of cohabitation compared to all the other educational groups. Those with tertiary education showed a rise in cohabitation rates between from the ages of 15 years to 29 years. The highest

rate of cohabitation was for those with tertiary education in the 25 years to 29 years age group (26%), this indicates that there is a rising trend for those with tertiary education in the younger ages. For ages 30 years and older, there is a downward trend in cohabitation rates for those with tertiary education. Those with primary education had the highest cohabitation rates for the older age groups that are 40 years and older. For ages from 20 years to 39 years those with primary education had the lowest cohabitation rates while for ages 40 years, and older those with primary education have the highest cohabitation rates. Those with secondary education had the highest rates of cohabitation for the youngest age groups who are aged 24 years and younger. There was a polynomial trend for cohabitation with age, for the younger ages there was an upward trend in the cohabitation rates, and for older ages, there was generally a downward trend in the rate of cohabitation. The polynomial trend lines are shown the appendix.

4.3.4. Comparing cohabitation by place of residence

The research investigated the cohabitation rates across different places of residence. Figure 4.7 below shows the rates of cohabitation and marriage across the different place of residence.

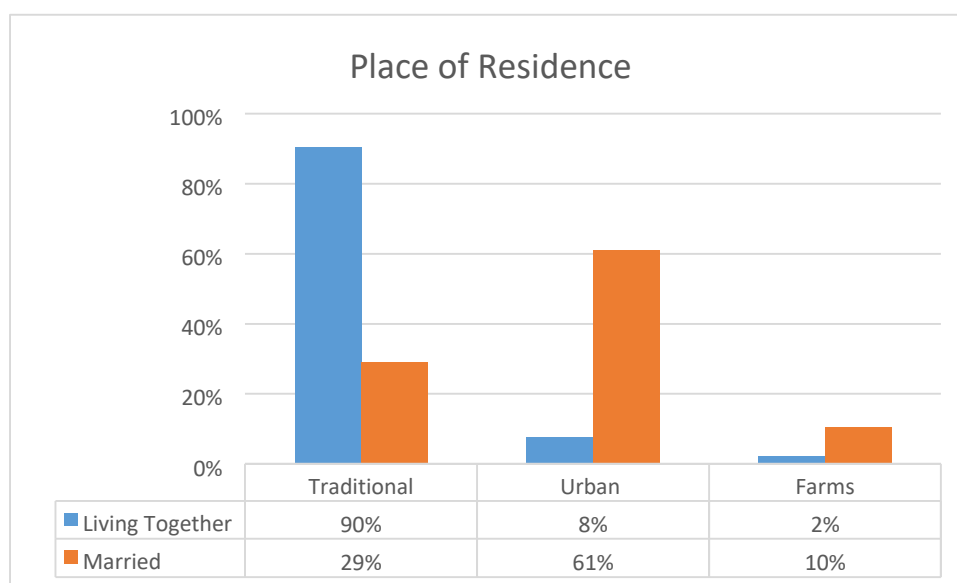


Figure 4.7: Marriage rate and Cohabitation rate by place of residence

Those living in the traditional areas had the highest cohabitation rates (90%) while those living in the farms had the lowest cohabitation rates (2%). Those living in the urban areas had the highest marriage rates (61%) while those living in the farms had the lowest marriage rates (10%). For those living on the farms and the urban areas, the marriage rates were higher than the cohabitation rates. Those residing in traditional areas had higher rates of cohabitation compared to marriage rates with the cohabitation rates about three times the size of the marriage rates.

4.4. SMAM ANALYSIS

The patterns of those that were single and had never married were also investigated in the research study. Figure 4.8 shows the percentage rates of those that were single and never married for the different five year age groups.

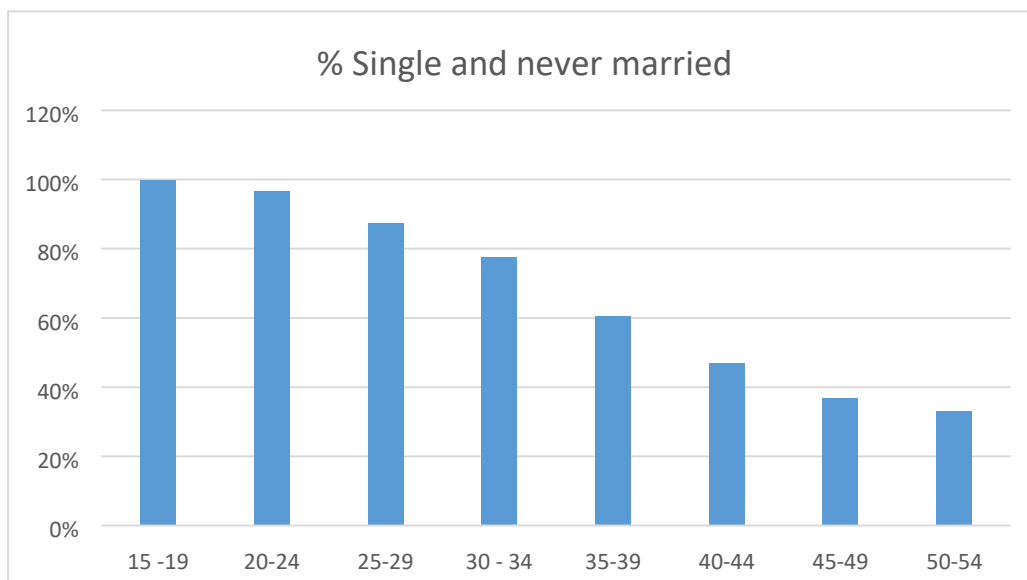


Figure 4.8: Proportion of those that are single and never married in different age groups

The lowest rates of being single were highest amongst the older age group of 50-54 years (33.2%) — generally the rate of those that were single and never married decreased as age increased. It was necessary to investigate further the trends of those that were single and never married for different age groups and racial differentials; this is shown in Figure 4.9 below.

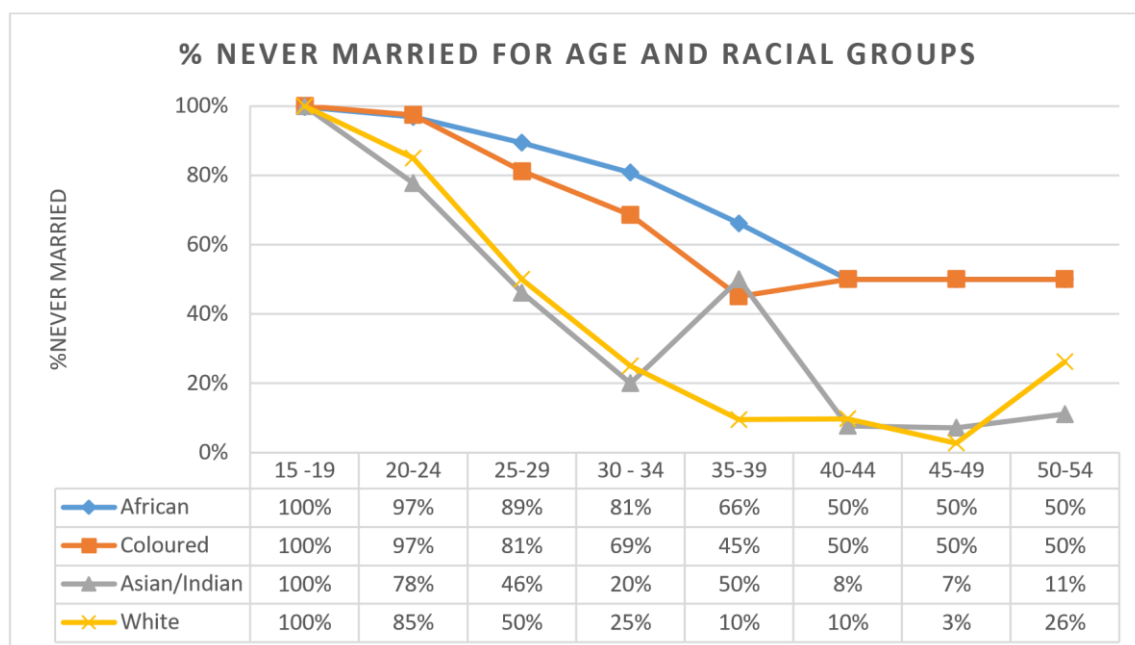


Figure 4.9: Percentage of those that are single and never married by age and race

The rates for those that were single and never married was the highest amongst the African and Coloureds racial groups. The African racial group had the highest rate of those that were never married for the ages 25 to 39 years. The Asian/Indian racial groups had the lowest rates of those that were never married for most of the age groups. However, for the age group 35 to 39 years the Indian race experienced a rise in those that were never married and had the second-highest rate for those that were never married. The white racial group had the lowest rates for those that were not married for the 35 to 39 years and 45 to 49 year age groups.

Furthermore, the SMAM was measured across the different racial groups to investigate the average period being in the single state of those who are not married before the age of 50 years. Figure 4.10 below shows the SMAM for the different racial groups.

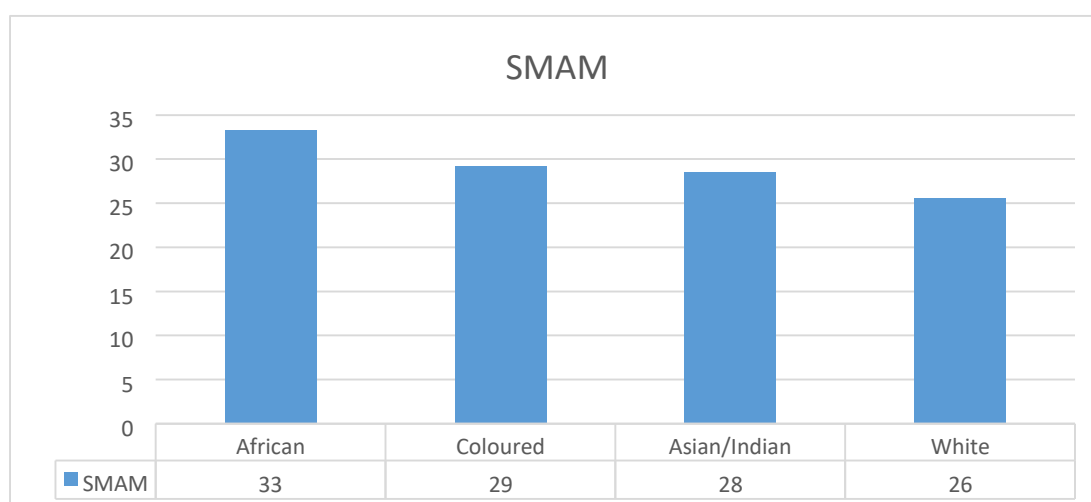


Figure 4.10: SMAM by racial groups

The SMAM was the highest in the African and Coloureds racial groups. The African racial group is single for an average period of 33 years, and the Coloureds racial group is single for an average period of 29 years. The African racial group is the only racial group that has a SMAM above the age of 30 years; this is an indication that the African racial group has a tendency to get married at older ages compared to the other races. The white racial group had the least SMAM with an individual having to be in the single state for an average of 26 years; this indicates that the white racial group generally gets married and settles down at a younger age than the other racial groups.

4.5. Fertility levels

4.5.1. Analysis of ASFR and TFR: Age and Racial groups

This section presents the patterns of the Age-Specific Fertility Rates (ASFR) for a woman for different racial groups and age groups. Figure 4.11 shows the ASFR for a woman for different five year age groups and racial groups.

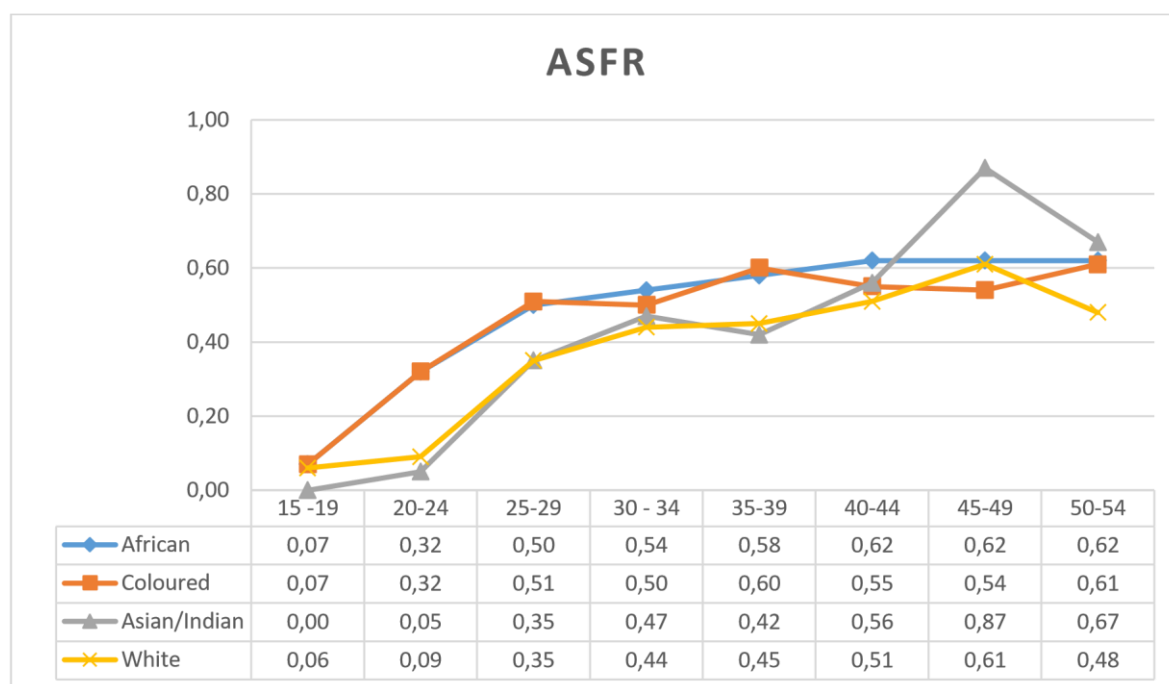


Figure 4.11: ASFR by age groups and racial groups

The ASFR was the highest in the African racial groups for most of the age groups. The ASFR for the African racial group peaked at the 40 to 44 years age group with an ASFR of 0.62 births per woman and was generally constant after that. The Asian/Indian racial group had the highest ASFR for the 45 to 49 year age groups with 0.87 births per woman and the 50 to 54 years age group with 0.67 births per woman. These ASFR values were highest for all the values presented. The African and Coloureds racial groups had the highest ASFR Rates for the ages below 30 years. The SMAM for the African racial group was 33 years, which is

within the 30 to 34 year age group. This shows that there is a high chance that African women in this age group will get married, this may be the reason why the ASFR becomes the highest for the 30 to 34 year age group as African women have a high chance of being married and settled in this age group.

The research also investigated the pattern of the total fertility rate (TFR) for the different racial groups. Figure 4.12 shows the TFR for a woman for different racial groups.

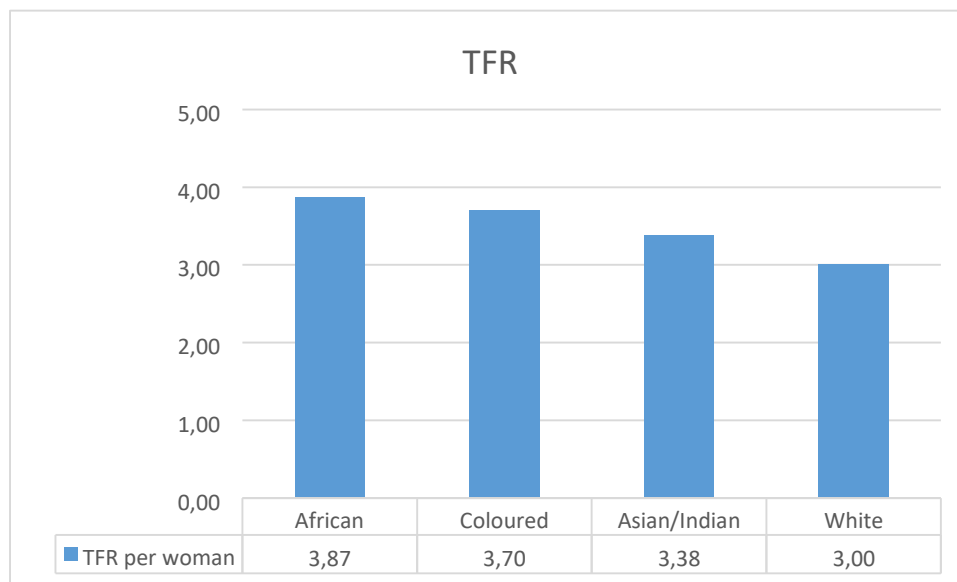


Figure 4.12: TFR by racial groups

The African racial group had the highest TFR of 3.87 childbirths per woman while the Coloureds racial group had the second highest TFR of 3.70 childbirths per woman, this indicates that the African and Coloureds racial group generally had a higher tendency of having more children. The lowest TFR was reported for the white racial group which was three childbirths per woman. The white racial group, therefore, had the lowest tendency of having children compared to the other racial groups. The white racial group had the lowest SMAM which means that they should generally get married at younger ages and should have a higher chance of giving birth; however, this was not the case as indicated by the white racial group having the lowest TFR.

4.5.2. Analysis of ASMFR and TMFR: Age and Racial groups

This section presents the patterns of the Age-Specific Marital Fertility Rates (ASMFR) for the woman across different racial groups and age groups. Figure 4.13 shows the ASMFR for a woman for different five year age groups and racial groups.

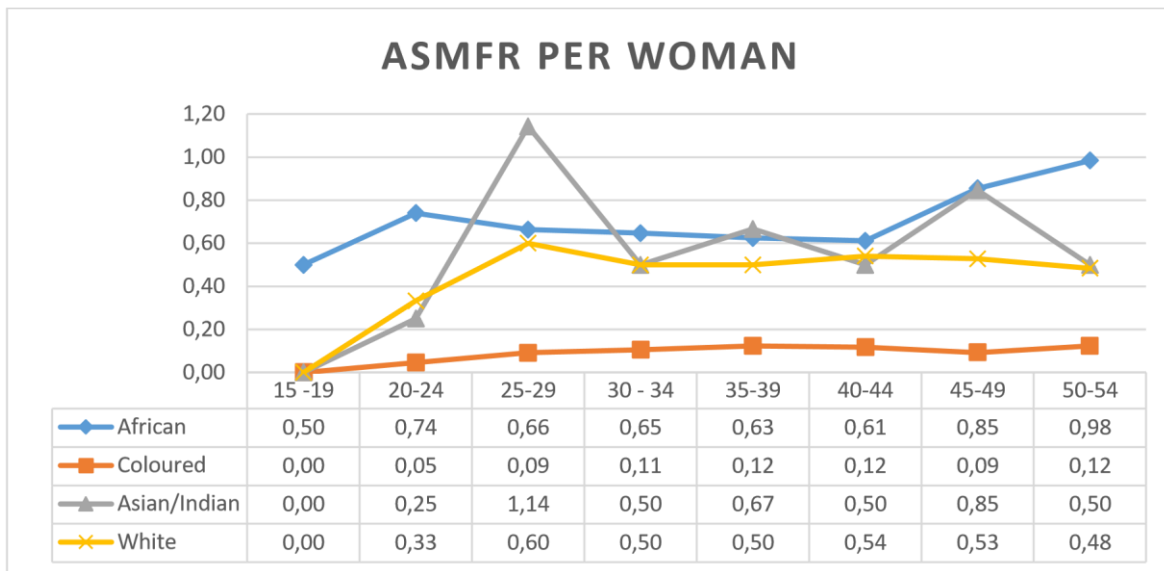


Figure 4.13: ASMFR by age groups and racial groups

The African racial group has the highest ASMFR per woman across most of the age groups; this shows those that were married in the African racial group had a higher tendency of having children. The Asian/Indian racial group had the highest ASMFR per woman in comparison to all the other racial groups for the age group 25 to 29 years (1.14) and the age group 35 to 39 years (0.67). The Coloureds racial had the lowest ASMFR across all the age groups compared to the all the other racial groups; this shows that those that were married in the Coloureds racial group had a lower tendency of having children.

The research also investigated the pattern of the total fertility marital rate (TMFR) for the different racial groups. Figure 4.14 shows the TMFR for a woman for different racial groups.

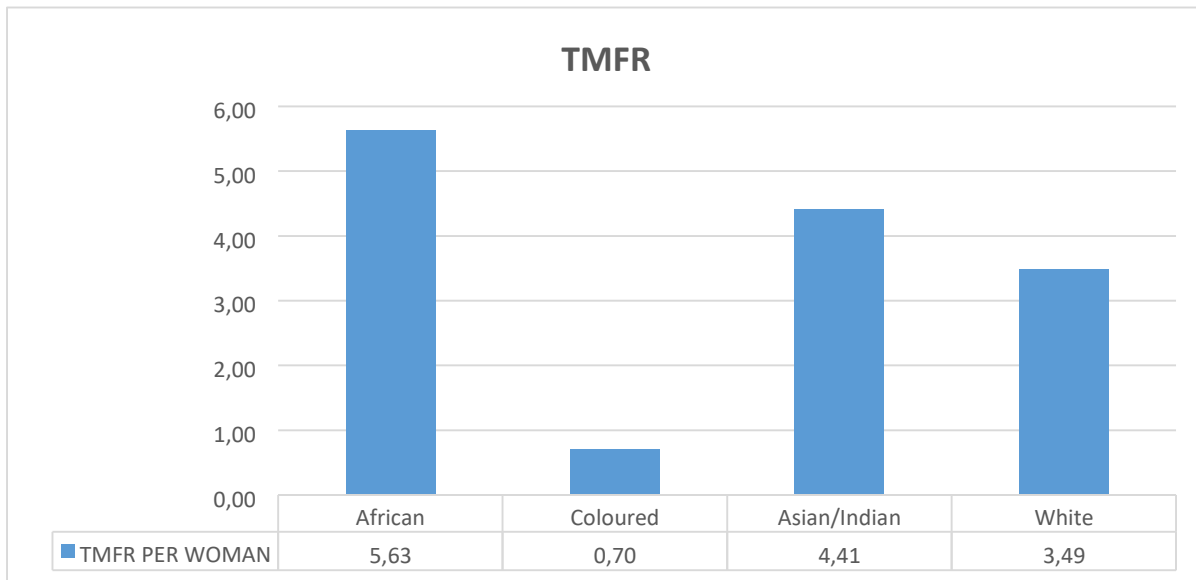


Figure 4.14: TMFR by racial groups

The African racial group had the highest TMFR per woman compared to all the other racial groups (5.63). As mentioned earlier, this generally means that those women that are married in the African racial group had a higher tendency of having children. The Coloureds racial group had the lowest TMFR compared to all the other racial groups (0.70). As mentioned earlier, this indicates that the women in the Coloureds racial group who are married, have a lower tendency to have children compared to all the other races.

Furthermore, the researcher compared the total fertility rate (TFR) and the total fertility marital rate (TMFR), and this is presented in Figure 4.15 below.

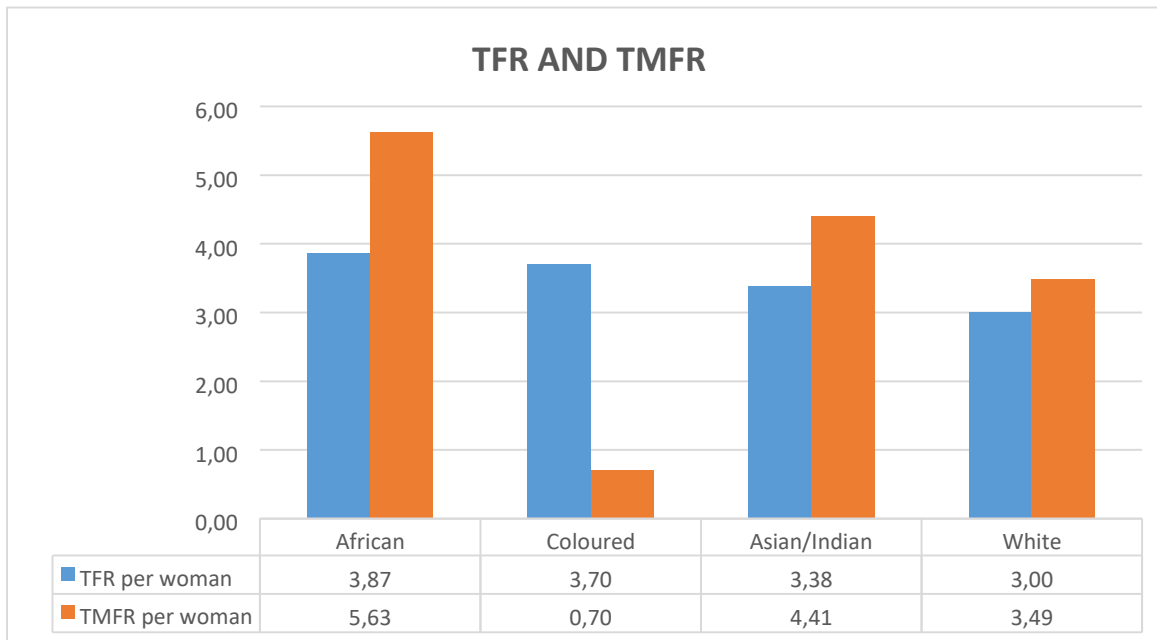


Figure 4.15: TFR and TMFR by racial groups

The African race had the highest TFR and TMFR than all the races. However, the TMFR was higher; this indicates that married African women have a higher tendency to have children compared to the unmarried African woman. The Asian/Indian and the white racial groups showed a similar pattern of having TMFR which strongly suggests that being married has a positive effect on the TMFR. The Coloureds racial group was the only exception as the TFR was higher the TMFR, this may indicate that married Coloureds women have a lower tendency of having children compared to the unmarried Coloureds women. However, it is important to note that earlier, it was found that a higher percentage of women in the Coloureds racial group were living together and not married and therefore most women in the Coloureds racial group are represented in the TFR as most of them are not married.

4.6. CEB AVERAGES

The mean CEB for the different racial groups was investigated, and the results are present in Figure 4.16 below.

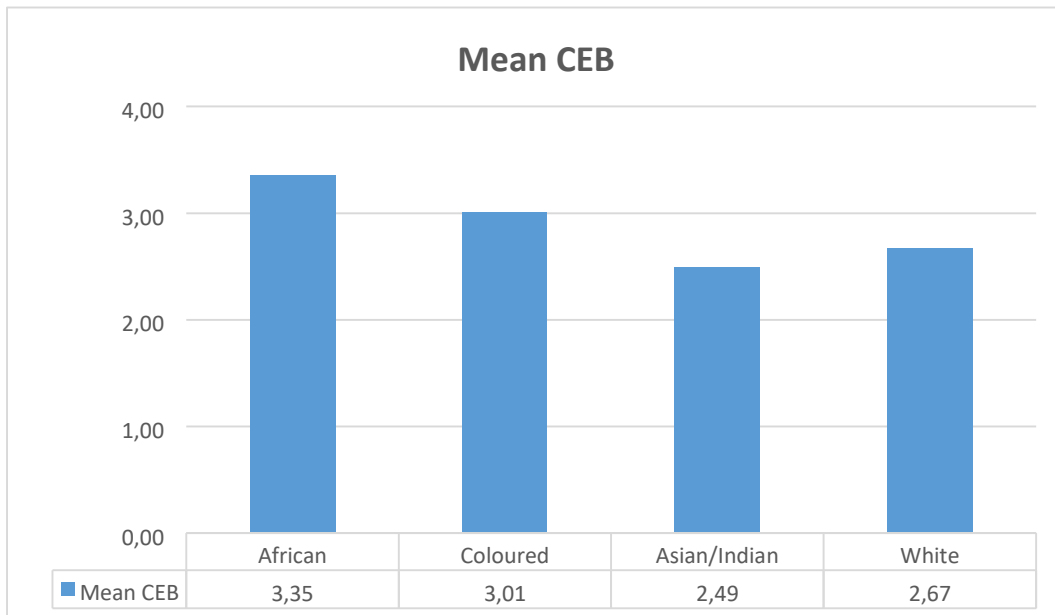


Figure 4.16: Mean Child Ever Born by racial groups

The African race had the highest mean CEB compared to all the other racial groups (3.35), this indicates that African women generally had the highest tendency to give birth compared to the other racial groups, this is expected because in the previous sections the research found that the African racial group had the highest TFR and TMFR. The Asian/Indian race had the lowest mean CEB compared to the other racial groups (2.49), this indicates that Asian/Indian generally have a lower tendency to give birth compared to the other racial groups.

Furthermore, the trend of the mean CEB was investigated across the different five age groups for the different racial groups. The mean number of children ever born across different racial groups was investigated in the research, and the results are presented in Figure 4.17 below.

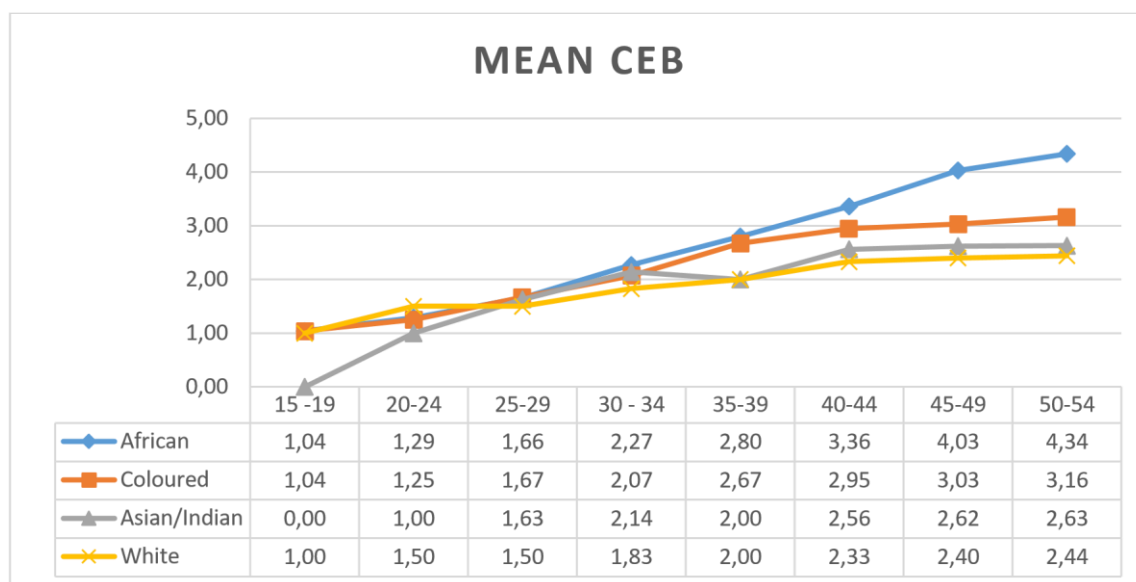


Figure 4.17: Mean Child Ever Born by racial groups and age groups

The general trend was that as age increases the mean CEB increases, this is an indication that women continued giving birth as they became older. For ages 30 years and older the African race had the highest mean CEB, and there was a high increase of the CEB from 1.66 (for 25-29 years) up to 4.34 (for 50-54 years), this as an indication that as African women were older than 30 years, they had a higher tendency of giving birth compared to all the other races. As mentioned SMAM for women was 33 years, which indicates that age that African women generally get married. In addition to this, the African women had the highest ASMFR and ASFR for the age group 30 to 34 years; this may be the reason why there is a high mean CEB after the age of 30 years as the women would have been married and settled down to start a family. The white race had the lowest rates for those that were 25 years and older, and there was a gradual increase of the mean CEB from 1.50 (for 25-29 years) up to 2.44 (for 50-54 years). The white racial group had the highest mean CEB for the young ages of 20 to 24 years. For the white racial group, the youngest average SMAM of 26 years, indicating that they marry and settle down at a younger age. In addition to this woman in the white racial group had the highest ASMFR for the 20 to 24 years, which indicates that married women in the white racial group have the highest tendency of having children, this may be the reason why they have the highest mean CEB at this younger age group.

4.7. Measures of significance between fertility, education level, residential type, and cohabitation: Pearson chi-square and t-test

The t-test is an inferential/continuous statistic comparison of 2 means (averages) whereas a chi-square is a categorical comparison of 2 variables. In order to correct for the

underrepresented individuals often caused by non-response and missing data, survey weights were applied for this analysis. The confidence- interval used was 95% interval which simply means results of the estimated mates will fall between the two confidence intervals if there is a 5% level of significance. 2 Decimal places were used by the researcher for the easy representation of numbers. The Design-based F produced by -svy tab- _is_ a corrected weighted Pearson chi-square statistic. But because of the complex sampling design, the distribution of the uncorrected version is not chi-square. To get a valid p-value, the chi-square statistic is converted to an F statistic.

Table 4.1: t-test years of schooling and marital status

Survey mean estimate

Strata = 3

PSUs = 2360

Number of observations = 8377

Population size = 16151262

Design df = 2357

over	Mean	Std. error	95 % Conf. Interval	
yrs_of_school				
Married	6.52	0.22	6.08	6.95
Cohabiting	5.65	0.32	5.03	6.26
Widowed	3.84	0.19	3.48	4.20
Divorced	7.03	0.57	5.91	8.16
Never-married	7.79	0.09	7.62	7.96

An independent t-test was run on a population size of 16151262 to determine the years of schooling and marital status averages. The observation frequency was 8377. The results showed that cohabiting couples have lower years of schooling (3.84) average. Divorced individuals have the highest averages (7.79). The average difference between the two is 3.95. These results support the results found in 4.3.3., which show cohabiting couples having lower levels of education as compared to married couples. These results show that in South Africa, cohabiting couples are not more educated as the literature suggested. Therefore one can make the assumption that cohabitation is more popular amongst the working class in South Africa rather than the upper class. The null hypothesis (Ho) is that cohabiting couples are more educated. The Alternative hypothesis (H1) is that cohabiting couples are not more educated.

Therefore the researcher fails rejects the null hypothesis due to the results produced, meaning that there is no significance between cohabiting and being more educated.

Table 4.2: t-test number of children and marital status

Survey mean estimate

Strata = 3

PSUs = 2290

Number of observations = 6633

Population size = 13497535

Design df = 2287

Over	Mean	Std. error	95 % Conf. Interval	
W3_a_bhcnt1con				
Married	3.51	0.07	3.36	3.65
Cohabitation	3.03	0.13	2.77	3.29
Widowed	4.98	0.13	4.72	5.24
Divorced	3.31	0.14	3.04	3.58
Never married	2.32	0.04	2.24	2.39

An independent t-test was run on a population size of 13497535 to determine the number of children and marital status averages. The observation frequency was 6633. The results showed that never-married couples have the less average number of children (2.32) average. Widowed individuals have the highest averages (4.98). The average difference between the two is 2.66. These results support literature that cohabitation does tend to limit fertility and child-bearing in South Africa and coincides with the results in section 4.3.1., which show cohabiting couples having lower fertility rates compared to married couples. The assumption that can be made for low fertility rates amongst the never-married individuals is the error is self-reporting and also younger individuals tend to report themselves as never married and younger age cohorts have lower parity levels i.e. fewer children as they have just entered their reproductive years. The null hypothesis (Ho) is that cohabiting couples have lower fertility rates. The Alternative hypothesis (H1) is that cohabiting couples do not have lower fertility rates. Therefore the researcher fails to reject the null hypothesis, meaning there is a level of significance between cohabitation and having lower fertility.

Table 4.3: Pearson chi-square comparing categorical variables education and marital status

Strata = 3

PSUs = 2914

Number of observations = 12860

Population size = 29271235

Design df = 2911

Edcat	married	cohabiting	widowed	Divorced	Nevermarried	total
Primary	0.07	0.01	0.03	0.01	0.08	0.19
Secondary	0.16	0.09	0.02	0.01	0.42	0.65
Tertiary	0.07	0.01	0.00	0.01	0.07	0.16
Total	0.29	0.06	0.05	0.03	0.57	1

Pearson:

Uncorrected chi2 (8) = 913.41

Design-based F (6.88, 20037.43) = 39.84

P = 0.00

A Pearson chi-square was run on a population size of 29271235 with 12860 numbers observed. The uncorrected chi-square is 913.41 with a p-value = 0.00. The null hypothesis (Ho) is that there is a relationship between the level of education and marital status. The alternative hypothesis is that there is no relationship between the level of education and marital status. Due to the results presented the researcher rejects the null hypothesis meaning that the relationship is significant.

Table 4.4: Pearson chi-square comparing categorical variables number of children and marital status.

<u>Fert</u>	<u>married</u>	<u>cohabiting</u>	<u>widower</u>	<u>divorced</u>	<u>Nevermarried</u>	<u>total</u>
1	0.13	0.03	0.04	0.01	0.16	0.37
2	0.02	0.00	0.02	0.00	0.01	0.05
3	0.00	2.5e-04	0.00	5.3e-05	5.0e-04	0.00
4	0.15	0.04	0.01	0.01	0.37	0.58
Total	0.30	0.06	0.07	0.03	0.54	1

Chi-square test for fertility and marital status produced the following results Pearson chi-square = 2150.01 with p-value= 0.00. The null hypothesis (Ho) is that married couples have more children. The alternative hypothesis is that married couples do not have more children. The researcher rejects the null hypothesis meaning that again the relationship is significant.

Table 4.5: Pearson chi-square comparing geography type and marital rates

Number of strata= 1

PSUs = 1510

Number of observations = 7149

Population size = 19348880

Design df = 1509

Marital Status	Proportions
Married	0.32
Cohabiting	0.07
Widowed	0.06
Divorced	0.03
Never-married	0.52
Total	1

Key: proportions = cell proportions

Only a one-row category. Statistics cannot be computed

Table 4.5 only provides the cell proportions results of the urban areas, therefore, chi-square results could not be computed by Stata. Based on the visible results in urban-areas most people have never-married.

4.8. Conclusion

This chapter gave a detailed presentation of the results. It was found that there is variation in cohabitation, marriage and fertility rates and periods in which women remained single for the different age groups, education levels, races and places of residence. The African race generally had higher fertility rates represented by the TFR and TMFR. Furthermore, the African racial group had the most prolonged periods of women being single represented by the higher SMAM. The research also found that cohabitation did not have a significant impact on fertility, there the author rejects the hypothesis of the study. The t-tests and chi-square tests yielded similar results to the other analysis tests which showed marital fertility is slightly higher, cohabiting couples having low educational levels and coloured race in South has the highest cohabitation rate hence the low ASMFR. The next chapter will present the recommendations and the conclusion based on the findings from this chapter

Chapter 5

Discussion, recommendations and limitations

5.1. Introduction

Fertility is essential in society as it contributes to the growth of the population and reflects the desires and reproductive practices of the society (Goodman et al., 2012). Therefore it was necessary for the research study to investigate the trends of fertility in South Africa. However, there is a concern that unmarried women who give birth to children tend to neglect or even abandon their children and even if they do not, they are stuck in a vicious cycle of poverty (Barbarin and Richter, 2013). It is good to note though that it is not all single woman who does this, some are financially capable of raising their sons but there are psychological issues that come with having an absent father in a child's life. Although marriage has been a critical determinant of fertility for women, it is also necessary to consider cohabitation as an alternative union between partners and its effect on fertility (Guzzo & Hayford, 2014).

Cohabitation has become a regular and sometimes permanent living arrangement that is outside marriage (Posel et al., 2011). Therefore it was necessary for the research to investigate the trends of marriage and cohabitation in South Africa across different ages, racial groups and education levels. In addition to this, the study investigated the influence of cohabitation on fertility for women across different age groups, racial groups and education levels; this chapter provides a discussion of these research findings and the context of these findings based on literature. Furthermore, the chapter provides recommendations based on the findings for further research and limitations of the study.

5.2. Discussions

5.2.1. Discussion of Marriage trends and cohabitation

The research investigated the marriage trends and cohabitation patterns across racial groups, age groups and place of residence. The research found that the Coloureds racial group had the highest rates of cohabitation. The rate of cohabitation for the African racial group peaks for the 30 to 34 year age group and is about twice that of the White racial group and two-thirds of the Coloureds racial group. Similar to this (Moore and Govender, 2013) found that in South Africa the African and Coloureds racial group had the highest rates of cohabitation for the ages 30 to 34 years. (Iyigun, 2009) Argues that there is a preference for cohabitation as this arrangement allows women to be more independent and free from male influence.

Cohabitation is a liberal arrangement with less restraint compared to marriage.

The white racial group had the highest rates of marriage which were about three times the rate of marriage of the African racial group (which had the lowest rates of marriage). The African racial group faces a barrier of payment of the bride price before they can get married (Posel & Rudwick, 2012). The white males do not have to pay the bride price which enables them to get married without facing a high amount of costs easily. The African racial group was found to have a rate of cohabitation that is about twice that of the white racial group for the 30 to 34 years, which is almost similar to literature findings that Africans in their mid-thirties have twice the rate of cohabitation rate of the white racial group (Posel et al., 2011).

There was generally no cohabitation for the white racial group at ages 35 years and older which complies with literature findings that cohabitation is just a temporary stage at younger ages. Cohabitation eventually terminates as marriage at older ages for the white racial group (Posel et al., 2011), the findings further support this that for the white racial group the age group 35 to 39 years has the highest age groups with about nine out of ten women being married.

The slow decline in the cohabitation rate indicates that for most women cohabitation may be a permanent or long-term stage. The majority of African women are unmarried during most of the reproductive years. Furthermore, the higher SMAM of the African racial group indicates that the African women remain unmarried for the most extended period during the reproductive years; this means that African women have a higher risk of having children while they are single which often results in an uncontrolled rate of giving birth (Mudhovozi, 2012).

The research found that women with secondary education as their highest level of education had the highest rates of marriage while those with tertiary education as their highest level of education had the lowest rates of marriage. Furthermore, the research found that most young people between the ages of 25 and 29 years who had tertiary education and those 24 years and younger who had secondary education had the highest cohabitation rates. These findings indicate that those with important education have a higher preference for cohabiting compared to marriage. (Sassler and Miller, 2011) argue that women with a notable education are more likely to delay marriage. Therefore women with a notable education may show a preference towards cohabitation before marriage. Women with a higher level of education also take more time evaluating and deciding on a suitable partner before marriage (Sassler and Miller, 2011). Cohabitation may allow these women to freely evaluate their partners without having to commit to a long term relationship such as marriage

The women living in urban areas had the highest marriage rates with about six out of ten women being married. For the African racial group, the rise in marriage rate is shallow, and the decline of cohabitation is slow which further indicates that there is a tendency for the African women to remain at the cohabitation stage than to transition into marriage. More than half of the African women were unmarried across most of the reproductive age groups. The African racial had the highest SMAM (33years) while the white racial group had the lowest SMAM (26 years) which strongly indicates that the women in the white racial group are married in the younger ages while the African women delay marriage to an older age.

5.2.2. Discussion of Fertility rates in South Africa

The research found that the ASFR for the African racial groups initially exceeds all the other racial groups at the 30 to 34 year age groups which coincide with the SMAM of 33years. The TFR was the highest for the African Racial group and the lowest for the white racial group. For about three children that the white racial women gave birth to, the African woman would give birth to 4 children. According to Goodman et al., (2012) fertility is affected by preferences of women, attitudes towards the use of contraception, rates of abortions, diseases which reduce fertility such as HIV/AIDS. According to Bongaarts (2010), contraceptive use and induced abortion are critical determinants infertility. Induced abortions and contraception tend to reduce the fertility rates amongst women. Therefore the higher fertility amongst the African racial group may be indicative of lower and improper use of contraception. Also, the higher fertility rate may also be indicative of lower induced abortion rates amongst the African racial group. African women who reside in rural areas have a low tendency to engage in family planning and to use contraception, and this has resulted in a higher fertility rate for African women. According to Kulu (2003), African and white women residing in urban areas have lower fertility levels than what would typically be ideal. In addition to this, fertility for the white racial group has declined at a higher rate compared to that of the African and Coloureds Racial groups.

The African racial group had the highest ASMFR across most of the age groups while the Coloureds racial group had the lowest ASMFR, this strongly indicates that across most of the reproductive year's African women who are married tend to have higher fertility than the other age groups. Therefore this finding seems to indicate that marriage seems to be an essential factor that increases the fertility rate for African women. According to Bongaarts (2010), the percentage of women that are married during their reproductive years is an essential determinant of marital fertility rate. African women that are married at younger reproductive years will tend to have higher fertility rates in comparison to those that are married in later ages. This is a concern for the African racial group since women tend to get married at the SMAM of 34 years which may indicate that they are not reproductive as they could potentially

be if they were married earlier. The African racial group had the highest TMFR (5.63 children per woman) while the Coloureds racial group had the lowest TMFR (0.7 children per woman). The TMFR was higher than the TFR for all racial groups except the Coloureds racial group. The TMFR for the African racial group was about 1.5 times of the TFR. (Rossouw, et al., 2012) reports that the fertility rate amongst women that are unmarried has experienced a higher decline compared to those who are married due to an increase of contraception by those that are unmarried.

The African racial group had the highest mean CEB (3.35 children per woman) while the Indian/Asian had the lowest mean CEB (2.49). The African Racial group had the highest mean CEB for ages above 29 years. The white racial group had the highest rate for the younger age group of 20 to 24 years. Therefore this shows that white racial women tend to have the highest fertility at the younger age groups while the African women have the highest fertility for the older ages. The white racial group had the lowest SMAM which is suggestive to that they have a tendency to get married at younger ages in comparison to all the other racial groups. According to Bongaarts (2010), the percentage of women that are married during the younger reproductive years increases the fertility that of the women within these reproductive years. Therefore this seems to indicate that since women in the white racial group are married earlier, they have a higher number of children ever born at the younger ages. However, at older age groups, the African racial group has higher fertility as they have the highest CEB for ages 30 years and above.

5.2.3. Discussion of Socioeconomic factors that affect fertility amongst cohabiting and married

The study found that the odds ratio across all the variables were more significant than one across all the variables that were considered given that women were cohabiting with their partner. This suggests that cohabiting increases the chances of giving birth, hence, strongly supports the notion that a cohabiting union can be an alternative to a marriage arrangement as it also has the effect of increasing fertility (Bongaarts, 2010). For the racial groups, the odds of a woman giving birth given that they were cohabitating was the highest for the white racial group which was about twice the odds of the Coloureds racial group and three times that of the African racial group. The African women had the lowest odds of giving birth to a child in comparison to the white and Coloureds racial group. The Indian/Asian racial group had the lowest rates of cohabitation with very low or no cohabitation across all the different age groups, and therefore the effect of cohabitation on fertility was insignificant, this may indicate that it is uncommon for Indian/Asian women to engage in cohabitation.

For education, the odds of a woman giving birth given that they were cohabitating was the highest for women with secondary education was the lowest for those with tertiary education. (Rossouw, et al., 2012) Found that women who had acquired a higher level of education tend

to have a lower fertility rate as they generally have greater prospects of earning larger incomes and the opportunity cost of preceding this income is much higher. Furthermore, with a higher educational level, there is a higher likelihood of women being alert and well informed on family planning and the use of contraception. In the theoretical framework developed by John Bongaarts, contraceptive use and how effectively it is used are critical determinants of fertility (Bongaarts, 2010). The effectiveness of contraception can be significantly increased if women are more educated on the use of contraception. Furthermore, due to the higher opportunity cost of preceding income, the women who are more educated may be induced into undertaking an abortion which is another determinant of fertility in John Bongaarts theoretical framework.

For age groups, the odds of a woman giving birth given that they were cohabitating was the highest for women within the 30 to 34 years age group which coincides which is the age group when the African and Coloureds racial group have the highest cohabitation rates. Therefore this generally indicates that at the age when they are high levels of cohabitation amongst the African and Coloureds racial groups the odds of women giving birth is generally higher. Furthermore, cohabitation had the highest positive influence on the number of children that the women would give birth for the 30 to 34 year age group. Therefore it is evident that high levels of cohabitation will increase both the chance of giving birth and the number of children that a woman would give birth. In John Bongaarts theoretical framework the frequency and timing of intercourse are vital factors that influence fertility (Bongaarts, 2010). Cohabitation which represents a committed relationship results in a higher chance of frequent intercourse which is likely to result in higher fertility (Schröder & Schmiedeberg, 2015).

5.3. Implications of the Findings

The findings revealed that most African women spend the younger ages single and tend to get married in their early thirties; this is a large proportion of their early reproductive years and potentially reduces the fertility rate of women (Bongaarts, 2010). These findings seem to be suggestive of those African women could potentially have higher fertility rates if they were married at younger ages. The findings also revealed that women had the highest odds of giving birth in the age group that contains the African women's SMAM which seems to be suggestive to that the chances of women giving birth are higher closer to the SMAM. A lower SMAM for the African women would mean that they reach their full potential of reproduction at younger ages when they are the most reproductive. Furthermore, the findings of a higher TMFR for African women which was about one and a half times greater than the TFR is suggestive to that being in marriage increases the fertility rate of women. Therefore this gives

further motivation into the need of African women to enter marriage at earlier reproductive ages in order to improve the fertility amongst African women.

African women were found to have about twice the cohabitation rate in comparison to the white racial group; however, the odds of fertility while cohabiting were lowest for the African racial group. This seems to be suggestive that cohabitation has the lowest impact in increasing the fertility of African women even though they seem to have the highest levels of cohabitation. However even though the impact is lower among African women, cohabitation still increases the odds of giving birth compared to not giving birth. Cohabitation is considered a stable union to some extent that may be an alternative to marriage, and therefore there is a likelihood that it will increase fertility. Also, the findings revealed that African women would tend to stay as cohabiting couples for a longer time in comparison to the white racial group; this is suggestive that cohabitation may be considered as a long-term arrangement within African women which offer some form of stability to raise children. The birth of a child or pregnancy may solidify the relationship and make it more stable in some cases and even increase the chances of women conceiving more children while in a cohabiting arrangement (Musick and Micheltore, 2015).

The research found that the chances of fertility were lowest amongst women with tertiary education; this is suggestive to that as women acquire more education and are more aware of the chances of them having children. Highly educated will tend to assume more responsibilities in their careers that may result in time constraints regarding taking care of a child (Rossouw et al., 2012). Therefore these women will tend to be more likely to give birth. In addition to this, women will tend to be aware of contraception and family planning methods which are useful in reducing unwanted pregnancies. Therefore the findings are suggestive to that education has an impact in reducing unwanted pregnancies and the interest of the women in giving birth as this will be a distraction in their career goals. On the face of it, this will suggest that higher education is a key determinant in the reduction of fertility amongst women. As more women acquire higher tertiary education, as has been the case in South Africa, the fertility rates also decrease.

5.4.Recommendations

The findings in the research revealed that there was a significant relationship between cohabitation and fertility and this varied across the different racial groups, ages and level of education attained by the women. Cohabitation generally had a positive effect on fertility as this arrangement increased the chance of fertility as shown in table 4.2. The John Bongaarts model only considers marriage as a determinant and does not consider the effect of cohabitation as a determinant of fertility (Bongaarts, 2010). In South Africa, cohabitation has

become a regular living arrangement especially for women residing in urban areas and those with important education. Furthermore, cohabitation has usually been the final stage of a relationship due to barriers of entering into marriage especially for the African women. Therefore it is necessary to adjust models and theoretical frameworks such that they consider cohabitation as one of the determinants of fertility especially within the context of South Africa.

Cohabitation has been generally viewed as a less stable union which is less suitable for raising children as research has shown that the child being raised under the cohabitation union is less likely progress as well as a child raised under a marriage union (Lau, 2012). Therefore this is of concern as children that do not progress well in society will generally be less productive and may quickly become a burden to society. There is a need to ensure that cohabitation arrangements receive external support especially legal recognition i.e. marriage under common law made applicable in South Africa, as these have developed into popular alternative arrangements to marriage, especially for the African and Coloureds racial groups. These two races comprise a significant proportion of the population composition in South Africa. Therefore it is necessary that government policy and institutions provide support and recognition of such arrangements.

Counselling that is suited for those that are cohabiting should be provided to give proper guidance and support for the cohabiting unions to improve the stability of the union. A higher number of unstable cohabiting unions will have a high negative impact on children being born into those unions therefore communities have to promote stable cohabiting unions as they provide a suitable environment for raising children.

The research found that highly educated women were less likely to have children while cohabiting with a partner. Therefore, it is highly unlikely that highly educated women will have unplanned pregnancies. In South Africa, unplanned pregnancies can be a cost burden to the government as they have generally resulted in high demand for grants from the government (Lwelamira et al., 2012). Therefore, it is necessary that the government develop policies that promote and improve education amongst women to reduce the chances of women having unplanned pregnancies. According to Bongaarts (2010), contraception is a critical determinant infertility amongst women. Therefore, the use of contraception can be used to reduce fertility in cases where the pregnancy is unwanted.

According to Guzzo & Hayford (2014), fertility during cohabitation may encourage the transition to marriage which is considered to be a more stable union. However, this is not certain and is based on whether cohabitation is considered as a permanent alternative to marriage or is considered as a stage that leads to marriage. Therefore, it is necessary to investigate further whether the cohabitation leads to marriage which may be considered to be more stable and may result in lower chances of abortions or neglecting children. Initiatives for family planning and contraception should target African and Coloureds women as these two racial groups tend to remain in a cohabitation union longer than the other races. African women have a SMAM of 33 years which indicates that they are usually single for the longest; this indicates that there is a higher chance of the African woman engaging in sexual intercourse outside marriage or cohabitating with a partner, this increases the chances of the woman having a child outside marriage. Therefore, this gives further support to the case that measures and initiatives for contraception, birth control, and family planning should target African women as they are at a higher risk of having pregnancies outside marriage. Women that give birth to children outside marriage have a higher chance of neglecting or abandoning their children (Barbarin and Richter, 2013). Logistic regression modelling can be conducted to find out the odds of having more kids that are, married versus cohabiting. This can be done in controlling for demographic variables.

5.5 Suggestions for further research

There is a need to expand the research such that it is longitudinal and takes into account changes in the relationship between cohabitation and fertility with time. There is a need to investigate trends throughout at least ten years in order to get more insights into the changing trends of fertility with time. The investigation over time allows changes and trends that change across different variables of the fertility rate to be identified in comparison to a cross-sectional study of the data for a single year.

According to Rossouw et al., (2012) argues that the size of income that women might have to forgo and awareness of contraception will affect fertility outside marriage. Therefore the research could be adjusted to consider other mediating variables in this relationship such as income and awareness of contraception. Furthermore, studies should aim to investigate the nature of cohabitation and how it affects fertility. The stability of cohabiting union may be unstable and may easily result in separation (Perelli-Harris et al., 2009). Therefore it is necessary to study and compare the effect of the cohabitation on fertility in a stable and unstable arrangement. The fundamental difficulties that may arise are that it may be difficult to determine whether a cohabiting union is stable or not and may require a prior qualitative investigation. Furthermore, it can be useful to investigate the nature of cohabitation; based on

the likelihood of the cohabiting union resulting in a marriage or separation; this can be done by using similar probability theory and mathematical techniques that are used in life tables (Calves, 2016).

Further research which incorporates the index of contraception in the calculation of the total marital fertility rate can be carried out to encompass the effect of contraception on fertility (Bongaarts, 2010). However, it is challenging to collect data on the contraception practices and efficacy of contraception for the different age groups of women in a given population. The reason for incorporating is essential as the use of contraception tends to reduce marital fertility. Further research could adjust the fertility rate for the reduction as a result of induced abortion (Bongaarts, 2010). There is the tendency of induced abortion to avert the childbirth especially when there is the use of contraception. Mathematical models can be used to incorporate the effect of induced abortion on fertility; however, even with the aid of the mathematical, it is difficult to precisely determine the decrease in the fertility rate as a result of induced abortion. The adjustments for the fertility rate as a result of contraception and induced seek to provide more realistic estimates of the fertility rate. However, limitations are determining their effects on the fertility rate.

5.6. Contributions of Research Findings

The research contributed by investigating cohabitation as an alternative to marriage and its effect on the fertility amongst different racial, age and education groups. The findings show that cohabitation has a positive effect on the fertility rate amongst women. Cohabitation has a similar effect to fertility as marriage in the Bongaarts theoretical framework. Therefore the study has contributed by extending Bongaarts the theoretical framework beyond marriage through the consideration of cohabitation as an alternative to marriage.

Furthermore, the study revealed differences amongst the racial groups regarding rates of cohabitation, marriage rates and fertility. The research contributed by linking these variables and analyzing the trends across different racial groups and age groups as well as comparing them to other findings in the literature and providing further support for the findings in the literature. Therefore the research provides support for some previous finding in academic literature.

Finally, the research provided implications and recommendations on strategies that can be used to ensure that there is a reduction in unwanted pregnancies and possible interventions that can provide support for the stability of cohabiting arrangements. It is vital that the cohabiting unions be stable as this provides a suitable environment for a child to be raised. Also, there are significant levels of cohabitation levels amongst the Coloureds and African

racial group. Therefore it is critical that such arrangements be recognized as an alternative to marriage.

5.7. Limitations of the Study

This study aims to reveal the impact cohabitation has on fertility. One of the limitations of this study is that marital status is self-reported which introduces bias. The second limitation is that this dataset shows some non-responses therefore since the NIDs study focuses on specific individuals, the validity of the study reduces with every participant that chooses not to participate or is no longer available due to moving or death as the number of participants reduces. The third limitation is that the age of the mother after the first birth is not mentioned. Inadequate up-to-date data is another limitation. Statistics available of cohabitation are outdated and old.

The limitations of the chi-square test are that it is not a good measure of strength/ magnitude of association, just determines if there is a relationship but not how strong. Also, it is a global statistic which does not state which parts of a table may be causing a large chi-square statistic. The limitations of the t-test are that inferential statistics can only be applied to populations similar to the sample being tested, distribution of sample and population must be slightly normal, all data should be independent and the data should be approximately interval-level or higher or else p-values will not be accurate.

5.8. Conclusion

This chapter has focused on the final discussions and the recommendations of this chapter. This research has contributed to why cohabitation should be considered as a determinant of marriage and the impact it has on marriage.

References

- Anderson, B. A., 2003. Fertility in South Africa: Current Issues and Prospects for the Future, Michigan: PSC Publications.
- Brown, S., VanHook, J. & Glick, J., 2008. Generational Differences in Cohabitation and Marriage in the US. *Population Research and Policy Review*, Volume 37, pp. 531 - 550.
- Barbarin, O.A. and Richter, L.M., 2013. *Mandela's children: Growing up in post-apartheid South Africa*. Routledge.
- Barber, K., 2018. *A History of African Popular Culture (Vol. 11)*. Cambridge University Press.
- Bongaarts, J. (2007). Late marriage and the HIV epidemic in Sub-Saharan Africa. *Population Studies*, 61(1), 73-83.
- Bongaarts, J. And Potter, R.E., 2013. *Fertility, biology, and behaviour: An analysis of the proximate determinants*. Academic Press.
- Bongaarts, J., 2008. Fertility transitions in developing countries: Progress or stagnation?. *Studies in family planning*, 39(2), pp.105-110.
- Bongaarts, J., 2010. The causes of educational differences in fertility in Sub-Saharan Africa. *Vienna Yearbook of population research*, 8(2010), pp.31-50.
- Brown, D.L. and Schafft, K.A., 2011. *Rural people and communities in the 21st Century: Resilience and transformation*. Polity.
- Brown, S.L. and Booth, A., 1996. Cohabitation versus marriage: A comparison of relationship quality. *Journal of Marriage and the Family*, pp.668-678.
- Bumpass, L.L., Sweet, J.A. and Cherlin, A., (1991) The role of cohabitation in declining rates of marriage. *Journal of Marriage and the Family*, pp.913-927.

- Caldwell, J.C. & Caldwell, P. (2003). The fertility transition in sub-Saharan Africa. In
- Calves, A. (2000). Premarital childbearing in urban Cameroon: Paternal recognition, childcare and financial support. *Journal of Comparative Family Studies*, 31(4), 443-461.
- Calvès, A.E., 2016. First union formation in urban Burkina Faso: Competing relationship transitions to marriage or cohabitation. *Demographic Research*, 34, pp.421-450.
- Celly, K.S. and Frazier, G.L., 1996. Outcome-based and behaviour-based coordination efforts in channel relationships. *Journal of marketing research*, pp.200-210.
- Clark, C., & Hamplova, D. (2011). The impact of the mother's marital status on child mortality in Sub-Saharan Africa: An analysis of birth and marital histories. Canada: Canada Research Chair in Youth, Gender and Global Health.
- Clark, S., Beguy, D., Cotton, C., & Boco, A. (2012). Single motherhood and child mortality in Sub-Saharan Africa: Is poverty the link? Canada: Canada Research Chair in Youth, Gender and Global Health.
- Crawford, C., Goodman, A., Greaves, E. And Joyce, R., 2011. Cohabitation, marriage, relationship stability and child outcomes: an update.
- Department of Social Protection. (2016). Cohabitation. A RoinnCoimirceSoisialai: Ireland. < Available on <http://www.welfare.ie/en/Pages/Cohabitation.aspx>, Accessed on 19 April 2017>.
- Doyle, A.M., Mavedzenge, S.N., Plummer, M.L. and Ross, D.A., 2012. The sexual behaviour of adolescents in sub-Saharan Africa: patterns and trends from national surveys. *Tropical Medicine & International Health*, 17(7), pp.796-807.
- Dubler, A.R. (2005) Immoral Purposes: Marriage and the Genus of Illicit Sex. *Yale LJ*, 115, p.756.
- Emina, J.B., Chirwa, T. and Kandala, N.B., 2014. Trend in the use of modern contraception in sub-Saharan Africa: does women's education matter?. *Contraception*, 90(2), pp.154-161.
- Edin, K. And Kefalas, M., 2011. Promises I can keep: Why poor women put motherhood before marriage. Univ of California Press.
- England, P., Wu, L.L. and Shafer, E.F., 2013. Cohort trends in premarital first births: What role for the retreat from marriage?. *Demography*, 50(6), pp.2075-2104.
- Faturochman, F., DETERMINANTS AND CHARACTERISTICS OF UNMARRIED COHABITATION AND ITS IMPACTS ON MARRIAGE: WESTERN

EXPERIENCES. *Populasi*, 6(1).

Fears, C. (2008). Non-marital childbearing: Trends, reasons and public policy interventions. CRS Report for Congress. US: Congressional Research Service.

Garenne, M., &Zwang, J. (2006). Premarital Fertility and Ethnicity in Africa. DHS Comparative reports no. 13. Calverton, Maryland, USA: Macro International Inc.

Goodman, A., Koupil, I. And Lawson, D.W., 2012. Low fertility increases descendant socioeconomic position but reduces long-term fitness in modern post-industrial society. *Proceedings of the Royal Society B: Biological Sciences*, 279(1746), pp.43424351.

Guzzo, B. K., &Hayford, S. R. (2010). Single mothers, single fathers: Gender differences infertility after a non-marital birth. *Journal of Family Issues*, 31(7), 906933.

Guzzo, K. B. & Hayford, S. R., 2014. FERTILITY AND THE STABILITY OF COHABITING UNIONS: VARIATION BY INTENDEDNESS. *J Fam Issues*, 35(4), pp. 547 - 576.

Guzzo, K. B. & Hayford, S. R., 2014. FERTILITY AND THE STABILITY OF COHABITING UNIONS: VARIATION BY INTENDEDNESS. *J Fam Issues*, 35(4), pp. 547 - 576.

Hardie, J. and Lucas, A., 2010. Economic factors and relationship quality among young couples: Comparing cohabitation and marriage. *Journal of Marriage and Family*, 72(5), pp.1141-1154.]

Hicks, J. and Hicks, D.L., 2019. Lucky Late Bloomers? Consequences of Delayed Marriage for Women in Rural Western Kenya. *Consequences of Delayed Marriage for Women in Rural Western Kenya* (June 2019).

Hosegood, V., McGrath, N. and Moultrie, T., 2009. Dispensing with marriage: Marital and partnership trends in rural KwaZulu-Natal, South Africa 2000-2006. *Demographic Research*, 20, p.279.

Indongo, N., &Pazvakawambwa, L. (2012). Determinants of fertility in Namibia. *African Journal of Reproductive Health*, 16(4), 50-57.

Jayachandran, S., 2017. Fertility decline and missing women. *American Economic Journal: Applied Economics*, 9(1), pp.118-139.

Johnson, K., Abderrahim, N., &Rutstein, S. (2011). Changes in the direct and indirect determinants of fertility in Sub-Saharan Africa. DHS Analytical Studies No. 23. Calverton, Maryland, USA: ICF Macro.

- Jong, P. D. & Heller, G. Z., 2008. *Generalised Linear Models For Insurance Data*. New York: Cambridge University Press.
- Jong, P. D. & Heller, G. Z., 2008. *Generalised Linear Models For Insurance Data*. New York: Cambridge University Press.
- Joubert, J., Rao, C., Bradshaw, D., Dorrington, R.E., Vos, T. And Lopez, A., 2012. Characteristics, availability and uses of vital registration and other mortality data sources in post-democracy South Africa. *Global health action*, 5(1), p.19263.
- Kalule-Sabiti, I., Palamuleni, M., Makiwane, M., &Amoateng, A. (2007). Family Formation and Dissolution Patterns. In Amoateng, A., & Heaton, T. (eds). *Families and Households in Post-Apartheid South Africa*. Cape Town: HSRC Press, 89-112.
- Kaufman, C.E., 2000. Reproductive control in apartheid South Africa. *Population Studies*, 54(1), pp.105-114.
- Kennedy, S. and Bumpass, L. (2008). Cohabitation and children's living arrangements: New estimates from the United States. *Demographic Research*, 19, p.1663.
- Klausen, S.M., 2004. Introduction. In *Race, Maternity, and the Politics of Birth Control in South Africa, 1910–39* (pp. 1-11). Palgrave Macmillan, London.
- Koski, A., Clark, S. and Nandi, A., 2017. Has child marriage declined in sub-Saharan Africa? An analysis of trends in 31 countries. *Population and development review*, 43(1), pp.7-29.
- Kuperberg, A., 2014. Age at coresidence, premarital cohabitation, and marriage dissolution: 1985–2009. *Journal of Marriage and Family*, 76(2), pp.352-369.
- Kroeger, R.A. and Smock, P.J., 2014. Cohabitation: Recent research and implications. *The Wiley-Blackwell companion to the sociology of families*, 2, pp.217-235.
- Kulu, H., 2013. Why do fertility levels vary between urban and rural areas?. *Regional Studies*, 47(6), pp.895-912.
- Lau, C.Q., 2012. The stability of same-sex cohabitation, different-sex cohabitation, and marriage. *Journal of Marriage and Family*, 74(5), pp.973-988.
- Lesthaeghe, R. (2010). The unfolding story of the second demographic transition. *Population and development review*, 36(2), pp.211-251.
- Lwelamira, J., Nyakoki, S., &Zakayo, O.M. (2012). Prevalence and correlates of premarital fertility (childbearing) among unmarried female youths in Chamwino District in central Tanzania. *Current Research Journal of Social Sciences*, 4(2), 159-167.

Madhavan, S., 2014. An analysis of the proximate determinants of fertility in subSaharan Africa with a focus on induced abortion (Doctoral dissertation).

Makiwane, M. and Udjo, E., 2015. Is the child support grant associated with an increase in teenage fertility in South Africa?: evidence from national surveys and administrative data.

Magruder, J.R., 2011. Marital shopping and the epidemic of AIDS. *Demography*, 48(4), pp.1401-1428.

Mair, L.P., 2013. African marriage and social change. Routledge.

Mazuy, M., Barbieri, M., d'Albis, H. and Reeve, P. (2014) Recent demographic trends in France: The number of marriages continues to decrease. *Population*, English Edition, 69(3), pp.273-321.

Mbanefo, C. (2013). Levels and correlates of single motherhood in Southern Africa. Department of Demography and Population Studies Theses. Johannesburg: University of Witwatersrand.

McCaskey, K. & Rainey, C., 2015. Substantive Importance and the Veil of Statistical Significance. *Statistics, Politics, and Policy*, 6(2), pp. 77 - 96.

McCaskey, K. & Rainey, C., 2015. Substantive Importance and the Veil of Statistical Significance. *Statistics, Politics, and Policy*, 6(2), pp. 77 - 96.

Montgomery, D. C. & Runger, G. C., 2014. *Applied Statistics and Probability for Engineers*. 6th ed. New Jersey: John Wiley & Sons, Inc.

Montgomery, D. C. & Runger, G. C., 2014. *Applied Statistics and Probability for Engineers*. 6th ed. New Jersey: John Wiley & Sons, Inc.

Montgomery, D. C. & Runger, G. C., 2014. *Applied Statistics and Probability for Engineers*. 6th ed. New Jersey: John Wiley & Sons, Inc.

Moore, E. And Govender, R., 2013. Marriage and cohabitation in South Africa: An enriching explanation?. *Journal of Comparative Family Studies*, 44(5), pp.623-639.

Morgan, S.P. (1991)Late nineteenth-and early twentieth-century childlessness. *American Journal of Sociology*, 97(3), pp.779-807.

Mudhovozi, P., Ramarumo, M. And Sodi, T., 2012. Adolescent sexuality and culture: South African mothers perspective. *African Sociological Review/Revue Africaine de Sociologie*, 16(2), pp.119-138.

- Musick, K. (2002). Planned and unplanned childbearing among unmarried women. *Journal of Marriage and Family*, 64, 915-929.
- Musick, K. And Michelmore, K., 2015. Change in the stability of marital and cohabiting unions
- Parkin, D. and Nyamwaya, D., 2018. Transformations of African marriage. Routledge.
- Perelli-Harris, B., Berrington, A., Gassen, N.S., Galezewska, P. and Holland, J.A., 2017. The rise in divorce and cohabitation: Is there a link?. *Population and development review*, 43(2), p.303.
- Perelli-Harris, B. and Bernardi, L., 2015. Exploring social norms around cohabitation: The life course, individualization, and culture. *Demographic Research*, 33, p.701.
- Perelli-Harris, B. and Gassen, N.S., 2012. How similar are cohabitation and marriage? Legal approaches to cohabitation across Western Europe. *Population and Development Review*, 38(3), pp.435-467.
- Perelli-Harris, B. et al., 2009. The increase in fertility in cohabitation across Europe: Examining the intersection between union status and childbearing, s.l.: Max Planck Institute for Demographic Research.
- Pinkley, J. (2015). History quote of the day: Teddy Roosevelt. Discover Historic Travel: History is an adventure. Accessed on discoverhistoricaltravel.com/history-qoute-of-the-day-roosevelt.
- Posel, D., &Casale, D. (2013). The relationship between sex ratios and marriage rates in South Africa.*Applied Economics*, 45(5), 663-676.
- Preston, S. H., Heuveline, P. & Guillot., M., 2001. *Demography: Measuring and modelling population processes*. Malden, MA: Blackwell Publishing.
- Demographic Transition in the United States. *Demography*, Volume 38, pp. 59-66.
- Raley, R. K., 2001. Increasing Fertility in Cohabiting Unions: Evidence for the Second Demographic Transition in the United States. *Demography*, Volume 38, pp. 59-66.
- Reczek, C., Elliott, S. And Umberson, D., 2009. Commitment without marriage: Union formation among long-term same-sex couples. *Journal of Family Issues*, 30(6), pp.738-756.
- Reinhold, S., 2010. Reassessing the link between premarital cohabitation and marital instability. *Demography*, 47(3), pp.719-733.

Rhoades, G.K., Stanley, S.M. and Markman, H.J., 2009. Couples' reasons for cohabitation: Associations with individual well-being and relationship quality. *Journal of Family Issues*, 30(2), pp.233-258.

Rodriguez, T., 2012. Examining the patterns and implications of cohabitation: a guidebook for young adult cohabiting couples (Doctoral dissertation, California State University, Northridge).

Rossouw, L., Burger, R. & Burger, R., 2012. The fertility transition in South Africa: A retrospective panel data analysis, Cape Town: THE DEPARTMENT OF ECONOMICS AND THE BUREAU FOR ECONOMIC RESEARCH AT THE UNIVERSITY OF STELLENBOSCH.

Raab, M., Fasang, A.E., Karhula, A. and Erola, J., 2014. Sibling similarity in family formation. *Demography*, 51(6), pp.2127-2154.

Rossouw, L., Burger, R. & Burger, R., 2012. The fertility transition in South Africa: A retrospective panel data analysis, Cape Town: THE DEPARTMENT OF ECONOMICS AND THE BUREAU FOR ECONOMIC RESEARCH AT THE UNIVERSITY OF STELLENBOSCH.

Sassler, S. And Miller, A.J., 2011. Class differences in cohabitation processes. *Family Relations*, 60(2), pp.163-177.

Schröder, J. & Schmiedeberg, C., 2015. Effects of relationship duration, cohabitation, and marriage on the frequency of intercourse in couples: Findings from German panel data. *Social Science Research*, Volume 52, pp. 72 - 82.

Schröder, J. & Schmiedeberg, C., 2015. Effects of relationship duration, cohabitation, and marriage on the frequency of intercourse in couples: Findings from German panel data. *Social Science Research*, Volume 52, pp. 72 - 82.

Singh, S. and Samara, R., 1996. Early marriage among women in developing countries. *International family planning perspectives*, pp.148-175.

Soon, J.P. and Kalmijn, M., 2009. Is marriage more than cohabitation? Well-being differences in 30 European countries. *Journal of Marriage and Family*, 71(5), pp.1141-1157.

Stover, J., 1998. Revising the proximate determinants of fertility framework: What have we learned in the past 20 years?. *Studies in family planning*, pp.255-267.

Striessnig, E. and Lutz, W., (2013) Can below-replacement fertility be desirable?. *Empirical*, 40(3), pp.409-425.

Swartz, L. (2002). The fertility transition in Sub-Saharan Africa. In The Department of Social development Fertility and the current South African issues of poverty, HIV/AIDS and youth-seminar proceedings. Pretoria: HRSC.

Swartz, L., 2002. Fertility transition in South Africa, New York: Expert Group Meeting on Completing the Fertility Transition.

Thornton, A., Axinn, W.G. and Xie, Y., 2008. Marriage and cohabitation. University of Chicago Press.

U.S. Census Bureau. 1995. Selected housing characteristics, 2007-2011 American Community Survey 5-year estimates. Retrieved from http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_11_5YR_DP04.

Udjo, E., (2001) Marital patterns and fertility in South Africa: the evidence from the 1996 population census. The International Union for the Scientific Study of Populations, pp.18-24.

Williams, J., Ibisomi, L., Sartorius, B., Kahn, K., Collinson, M., Tollman, S. and Garenne, M., 2013. Convergence in the fertility of South Africans and Mozambicans in rural South Africa, 1993–2009. *Global health action*, 6(1), p.19236

White, H., 2015. Custom, normativity and authority in South Africa. *Journal of Southern African Studies*, 41(5), pp.1005-1017.

Appendix

Appendix 1: Ethical Clearance letter

Appendix 2: National Income Dynamics. Study Wave 3: 2012. Adult (15+) Questionnaire

National Income Dynamics Study Wave 3: 2012

Adult (15+) Questionnaire

Respondent details

A1 <i>name</i>	First name	
A2 <i>surname</i>	Surname	
A3 <i>name_o</i>	Any other names by which this person is known?	

Location – How to find this person

A4a	Apartment number (if any) <i>apart</i>		
A4b	Street Address (if any) <i>street</i>		
A5a	Local Area Type	Suburb	1
		Rural	2
		Farm	3
		Informal Settlement	4
		Don't know	-9
		Refused	-8
A5	Suburb or Village		
A6	Town or City		
A7	Post Code		
A7a	Description of how to find and identify the dwelling		
A8	Daytime telephone number		
A9	Evening telephone number		
A10	Other telephone number		
A11	Email contact		

Interviewer Details

A13 <i>intrv_name</i>	Interviewer Name				
A14 <i>intrv</i>	Date of interview (dd/mm/yyyy)	__/__/____	A15 <i>intrvsrt</i>	Interview start time	__:__:__

Appointments Log

	Date (dd/mm/yyyy)	Time	Outcome (drop down list)	Any new phone number/email addresses discovered
A16.1	__/__/____	A16.2 __: __	A16.3	A16.4
A17.1	__/__/____	A17.2 __: __	A17.3	A17.4
A18.1	__/__/____	A18.2 __: __	A18.3	A18.4

Refusals (if applicable)

A22 <i>refexpl</i>	What is the <u>main</u> reason for refusal?	Too busy	1
		Not interested/waste of time	2
		Questionnaire too personal/too intrusive	3
		Don't trust surveys	4
		Never do surveys	5
		Too old	6
		Other (Specify)	7
		Sickness/ Recent Death/ Recent child	8
		It took too long last time	9
A23 <i>refint</i>	Degree of interaction with person refusing	None – Refused calling card	1
		Very little – they cut me short, said no thanks	2
		Some – Got to say I was doing an important survey	3
		A fair bit – got to show them the brochure, and spend a bit of time trying to talk them around	4

A24 <i>refgen</i>	Gender of person refusing (Drop down list)	Male	Female
A25 <i>refage</i>	Age of person refusing		
A26	Comments regarding the refusal		



Adult (15+) Questionnaire Wave 3: 2012

Contents

Section Aa	5	Section	B:	Demographics
ever born	1	Section C1: Children		
Section C2: Birth history	2			
4				
Section D: Parents' education, living arrangements and vital status	6	Section	E:	Labour
non-employment sources	8	market	participation	
others to care for you	26	Section F1: Individual income from		
received	27	Section F2: Grants received by		
Contributions given	28	Section F3: Contributions		
Personal ownership and debt	29	Section F4:		
H: Education	31	Section G:		
Section J: Health	32			
38		Section	K:	Emotional
decision-making	46	health		
being and social cohesion	46	Section L: Household		
Measurements	46	Section M: Well-		
R: Alternative contact information	49	Section N:		
Section S: Interviewer evaluation	50			
1				

Section Aa

INTERVIEWER READ OUT: We contact some respondents to make sure you are happy with the way this interview was undertaken and to confirm we have taken your answers correctly. We would like to confirm your contact details

What	would be the best number contact you on during	
	the day?	
Aa1	Interviewer:	_____
Include area codes for landline numbers		
What	would be the best number contact you on during	
	the evening?	
Aa2	Interviewer:	_____
Include area codes for landline numbers		

Is there any other number we ought to try?

Aa3 Interviewer: _____

Include area codes for landline number

Section B: Demographics

INTERVIEWER READ OUT: We would like to ask you some questions about your background.					Validation Rule	Skips
CB1a	Computer check: Is this person the same person who has filled in the household roster?	Yes		1		B4
		No		2		
B1 <i>dob</i>	What is your date of birth? Interviewer: If don't know write "-9". If refused write "8"	dd	mm	year	Warn if panel value != Current value Pre-popped with display (with "Yes")	
B2 <i>gen</i>	What is your gender?	Male		1	Warn if panel value != Current value	
		Female		2		
		Refused		-8		
		Don't Know		-9	Pre-popped with display	
B3 <i>popgrp</i>	What population group do you belonging to?	African		1	Warn if panel value != Current value	
		Coloured		2		
		Asian/Indian		3	Pre-popped with display	
		White		4		
		Other (specify) <i>popgrp_o</i>		5		
		Refused		-8		
		Don't Know		-9		
B4 <i>marstt</i>	What is your current marital status?	Married		1		
		Living with partner		2		
		Widow/Widower		3		B6
		Divorced or separated		4		B6
		Never married		5	Warn if ever_marry=1	B7
		Refused		-8		B7
		Don't Know		-9		B7
		B5 <i>mary</i>	How many years have you been married or living together (with this partner)? Interviewer: If less than 1 year, write 1 If don't know write "-9". If refused write "-8"	Number of years		
B6 <i>timese p</i>	How long have you been widowed, divorced or separated from your last partner? Interviewer: If less than 1 year, write 1 If don't know write "-9". If refused write "-8"	Number of years				
B7 <i>lng</i>	Which language do you usually speak at home? Interviewer: See code sheet for Language codes	Language			Warn if panel value != Current value	
		If other, specify <i>lng_o</i>				

		Refused	-8	Pre-popped with display	
		Don't Know	-9		
B8 <i>slpw</i>	Over the past 7 nights, how many nights did you sleep under this roof? Interviewer: If all, write 7 If don't know write "-9". If refused write "-8"				
B9 <i>slpm</i>	Over the past month, how many nights did you sleep under this roof? Interviewer: If all, write 31 If don't know write "-9". If refused write "-8"				

INTERVIEWER READ OUT: Now we would like to know about the different places that you have lived.						Validation Rule	Skips
B11	Where were you born? Interviewer: If don't know write "-9". If refused write "-8"	Suburb/Village	Town/City	Province See code sheet for Province codes	Country (If not South Africa)		
		<i>brnsub</i>	<i>brntwn</i>	<i>brnprov</i>	<i>brncc</i>		
CB12	Computer Check: Is DOB year > 1994			Yes	1		CB13
				No	2		
B12 <i>lv94prov</i>	In which province were you living in 1994? Interviewer: If don't know write "-9". If refused write "-8"					Prepopped with display Warn if panel value != Current value	
B13 <i>lv10prov</i>	In which province were you living in February 2010? Interviewer: If don't know write "-9". If refused write "-8"						
B14 <i>lvevoth</i>	Have you ever lived in another suburb/town/village?			Yes	1	Warn if panel value != Current value	
				No	2		CC1.1
				Refused	-8		CC1.1
				Don't Know	-9		CC1.1
B15 <i>moveyr</i>	In which year did you move here? Interviewer: This refers to most recent move						
B16	Where did you live before moving to the place where you are living now? Interviewer: If don't know write "-9". If refused write "-8"	Suburb/Village	Town/City	Province See code sheet for Province codes	Country (If not South Africa)		
		<i>lvbfsb</i>	<i>lvbftwn</i>	<i>lvbfprov</i>	<i>lvbfcc</i>		

2

Section C1: Children ever born

						Validation Rule	Skips
CC1.1	Computer CHECK !		Yes		1		
			No		2		CD1

INTERVIEWER READ OUT: Now we would like to ask you about all the children that you have ever given birth.					
C1.2 <i>bhbrth</i>	Have you ever given birth?	Yes	1	Prepopped with display (with "Yes")	CC 1.10
		No	2		
		Refused	-8	Warn if panel value != Current value	CC 1.10
		Don't Know	-9		CC 1.10

C1.3 <i>bhcnt1con</i>	How many children have you given birth to in total? (Please include all children, even ones who may have passed away shortly after birth.) Interviewer: If don't know write "-9". If refused write "-8"	Number		Check if w2_numbirths > C1.3	
C1.4 <i>bhlive</i>	Do you have any biological children to whom you have given birth who are currently living with you?	Yes	1		
		No	2		C1.6
		Refused	-8		C1.6
		Don't Know	-9		C1.6
C1.5 <i>bhlive_n</i>	How many biological children are now living with you? Interviewer: If don't know write "-9". If refused write "-8"	Number			
C1.6 <i>bhali</i>	Do you have any biological children who are still alive, but are not living with you?	Yes	1		
		No	2		C1.8
		Refused	-8		C1.8
		Don't Know	-9		C1.8
C1.7 <i>bhali_n</i>	How many biological children are still alive, but do not live with you? Interviewer: If don't know write "-9". If refused write "-8"	Number			
C1.8 <i>bhdth</i>	Have you ever given birth to a son or a daughter who was born alive (cried out), but later died? Please tell us about a child even if he/she died after only a few hours or days.	Yes	1	Check if w2_childdeathsyn=1	
		No	2		CC 1.10
		Refused	-8		CC 1.10
		Don't Know	-9		CC 1.10
C1.9 <i>bhdth_n</i>	How many children were born alive but passed away later? Interviewer: If don't know write "-9". If refused write "-8"	Number		Check if w2_numchilddie > C1.9	
CC1.10	Computer CHECK! [Is this respondent 49 years old or younger?]	Yes	1		
		No	2		CC 1.11
C1.10 <i>bhprg</i>	Are you currently pregnant?	Yes	1		
		No	2		
		Refused	-8		
		Don't know	-9		
		Yes	1		

CC1.11	<u>Computer CHECK!</u> Is $C1.3 = C1.5 + C1.7 + C1.9$	No	2		Probe for Corre ct Answ er

Section C2: Birth history

CC2	Computer check: Is C1.2=Yes	Yes		1			
		No		2			D1
CC2.1	Computer Check: Pre-populate C2.1 using w2_child`i`name, pre-populate C2.2 using w2_child`i`gen and pre-populate C2.3 using w2_bh`i`dob_d,`i`dob_m and w2_b						
INTERVIEWER READ OUT: Now we would like to ask you more questions about all children born alive, even if the child only lived for a few hours or days.							
	C2.1 Starting with the first birth, what was the name given to that child? Interviewer: Complete column C2.1 before continuing with the rest of the table If child had no name, write X <i>bhname#</i>	C2.2 Was [...] a male or a female? Male = 1 Female = 2 Refused = - 8 Don't know = -9 <i>bhgen1#</i>	C2.3 What date was [...] born? Interviewer: If don't know write "-9". If refused write "-8" <i>bhdob#</i> dd/mm/yyyy	C2.4 Is [...] still alive? Yes=1 No=2 Refused=- 8 Don't know = - 9 <i>bhali#</i>	C2.5 When did [...] die ? (mm/yyyy) Interviewer: If don't know write "-9". If refused write "-8" <i>bhdod#</i>	C2.6 Is [...] still living with you? Yes = 1 No = 2 Refused = - 8 Don't know = -9 <i>bhlive#</i>	C2.7 Interviewer: What is the pid for this child <i>bhchild_id#</i> pid Interviewer: If don't know write "-9". If refused write "-8"
Computer Check				If -9 or -8, skip to next child. If "Yes" skip to	Skip to next child, or to Section D if this is the last child on the grid.	If "No", skip to next child, or to Section D if this is the last child on the grid. Also to tracking sheet.	Skip to next child, or to Section D if last child
Skip				C2.6			
Validation Rule	Pre-popped with display Number of names=C1.3	Pre-popped with display	Pre-popped with display	Pre-popped with display (with "No")	Pre-popped with display	Pre-popped with display	
1 to N	child`n`name	child`n`gen	bh`n`dob_d, bh`n`dob_m, bh`n`dob_y	1 2 -8 -9		1 2 -8 -9	

CC2.8 Computer Check	Are there any children born to female CSMs between this wave and the previous one who do not reside with their mothers? (i.e. Is : a. This respondent a CSM					If C2.6=2 and c. (C2.3_y>w1_intdat_y) OR (C2.3_y=w1_intdat_y and C2.3_m>w1_intdat_m) OR (C2.3_y=w1_intdat_y and C2.3_m=w1_intdat_m and C2.3_d>w1_intdat_d), open a tracking window and get location, care giver's name and care giver's contact details for each child. Then continue with questionnaire as usual.	
CC2.9	Is: Number of names in C2.1 = C1.3?			If No, confirm with respondent.			

Section D: Parents' education, living arrangements and vital status

INTERVIEWER READ OUT: Now I would like to ask about your biological parents.				Validation Rule	Skips
D1 <i>mthali</i>	Is your biological mother alive now?	Yes	1		D5
		No	2		
		Refused	-8		D6
		Don't know	-9		D6
D1.2 <i>mthdth5y</i>	Did your mother die in the last five years	Yes	1		
		No	2		
		Refused	-8		
		Don't know	-9		
D2 <i>mthdtha</i>	How old was she when she died? Interviewer: If don't know write "-9". If refused write "-8"	Age		Pre-popped with display Warn if panel value != Current value Check if < 13	
D3 <i>mthdthy</i>	When did she die? Interviewer: If don't know write "9999". If refused write "8888"	Year:		Pre-popped with display Warn if panel value != Current value Check if < B1 DOB year	
CD4	Computer Check: Is D3 = "9999" or "8888"	Yes	1		D6
		No	2		
D4a <i>mthdth15</i>	Did your mother die before you were 15 years old?	Yes	1	Pre-popped with display (with "Yes")	
		No	2		D6
		Refused	-8		D6
		Don't Know	-9		D6
D4b <i>mthdth5</i>	Did your mother die before you were 5 years old?	Yes	1	Pre-popped with display (with "Yes")	D6
		No	2		
		Refused	-8		
		Don't Know	-9		
D5 <i>mthhh_pid</i>	Does your mother live in this household? Interviewer: Select from drop down list	PID of females older than 12 years			D11
		No, Absent	77		
		Don't know	-9		
		Refused	-8		
D6 <i>mthbrthy</i>	In what year was your mother born?	Year		Pre-popped with display	
		Refused	-8		
		Don't know	-9		
D7 <i>mthsch</i>	What was the highest grade in school that your mother successfully completed? Interviewer: select from drop down list If don't know write "-9". If refused write "-8"	Highest school grade		Codes 16 to 23 are not applicable Pre-popped	

		If other, specify here		with display	
--	--	------------------------	--	--------------	--

				Validation Rule	Skips
D8a <i>mtthertyn</i>	Did your mother successfully complete any diplomas, certificates, degrees outside of school?	Yes	1	Pre-popped with display (with "Yes")	
		No	2		D9
		Refused	-8		D9
		Don't know	-9		D9
D8b <i>mtthert</i>	What is the highest level of education your mother successfully completed? Interviewer: select from drop down list If don't know write "-9". If refused write "-8"	Higher education		Codes 00 to 15 and 25 are not applicable	
		If other, specify here <i>mtthert_o</i>		Pre-popped with display	
D9 <i>mtthwrk</i>	What kind of work does/did your mother usually do in her current or last job? In other words what is/was your mother's occupation or job title? Interviewer: Record at least two words: car sales person, office cleaner, vegetable farmer, primary school teacher, etc. If don't know write "-9". If refused write "-8" If never worked, write 7777	Job Title		Pre-popped with display	Skip to D11 if D9 = 7777, -9 or -8
D10 <i>mtthtask</i>	What were/are your mother's main tasks or duties in this work? For example some people sell fruit or repair machines or keep accounts or deliver things or look after cattle	Main Duties			
D11 <i>fthali</i>	Is your biological father alive now?	Yes	1	Pre-popped with display (with "No")	D15
		No	2		
		Refused	-8		D16
		Don't know	-9	Warn if panel value != Current value	D16
D11.1 <i>fthdth5y</i>	Did your father die in the last five years?	Yes	1		
		No	2		
		Refused	-8		
		Don't know	-9		
D12 <i>fthdtha</i>	How old was he when he died? Interviewer: If don't know write "-9". If refused write "-8"	Age		Pre-popped with display Warn if panel value != Current value Check if < 13	

D13 <i>fthdthy</i>	When did he die? Interviewer: If don't know write "9999". If refused write "8888"	Year		Prepopped with display Warn if panel value != Current value Check if < B1 DOB year	
CD14	Computer Check: D13 equal to "8888" or "9999"	Yes	1		
		No	2		D16

				Validation Rule	Skips
D14a <i>fthdth15</i>	Did your father die before you were 15 years old?	Yes	1	Pre-popped with display (with "Yes")	D16 D16 D16
		No	2		
		Refused	-8		
		Don't Know	-9		
D14b <i>fthdth5</i>	Did your father die before you were 5 years old?	Yes	1	Pre-popped with display (with "Yes")	D16
		No	2		
		Refused	-8		
		Don't Know	-9		
D15 <i>fthhh_pid</i>	Does your father live in this household? Interviewer: Select from drop down list	PID of females older than 12 years			E1
		No, Absent	77		
		Don't know	-9		
		Refused	-8		
D16 <i>fthbrthy</i>	In what year was your father born?	Year		Pre-popped with display	
		Refused	-8		
		Don't know	-9		
D17 <i>fthsch</i>	What was the highest grade in school that your father successfully completed? Interviewer: select from drop down list If don't know write "-9". If refused write "-8"	Highest school grade		Codes 16 to 23 are not applicable Pre-popped with display	
		If other, specify here <i>fthsch_o</i>			
D18a <i>fthtertyn</i>	Did your father successfully complete any diplomas, certificates, degrees outside of school?	Yes	1	Pre-popped with display (with "Yes")	D19 D19 D19
		No	2		
		Refused	-8		
		Don't know	-9		
D18b <i>fthtert</i>	What is the highest level of education your father successfully completed? Interviewer: select from drop down list If don't know write "-9". If refused write "-8"	Higher education		Codes 00 to 15 and 25 are not applicable Pre-popped with display	
		If other, specify here <i>fthtert_o</i>			

D19 <i>fthwrk</i>	What kind of work does/did your father usually do in his current or last job? In other words what is/was your father's occupation or job title? Interviewer: Record at least two words: car sales person, office cleaner, vegetable farmer, primary school teacher, etc. If don't know write "-9". If refused write "-8" If never worked, write 7777, go to next	Job Title		Pre-popped with display	Skip to E1 if D19=7777, -9 or -8
D20 <i>fthtask</i>	What were/are your father's main tasks or duties in this work? For example some people sell fruit or repair machines or keep accounts or deliver things or look after cattle	Main Duties			

Section E: Labour market participation

INTERVIEWER READ OUT: In this section we find out about your employment history.				Validation Rule	Skips
E1 <i>emactlly rago</i>	Which one of the following best describes what you were doing one year ago? Interviewer: Read out options	Working for pay	1		
		Self-employed	2		
		Working on own plot or looking after livestock	3		
		Helping another family member with their business, without pay	4		
		Full-time scholar or student at school, university, college or another educational institution	5		
		Homemaker (looking after children / others / home)	6		
		Long term sick or disabled	7		
		Retired	8		
		Unemployed and actively searching for a job in the last four weeks	9		
		Unemployed but not actively searching for a job in the last four weeks	10		
		Refused	-8		
		Don't Know	-9		
INTERVIEWER READ OUT: In this section we find out whether you are working or unemployed or not wanting to work right now. We start by asking questions for those who are being paid a wage or salary to work regularly , whether full-time or part-time.					
E2 <i>em1</i>	Are you currently being paid a wage or salary to work on a regular basis for an employer (that is not yourself) whether full time or part time? If you work for yourself, we will ask about this later.	Yes	1		E33
		No	2		
		Refused	-8		
		Don't know	-9		
INTERVIEWER READ OUT: If you have more than one wage job, tell us about your main job now . We will ask about your second (or next most important) wage job after this. If you have more than two jobs, then tell us about the rest when we ask about casual work.					
E3	When did you start this job? Interviewer: Write month in <u>two</u> figures, e.g. 08 for August and year in <u>four</u> figures, e.g. 2001 Interviewer: If don't know write "-9". If refused write "-8"	month <i>em1strtm</i>	Year <i>em1strty</i>		
E4 <i>em1inf</i>	How did you find out about this job?	Saw an advert in a newspaper or on the internet	01		
		Saw an advert on a notice board in a community centre/shopping centre, shop etc.	02		
		A household member told me about the job	03		
		A friend/relative (in a different household) told me about the job	04		
		I went to a factory and waited for a job	05		
		I knocked on factory gates and visited private homes and shops until I got the job	06		
		Through an employment agency	07		
		I asked someone who had employed me before about a job	08		
		I waited on the side of the road	09		

		Other (specify) <i>em1inf_o</i>	10		
		Refused	-8		
		Don't know	-9		
E5 <i>em1showi dbk</i>	Were you required to show your current employer your national identity book, or a copy of this book, before you qualified for this job?	Yes	1		
		No	2		
		Not SA Citizen	3		
		Refused	-8		
		Don't know	-9		

				Validation Rule	Skips
E6 <i>em1wrk</i>	What kind of work do you usually do in this job? In other words, what is your occupation or job title? Interviewer: Record at least two words: car sales person, office cleaner, vegetable farmer, primary school teacher, etc. If don't know write "-9". If refused write "-8"	Job title			
E7 <i>em1task</i>	What are your <u>main</u> tasks or duties in this work? For example some people sell fruit or repair machines or keep accounts or deliver things or look after cattle. Interviewer: If don't know write "-9". If refused write "-8"	Main duties			
E8 <i>em1wrkplace</i>	What is the name of your place of work? For example, it might be Pick 'n' Pay or a government department or a bank or your own home? Interviewer: For government or large organisations, give the name of the establishment and branch or division: e.g. Education Dept – Rapele Primary School; ABC Gold Mining - Maintenance Div. Write "Own house" or "No fixed location", if relevant. For domestic workers write "private household". Interviewer: If don't know write "-9". If refused write "-8"	Employer			
E9 <i>em1goods</i>	What are the main goods and services produced at your place of work or what are its main functions? Examples could be making electrical appliances or repairing cars or selling houses or primary education? Interviewer: For domestic workers write "private household". Interviewer: If don't know write "-9". If refused write "-8"	Sector			
E9.1 <i>em1sect</i>	In which economic sector do you work?	Private households	0		
		Agriculture, fishing, forestry	1		
		Mining and quarrying	2		
		Manufacturing (e.g. clothing, food)	3		
		Electricity, gas, water	4		
		Construction	5		
		Wholesale/ retail	6		
		Transport, storage and communication	7		
		Finance, real estate and business services	8		
		Community, social and personal services	9		
		Catering and accommodation	10		
		Other - Specify	11		

		Don't know	-9		
		Refused	-8		
E10 <i>em1inc</i>	How much did you earn last month at your main job before any deductions for tax, medical aid or pension?	Amount	R		
		Refused	-8		
		Don't know	-9		
E11 <i>em1pay</i>	How much was your take-home pay last month?	Amount	R	Check if E11>E10	E13
		Refused	-8		
		Don't know	-9		

						Validation Rule	Skips
INTERVIEWER READ OUT: We understand that earnings is a difficult and sensitive question. However, due to its importance, we would like to ask you a range into which this your last month's take home pay falls							
E12	Would you say last month's take home pay was:					Check if E12 lower bound>E10	
		E12.1 <i>em1inc_brac1</i>	More than or less than R3100?	More than	1		E12.3
				About equal to	2		E13
				Less than	3		E12.2
				Refused	-8		E13
				Don't know	-9		E13
		E12.2 <i>em1inc_brac2</i>	More than or less than R1300?	More than	1		E13
				About equal to	2		E13
				Less than	3		E12.4
				Refused	-8		E13
				Don't know	-9		E13
		E12.3 <i>em1inc_brac3</i>	More than or less than R5900?	More than	1		E12.5
				About equal to	2		E13
				Less than	3		E13
				Refused	-8		E13
				Don't know	-9		E13
		E12.4 <i>em1inc_brac4</i>	More than or less than R600?	More than	1		E13
				About equal to	2		
				Less than	3		
				Refused	-8		
				Don't know	-9		
		E12.5 <i>em1inc_brac5</i>	More than or less than R11000?	More than	1		E13
				About equal to	2		
				Less than	3		
				Refused	-8		
				Don't know	-9		
		E12.6 <i>em1inc_brac6</i>	More than or less than R18000?	More than	1		E13
				About equal to	2		
				Less than	3		
				Refused	-8		
				Don't know	-9		
E13 <i>em1hrs</i>	How many hours do you work at this job in a typical week? Interviewer: If don't know write "-9". If refused write "-8"	Hours				Check If hours>168	

E14.1.1 <i>em1cheq</i>	Did you get a 13 th cheque or an annual bonus in the last 12 months?	Yes		1		
		No		2		E 14.2.1
		Refused		-8		E 14.2.1
		Don't know		-9		E 14.2.1
E14.1.2 <i>em1cheq_a</i>	How much was the amount received in the last 12 months?	Amount	R			
		Refused		-8		
		Don't Know		-9		
E14.1.3 <i>em1cheqlm</i>	Did you get a 13 th cheque or an annual bonus in the last month?	Yes		1		
		No		2		E 14.2.1
		Refused		-8		E 14.2.1
		Don't know		-9		E 14.2.1

				Validation Rule	Skips
E14.1.4 <i>em1cheqlm_a</i>	How much was the amount received in the last month?	Amount	R		
		Refused	-8		
		Don't Know	-9		
E14.2.1 <i>em1prf</i>	Did you get a share of profits in the last 12 months?	Yes	1		E 14.3.1
		No	2		
		Refused	-8		
		Don't know	-9		
E14.2.2 <i>em1prf_a</i>	How much was the amount received in the last 12 months?	Amount	R		
		Refused	-8		
		Don't Know	-9		
E14.2.3 <i>em1prflm</i>	Did you get a share of profits in the last month?	Yes	1		E 14.3.1
		No	2		
		Refused	-8		
		Don't know	-9		
E14.2.4 <i>em1prflm_a</i>	How much was the amount received in the last month?	Amount	R		
		Refused	-8		
		Don't Know	-9		
E14.3.1 <i>em1bon</i>	Did you get any other bonus payments in the last 12 months?	Yes	1		E 14.4.1
		No	2		
		Refused	-8		
		Don't know	-9		
E14.3.2 <i>em1bon_a</i>	How much was amount received in the last 12 months?	Amount	R		
		Refused	-8		
		Don't Know	-9		
		Yes	1		

E14.3.3 <i>em1bonl m</i>	Did you get any other bonus payments in the last month?	No	2		E 14.4.1
		Refused	-8		E 14.4.1
		Don't Know	-9		E 14.4.1
E14.3.4 <i>em1bonl m_a</i>	How much was amount received in the last month?	Amount	R		
		Refused	-8		
		Don't Know	-9		
E14.4.1 <i>em1pcrt</i>	Did you get extra money on a piece rate basis in the last 12 months?	Yes	1		
		No	2		E 14.5.1
		Refused	-8		E 14.5.1
		Don't Know	-9		E 14.5.1
E14.4.2 <i>em1pcrt_ a</i>	How much was amount received in the last 12 months?	Amount	R		
		Refused	-8		
		Don't Know	-9		
E14.4.3 <i>em1pcrtl m</i>	Did you get extra money on a piece rate basis in the last month?	Yes	1		
		No	2		E 14.5.1
		Refused	-8		E 14.5.1
		Don't Know	-9		E 14.5.1
E14.4.4 <i>em1pcrtl m_a</i>	How much was amount received in the last month?	Amount	R		
		Refused	-8		
		Don't Know	-9		

				Validation Rule	Skips
E14.5.1 <i>em1dedm ed</i>	Is anything deducted from your salary for medical aid?	Yes	1		
		No	2		E 14.6.1
		Refused	-8		E 14.6.1
		Don't Know	-9		E 14.6.1
E14.5.2 <i>em1dedm ed_a</i>	How much was deducted in the last month?	Amount	R		
		Refused	-8		
		Don't Know	-9		
E14.6.1 <i>em1dedp en</i>	Is anything deducted from your salary for pension/provident fund contributions?	Yes	1		
		No	2		E 14.7.1
		Refused	-8		E 14.7.1
		Don't Know	-9		E 14.7.1
E14.6.2 <i>em1dedp en_a</i>	How much was deducted in the last month?	Amount	R		
		Refused	-8		
		Don't Know	-9		
E14.7.1 <i>em1dedui f</i>	Is anything deducted from your salary for UIF?	Yes	1		
		No	2		E15.1
		Refused	-8		E15.1

		Don't Know	-9		E15.1
E14.7.2 <i>em1dedui</i> <i>f_a</i>	How much was deducted in the last month?	Amount	R		
		Refused	-8		
		Don't Know	-9		
E15.1 <i>em1contr</i>	Are you employed on the basis of a written contract or a verbal agreement?	A written contract	1		
		A verbal agreement	2		
		Refused	-8		
		Don't Know	-9		
E15.2 <i>em1contr</i> <i>_d</i>	Is the contract/agreement of a limited duration or unspecified duration or is it permanent?	Limited duration	1		
		Unspecified duration	2		
		Permanent	3		
		Refused	-8		
		Don't Know	-9		
E16 <i>em1tru</i>	Do you belong to a trade union?	Yes	1		
		No	2		
		Refused	-8		
		Don't Know	-9		

					Validation Rule	Skips
<u>INTERVIEWER READ OUT:</u> We are now going to ask you questions about your second(or next) most important wage job . If you have more than two jobs, then tell us about the rest when we talk about casual work.						
E23 <i>em2</i>	Do you currently have a second job where you are paid a wage or salary to work for an employer on a regular basis?	Yes	1			
		No	2			E33
		Refused	-8			E33
		Don't Know	-9			E33
E24	When did you start this job? Interviewer: Write month in <u>two</u> figures, e.g. 08 for August and year in <u>four</u> figures, e.g. 2001 If don't know write "-9". If refused write "-8"	Month <i>em2strtm</i>	Year <i>em2strty</i>			
E25 <i>em2wrk</i>	What kind of work do you usually do in this job? In other words, what is your occupation or job title? Interviewer: Record at least two words: car sales person, office cleaner, vegetable farmer, primary school teacher, etc. If don't know write "-9". If refused write "-8"	Job title				
E26 <i>em2task</i>	What are your <u>main</u> tasks or duties in this work? For example some people sell fruit or, repair machines or keep accounts or deliver things or look after cattle. Interviewer: If don't know write "-9". If refused write "-8"	Main duties				
E27 <i>em2wrkpl</i> <i>ace</i>	What is the name of your place of work? For example, it might be Pick 'n' Pay or a government department or a bank or your own home? Interviewer: For government or large organisations, give the name of the establishment and branch or division: e.g. Education Dept – Rapele Primary School; ABC Gold Mining; Maintenance Div. Write "Own house" or "No fixed location", if relevant For domestic workers write "private household" If don't know write "-9". If refused write "-8"	Employer				
E28 <i>em2goods</i>	What are the main goods and services produced at your place of work or what are its main functions? Examples could be making electrical appliances or repairing cars or selling houses or primary education? Interviewer: For domestic workers write "private household" If don't know write "-9". If refused write "-8"	Sector				
E28.1		Private households	0			

<i>em2sect</i>	In which economic sector do you work in this job?	Agriculture, fishing, forestry	1		
		Mining and quarrying	2		
		Manufacturing (e.g. clothing, food)	3		
		Electricity, gas, water	4		
		Construction	5		
		Wholesale/ retail	6		
		Transport, storage and communication	7		
		Finance, real estate and business services	8		
		Community, social and personal services	9		
		Catering and accommodation	10		
		Other - Specify	11		
		Don't know	-9		
		Refused	-8		

				Validation Rule	Skips
E29 <i>em2inc</i>	How much did you earn last month at this job before any deductions for tax, medical aid or pension?	Amount	R		
		Refused	-8		
		Don't know	-9		
E30 <i>em2pay</i>	How much was your take-home pay from this job?	Amount	R	Check if E30 > E29	E32
		Refused	-8		
		Don't know	-9		

INTERVIEWER READ OUT: We understand that earnings is a difficult and sensitive question. However, due to its importance, we would like to ask you a range into which this your last month's take home pay from this job falls

E31	Would you say last month's take home pay from this job was:					Check if E31 lower bound > E29	
		E31.1 <i>em2inc_brac1</i>	More than or less than R1900?	More than	1		
				About equal to	2		
				Less than	3		
				Refused	-8		
				Don't know	-9		
		E31.2 <i>em2inc_brac2</i>	More than or less than R700?	More than	1		
				About equal to	2		
				Less than	3		
				Refused	-8		
				Don't know	-9		
		E31.3 <i>em2inc_brac3</i>	More than or less than R3600?	More than	1		
				About equal to	2		
				Less than	3		
				Refused	-8		
				Don't know	-9		
		E31.4 <i>em2inc_brac4</i>	More than or less than R200?	More than	1		E32
				About equal to	2		
				Less than	3		
				Refused	-8		

				Don't know	-9			
		E31.5 <i>em2inc_ brac5</i>	More than or less than R5500?	More than	1			E32
				About equal to	2			
				Less than	3			
				Refused	-8			
				Don't know	-9			
		E31.6 <i>em2inc_ brac6</i>	More than or less than R15000?	More than	1			E32
				About equal to	2			
				Less than	3			
				Refused	-8			
				Don't know	-9			
E32 <i>em2hrs</i>	How many hours do you work at this job in a typical week? Interviewer: If don't know write “-9”. If refused write “-8”	Hours		E32 must be <=168				

INTERVIEWER READ OUT: We now want to ask you some questions about **self-employment** – that is if you work for yourself, even if this is in partnership with other people. The questions are for **all** people, even if you have a main job or are in full-time education, and therefore can only do this kind of work on the side.

				Validation Rule	Skip s
E33 <i>ems</i>	Have you engaged in any self-employment activities during the last month? For example, you might buy and sell goods, be a commercial farmer, work for yourself as a doctor or hairdresser or be a freelance consultant.	Yes	1		
		No	2		E48
		Refused	-8		E48
		Don't know	-9		E48
E34 <i>emsatc</i>	Describe your <u>main</u> self-employment activity Interviewer: Record at least two words If don't know write "-9". If refused write "8"	Main self-employment			
E34.1 <i>emssect</i>	In which economic sector is your self-employment activity?	Private households	0		
		Agriculture, fishing, forestry	1		
		Mining and quarrying	2		
		Manufacturing (e.g. clothing, food)	3		
		Electricity, gas, water	4		
		Construction	5		
		Wholesale/ retail	6		
		Transport, storage and communication	7		
		Finance, real estate and business services	8		
		Community, social and personal services	9		
		Catering and accommodation	10		
		Other - Specify	11		
		Don't know	-9		
		Refused	-8		
E35 <i>emsoth</i>	Do you do any other self-employment activities?	Yes	1		
		No	2		E37
		Refused	-8		E37
		Don't know	-9		E37
E36 <i>emsothatc</i>	Please describe your other self-employment activities Interviewer: Record at least two words for each activity Interviewer: If don't know write "-9". If refused write "-8"	Other Self-employment			

E36.1 <i>emsothsect</i>	In which economic sector is your other selfemployment activities?	Private households	0		
		Agriculture, fishing, forestry	1		
		Mining and quarrying	2		
		Manufacturing (e.g. clothing, food)	3		
		Electricity, gas, water	4		
		Construction	5		
		Wholesale/ retail	6		
		Transport, storage and communication	7		
		Finance, real estate and business services	8		
		Community, social and personal services	9		
		Catering and accommodation	10		
		Other - Specify	11		
		Don't know	-9		
		Refused	-8		
E37 <i>emsmn</i>	For how many months out of the last twelve were you engaged in any self-employment activities? Interviewer: If don't know write "-9". If refused write "-8"	Months			
E38 <i>emshrs</i>	How many hours do you spend doing all these self-employment activities in a typical week? Interviewer: If don't know write "-9". If refused write "-8"	Hours		E38 must be <=168	

				Validation Rule	Skip s		
INTERVIEWER READ OUT: Think about your main self-employment activity							
E39 <i>emstax</i>	Is the business registered for income tax and/or VAT?	Yes	1				
		No	2				
		Refused	-8				
		Don't know	-9				
E40 <i>emsfinr</i>	Does your business keep financial records?	Yes	1		E44		
		No	2				
		Refused	-8				
		Don't know	-9				
E41 <i>emsincifr</i>	In the <u>last month</u> , how much money did you keep for yourself after paying expenses out of all of your businesses?	Amount	R		E43		
		Refused	-8				
		Don't know	-9				
INTERVIEWER READ OUT: We understand that earnings is a difficult and sensitive question. However, due to its importance, we would like to ask you a range into which last month's money that you kept for yourself falls							
E42	In the last month, would you say that the amount of money you kept for yourself was:	E42.1 <i>emsincifr_brac1</i>	More than or less than R1100?	More than	1		E42.3
				About equal to	2		E43
				Less than	3		E42.2
				Refused	-8		E43
				Don't know	-9		E43
		E42.2 <i>emsincifr_brac2</i>	More than or less than R400?	More than	1		E43
				About equal to	2		E43
				Less than	3		E42.4
				Refused	-8		E43
				Don't know	-9		E43
		E42.3 <i>emsincifr_brac3</i>	More than or less than R2800?	More than	1		E42.5
				About equal to	2		E43
				Less than	3		E43

				Refused	-8		E43
				Don't know	-9		E43
		E42.4 <i>emsincif_r_brac4</i>	More than or less than R150?	More than	1		E43
				About equal to	2		E43
				Less than	3		E43
				Refused	-8		E43
				Don't know	-9		E43
		E42.5 <i>emsincif_r_brac5</i>	More than or less than R6900?	More than	1		
				About equal to	2		E43
				Less than	3		E43
				Refused	-8		E43
				Don't know	-9		E43
		E42.6 <i>emsincif_r_brac6</i>	More than or less than R17300?	More than	1		
				About equal to	2		
				Less than	3		
				Refused	-8		
				Don't know	-9		
E43 <i>emsincyr</i>	In the last <u>12 months</u> , how much money did you keep for yourself after paying expenses out of all of your businesses?	Amount	R				
		Refused	-8				E48
		Don't know	-9				
E44 <i>emsprofloss</i>	Did your business make a profit or loss in the last month?	Profit	1				
		Loss	2				E46
		Break even	3				E47. 1
		Refused	-8				E47. 1
		Don't know	-9				E47. 1
E45 <i>emsprof_a</i>	What was last month's total amount of profit (in Rands) after tax?	Amount	R				E47. 1
		Refused	-8				
		Don't know	-9				
E46 <i>emsloss_a</i>	What was last month's total loss in rands?	Amount	R				
		Refused	-8				
		Don't know	-9				
E47.1 <i>emsincfr</i>	Did you draw a salary last month?	Yes	1				
		No	2				E48
		Refused	-8				E48
		Don't know	-9				E48
					Validation Rule	Skips	
E47.2 <i>emsincfr_a</i>	How much was that salary, from all your businesses, after deductions for tax, medical aid and pension?	Amount	R				E48
		Refused	-8				
		Don't know	-9				
INTERVIEWER READ OUT: We understand that earnings is a difficult and sensitive question. However, due to its importance, we would like to ask you a range into which your last month's salary (after deductions for tax, medical aid and pension) falls							
E47.3	In the last month, would you say the amount of money you kept for yourself was ...	E47.3.1 <i>emsincfr_brac1</i>	More than or less than R1100?	More than	1		E47.3. 3
				About equal to	2		E48
				Less than	3		E47.3. 2
				Refused	-8		E48
				Don't know	-9		E48
		E47.3.2 <i>emsincfr_brac2</i>	More than or less than R400?	More than	1		E48
				About equal to	2		E48
				Less than	3		E47.3. 4
				Refused	-8		E48

			Don't know	-9		E48
	E47.3.3 <i>emsincfr_</i> <i>brac3</i>	More than or less than R2800?	More than	1		E47.3. 5
			About equal to	2		E48
			Less than	3		E48
			Refused	-8		E48
			Don't know	-9		E48
	E47.3.4 <i>emsincfr_</i> <i>brac4</i>	More than or less than R150?	More than	1		
			About equal to	2		
			Less than	3		E48
			Refused	-8		
			Don't know	-9		
	E47.3.5 <i>emsincfr_</i> <i>brac5</i>	More than or less than R6900?	More than	1		
			About equal to	2		E48
			Less than	3		E48
			Refused	-8		E48
			Don't know	-9		E48
	E47.3.6 <i>emsincfr_</i> <i>brac6</i>	More than or less than R17300?	More than	1		
			About equal to	2		
			Less than	3		E48
			Refused	-8		
			Don't know	-9		

INTERVIEWER READ OUT: This section covers **casual work**, that is work that is irregular and short-term, or any work that you do in addition to any work that you told us about earlier. These questions are for all people - even if you have a main job or are selfemployed or are in full-time education and therefore can only do casual work on the side.

E48 <i>emc</i>	Have you done any casual work to earn money in the past 30 days?	Yes	1		
		No	2		E53
		Refused	-8		E53
		Don't know	-9		E53
E49 <i>emcwrk</i>	What was your main form of casual work during the past 30 days? For example, was it construction work, waitressing, gardening, or paid domestic work? Interviewer: If don't know write "-9". If refused write "-8"	Casual work			

E49.1 <i>emcprod_c</i>	In which economic sector is your casual job?	Private households	0		
		Agriculture, fishing, forestry	1		
		Mining and quarrying	2		
		Manufacturing (e.g. clothing, food)	3		
		Electricity, gas, water	4		
		Construction	5		
		Wholesale/ retail	6		
		Transport, storage and communication	7		
		Finance, real estate and business services	8		
		Community, social and personal services	9		
		Catering and accommodation	10		
		Other - Specify	11		
		Don't know	-9		
		Refused	-8		

E50 <i>emcinc</i>	How much did you earn from all casual work during the past 30 days?	Amount	R		E52		
		Refused	-8				
		Don't know	-9				
INTERVIEWER READ OUT: We understand that earnings is a difficult and sensitive question. However, due to its importance, we would like to ask you a range into which your last month's earnings from casual work falls							
E51	In the last month, would you say that the earnings from all casual work was...	E51.1 <i>emcinc_</i> <i>b rac1</i>	More than or less than R900?	More than	1		E51.3
				About equal to	2		E52
				Less than	3		E51.2
				Refused	-8		E52
				Don't know	-9		E52
		E51.2 <i>emcinc_</i> <i>b rac2</i>	More than or less than R400?	More than	1		E52
				About equal to	2		E52
				Less than	3		E51.4
				Refused	-8		E52
				Don't know	-9		E52
		E51.3 <i>emcinc_</i> <i>b rac3</i>	More than or less than R1700?	More than	1		E51.5
				About equal to	2		E52
				Less than	3		E52
				Refused	-8		E52
				Don't know	-9		E52
		E51.4 <i>emcinc_</i> <i>b rac4</i>	More than or less than R150?	More than	1		E52
				About equal to	2		
				Less than	3		
				Refused	-8		
				Don't know	-9		
		E51.5 <i>emcinc_</i> <i>b rac5</i>	More than or less than R2800?	More than	1		
				About equal to	2		
				Less than	3		
				Refused	-8		
				Don't know	-9		
		E51.6 <i>emcinc_</i> <i>b rac6</i>	More than or less than R5700?	More than	1		E52
	About equal to		2				
	Less than		3				
	Refused		-8				
	Don't know		-9				
					Validation Rule	Skip s	
E52 <i>emchrs</i>	How many hours did you work in casual employment in the last 30 days? Interviewer: If don't know write "-9". If refused write "-8"	Hours					
INTERVIEWER READ OUT: This section asks about work you might have done on yourplot or food garden .							
E53 <i>emp</i>	In the last 30 days did you do any work on your own	Yes	1				
	or the household's plot, farm, food garden, cattle post or kraal, or help in growing farm produce or in looking after animals for your household? If you have already told us about your commercial farm, do not tell us about it again.	No	2		E61		
		Refused	-8		E61		
		Don't know	-9		E61		
E54 <i>emphrs</i>	How many hours do you spend on these activities in a typical week? Interviewer: If don't know write "-9". If refused write "-8"	Hours		E54 <= 168			
E55 <i>empsll</i>	Do you ever get money for this work by selling crops or livestock or animal products?	Yes	1				
		No	2				

		Refused	-8		
		Don't know	-9		
E56 <i>empser</i>	Do you ever get money for this work by providing these services to anyone else in your area? This is in addition to any work that you have told us about before.	Yes	1		
		No	2		
		Refused	-8		
		Don't know	-9		
CE57	Computer Check: is E55=1 or E56=1?	Yes	1		
		No	2		E59
E57 <i>empsll_v</i>	Please estimate how much you earned from this work during the past 30 days? Interviewer: If none, write 0	Amount	R		
		Refused	-8		
		Don't know	-9		
E58 <i>empser_v</i>	Please estimate how much you earned from this work during the past 12 months? Interviewer: If none, write 0	Amount	R		
		Refused	-8		
		Don't know	-9		
E59 <i>empconprod</i>	Do you or your family ever keep any of the produce for your own consumption?	Yes	1		E61
		No	2		E61
		Refused	-8		E61
		Don't know	-9		E61
E60 <i>empconprod_v</i>	Think about all the produce that you consumed from your own production last month. How much would it cost you to buy all of this at the market?	Amount	R		
		Refused	-8		
		Don't know	-9		
INTERVIEWER READ OUT: This section asks you questions about any help you give to other people with their business in addition to all the work that you have told us about already.					
E61 <i>emh</i>	Did you help other people with their business activities in the last 30 days? For example, did you help in a spaza shop or help make food to sell, or help to make clothes to sell?	Yes	1		
		No	2		CE67
		Refused	-8		CE67
		Don't know	-9		CE67
E62 <i>emhhrs</i>	How many hours do you work at this job in a typical week? Interviewer: If don't know write "-9". If refused write "-8"	Hours		E62<=168	

				Validation Rule	Skips
E63 <i>emhper</i>	Do you help a family member in this household or a family member in another household or a friend or someone else?	Family member in the household	1		
		Family members in another household	2		
		Friends	3		
		Other (specify) <i>emhper_o</i>	4		
		Refused	-8		
		Don't know	-9		
E64 <i>emhearn</i>	Do you ever get money for this work?	Yes	1		
		No	2		E66
		Refused	-8		E66
		Don't know	-9		E66
	How much did you earn from this work during the past 30 days?	Amount	R		

E65 <i>emhearn_v</i>	Interviewer: If none, write 0	Refused	-8		
		Don't know	-9		
E66 <i>emhtask</i>	What was your <u>main</u> task when you helped with other people's business activities? For example, did you make food or make clothes or answer the telephone or take the money? Interviewer: write at least two words If don't know write "-9". If refused write "-8"	Helping unpaid activities			
CE67	Computer Check: employed, self employed, casual employed or work on plot or food garden? i.e. Is (E2=1 E33=1 E48=1 E53=1 E61=1)?	Yes	1		
		No	2		E69
E67 <i>emreswage</i>	Assume that you become unemployed, what is the absolute lowest monthly take-home wage that you would accept for any permanent, full-time work?	Amount	R		E85
		Refused	-8		E85
		Don't know	-9		E85
E69 <i>unemprv</i>	Have you EVER worked for pay or profit or helped unpaid in a household business?	Yes	1		
		No	2		E74
		Refused	-8		E74
		Don't know	-9		E74
E70 <i>unemdc</i>	How long ago was it since you last worked?	Less than 3 months	1		
		3 months - less than 6 months	2		
		6 months - less than 9 months	3		
		9 months - less than 1 year	4		
		1 year - less than three years	5		E74
		3 years - less than 5 years	6		E74
		More than 5 years	7		E74
		Refused	-8		
		Don't know	-9		
E72 <i>unemwrk</i>	What kind of work did you usually do in this job? In other words, what was your occupation or job title? Interviewer: Record at least two words: car sales person, office cleaner, vegetable farmer, primary school teacher, etc. Interviewer: If don't know write "-9". If refused write "-8"	Last job description			

					Validation Rule	Skip s	
E73 <i>unemex</i>	What was the main reason you stopped working in your last job/business?	Health reasons		01			
		Caring for own children/relatives		02			
		Pregnancy		03			
		Other family/ community responsibilities		04			
		Going to school		05			
		Lost job/ job ended/ laid off/ business sold/ closed down		06			
		Changed residence		07			
		Dissatisfied with the job		09			
		Retired		10			
		Marriage		11			
		Other (specify) <i>unemex_o</i>		12			
		Refused		-8			
		Don't know		-9			
		E74 <i>unemwnt</i>	In the last 4 weeks, would you have liked to work for pay, profit or family gain?	Yes			1
No				2	E83		
Refused				-8	E83		
Don't know				-9	E83		
E75	How long have you been wanting work and been without any paid employment? Interviewer: state number of years <u>OR</u> number of months If don't know write "-9". If refused write "8"	E75.1 Time <i>unemwnt_v</i>					
		E75.2 Units <i>unemwnt_dy</i>	1. Months				
			2. Years				
E76 <i>unemrj</i>	Did you turn down any job offers during this time period?	Yes		1		E78.1	
		No		2			E78.1
		Refused		-8			E78.1
		Don't know		-9			E78.1
E77 <i>unemrjex</i>	What was the <u>main</u> reason you chose not to accept this job offer? Interviewer: One mention only	The job was too far away		1			
		The wage offered was too low		2			
		The cost of travel would have been too high		3			
		The job was below my educational/skill level		4			
		I did not like the job		5			
		Family commitments prevented me from accepting		6			
		I wanted to further my studies		7			
		Other (specify) <i>unemrjex_o</i>		8			
		Refused		-8			
		Don't know		-9			
E78	INTERVIEWER READ OUT: We now want to ask you how long you think it will be before you get a job.						
E78.1 <i>unemmn</i>	Do you think there is a realistic possibility that you will get a job in the <u>next month</u> ?	Yes		1		E79	
		No		2			
		Refused		-8			
		Don't Know		-9			
E78.2 <i>unenl3mnth</i>	Do you think there is a realistic possibility that you will get a job in the next <u>3 months</u> ?	Yes		1		E79	
		No		2			
		Refused		-8			
		Don't Know		-9			

E78.3 <i>unenl6mn</i>	Do you think there is a realistic possibility that you will get a job in the next <u>6 months</u> ?	Yes	1		E79
		No	2		
		Refused	-8		
		Don't Know	-9		

				Validation Rule	Skip s
E83 <i>noemex</i>	What is the <u>main</u> reason you were not available to work in the last four weeks? Interviewer: One mention only.	I am too old	01		
		I am a full-time student/learner	02		
		I am sick/disabled	03		
		I do not like the available jobs and would rather not work	04		

				Validation Rule	Skip s	
E78.4 <i>unemyr</i>	Do you think there is a realistic possibility that you will get a job in the <u>next year</u> ?	Yes	1		E79	
		No	2			
		Refused	-8			
		Don't Know	-9			
E78.5 <i>unem2yr</i>	Do you think there is a realistic possibility that you will get a job in the next <u>2 years</u> ?	Yes	1			
		No	2			
		Refused	-8			
		Don't Know	-9			
E79 <i>unems#</i>	In the last four weeks, what are all the things that you have done to search for work or to start a business? Interviewer: Multiple mentions allowed	Registered at an employment agency	01			
		Enquired at workplaces, farms, factories, or called on other possible employers	02			
		Placed advertisement (s)	03			
		Answered advertisements	04			
		Searched through job advertisement (s) on the internet	05			
		Sought assistance from relatives or friends	06			
		Looked for land, building, equipment or applied for permit to start own business or farming	07			
		Waited at the side of the road	08			
		Sought financial assistance to start a business	09			
		Other (specify) <i>unems10_o</i>	10			
		Nothing	11			E82
		Refused	-8			E82
		Don't know	-9			E82
E80 <i>unemsrct</i>	How much did you spend on travel costs associated with looking for work last week? Interviewer: If none, write 0 Interviewer: If don't know write "-9". If refused write "-8"	Amount	R		If E80 = 0, skip to E82	
E81 <i>unemsrsrc</i>	Where did the money for travel come from?	A family member in the household	1			
		A family member outside the household	2			
		A friend in the household	3			
		A friend outside the household	4			
		A money lender	5			
		My savings	6			
		My Grants	7			
		Refused	-8			
		Don't know	-9			
E82 <i>unemava</i>	If a suitable job had been offered to you, would you have been able to start work in the last four weeks?	Yes	1		E84	
		No	2			
		Refused	-8		E84	
		Don't know	-9		E84	

I do domestic duties and look after children and or elderly/disabled family members

06

I look after children

07

It costs too much to look for work

08

		The wages are too low, it is not worth my time working	09		
		I spend my time cooking and cleaning, shopping etc.	10		
		Pregnant	11		
		Other (specify) <i>noemex_o</i>	12		
		Refused	-8		
		Don't know	-9		
CE84	Computer Check: Is E83=1 and Age>70?	Yes	1		E86
		No	2		
CE84	Is this person currently searching for employment? (is E74 = 1?)	Yes	1		
		No	2		E85
E84 <i>noemresw age</i>	What is the absolute lowest take-home wage that you would accept for any permanent, fulltime work (per month)?	Amount	R		
		Refused	-8		
		Don't know	-9		
E85 <i>noemfrwa</i>	What do you think would be a fair take-home monthly wage for you, given your age, education and skills? Interviewer: If don't know write "-9". If refused write "-8"	Amount	R		
CE86	Computer Check: if employed, self employed, casual employed or work on plot or food garden. (is E2=1 or E33=1 or E48=1 or E53=1)?	Yes	1		F1.1
		No	2		
CE86	Computer Check: Is this person currently looking for a job (is 1<=E79<=10?)	Yes	1		F1.1
		No	2		
E86 <i>noemsr</i>	Have you ever looked for a job?	Yes	1		
		No	2		F1.1
		Refused	-8		F1.1
		Don't know	-9		F1.1
E87 <i>noemsryr</i>	In which year did you last look for a job? Interviewer: If don't know write "-9". If refused write "-8"	Year			

				Validation Rule	Skip s
E88 <i>noemsre x</i>	What was the <u>main</u> reason you stopped looking? Interviewer: One mention only.	I became discouraged (I did not think I would ever find a job / Job search was pointless / There are no jobs to be had / It was a waste of time)	01		
		I got pregnant/ had a child	02		
		I had family responsibilities that prevented me from looking for a job	03		
		I got married	04		
		I could not afford the costs of looking for work	05		
		I decided to go back to school/study further	06		
		I became disabled	07		

	I decided I was too old to work anymore	08	
	The wages were too low	09	
	I chose not to look for work	10	
	I do not have ID documents	11	
	Other (specify) <i>noemsrex_o</i>	12	
	Refused	-8	
	Don't know	-9	

Section F1: Individual income from non-employment sources

INTERVIEWER READ OUT: In this section we are going to talk about any money or any form of assistance that you may receive which does not involve employment of some kind. As I read a list of the different ways in which people can receive money or assistance, please indicate whether [...] did, in fact, receive such assistance or not in the last month.								
		1. Did you receive income or assistance from [..] in the last month ?				Computer Check: If Answer Not=1 skip to next Question.	Validation Rule	2.How much did you receive last month in Rands? Interviewer: If don't know write "-9". If refused write "-8"
		Yes	No	Refused	Don't Know			
F1.1	State (South African government) old age grant <i>incgovpen</i>	1	2	-8	-9	: If Answer Not=1 skip to F1.2		<i>incgovpen_v</i>
F1.2	Disability grant <i>incdis</i>	1	2	-8	-9	: If Answer Not=1 skip to F1.3		<i>incdis_v</i>
F1.3	Child support grant <i>incchld</i>	1	2	-8	-9	: If Answer Not=1 skip to F1.4		<i>incchld_v</i>
F1.4	Foster care grant <i>incfos</i>	1	2	-8	-9	: If Answer Not=1 skip to F1.5		<i>incfos_v</i>
F1.5	Care dependency grant <i>inccare</i>	1	2	-8	-9	: If Answer Not=1 skip to F1.6		<i>inccare_v</i>
F1.6	War veterans pension <i>incwar</i>	1	2	-8	-9	: If Answer Not=1 skip to F1.7		<i>incwar_v</i>
F1.7	Unemployment insurance (UIF) <i>incuif</i>	1	2	-8	-9	: If Answer Not=1 skip to F1.8		<i>incuif_v</i>
F1.8	Workmen's compensation <i>incwc</i>	1	2	-8	-9	: If Answer Not=1 skip to F1.9		<i>incwc_v</i>
F1.9	Pension or Provident Fund <i>incpfnd</i>	1	2	-8	-9	: If Answer Not=1 skip to F1.10		<i>incpfnd_v</i>
F1.10	Private retirement annuity <i>incret</i>	1	2	-8	-9	: If Answer Not=1 skip to F1.11		<i>incret_v</i>
F1.11	Retirement gratuity or retirement package <i>incretp</i>	1	2	-8	-9	: If Answer Not=1 skip to F1.12	Warn if (A14-B1)<60	<i>incretp_v</i>

		1. Did you receive income or assistance from [..] in the last month ?				Computer Check: If Answer Not=1 skip to next Question.	Validation Rule	2. How much did you receive last month in Rands? Interviewer : If don't know write "-9". If refused write
--	--	--	--	--	--	--	-----------------	---

								"-8"
		Yes	No	Refused	Don't Know			
F1.12	Rental income <i>incrnt</i>	1	2	-8	-9	: If Answer Not=1 skip to F1.13		<i>incrnt_v</i>
F1.13	Interest earnings including dividends, interest from savings, loans <i>incint</i>	1	2	-8	-9	: If Answer Not=1 skip to F1.14		<i>incint_v</i>
F1.14	Retrenchment package <i>incretr</i>	1	2	-8	-9	: If Answer Not=1 skip to F1.15		<i>incretr_v</i>
F1.15	Inheritances <i>incinh</i>	1	2	-8	-9	: If Answer Not=1 skip to F1.16		<i>incinh_v</i>
F1.16	Lobola or bride wealth payments <i>inclob</i>	1	2	-8	-9	: If Answer Not=1 skip to F1.17		<i>inclob_v</i>
F1.17	Gifts <i>incgif</i>	1	2	-8	-9	: If Answer Not=1 skip to F1.18		<i>incgif_v</i>
F1.18	Repayments of loans to you <i>incloan</i>	1	2	-8	-9	: If Answer Not=1 skip to F1.19		<i>incloan_v</i>
F1.19	Sale of household goods (e.g. Car, television, refrigerator) <i>incsale</i>	1	2	-8	-9	: If Answer Not=1 skip to F1.20		<i>incsale_v</i>
F1.20	Other, excluding child maintenance, remittances and alimony (specify) <i>inco</i>	1	2	-8	-9	: If Answer Not=1 skip to CF2.1		<i>inco_v</i>

Section F2: Grants received by others to care for you

				Validation Rule	Skips
CF2.1	Computer CHECK! Is this respondent between 15 and 17 years of age? (i.e. Is 15 <= A14 – B1 <= 17?)	Yes	1		
		No	2		F3.1
INTERVIEWER READ OUT: Now we would like to ask some questions about any grants received by others to care for you.					
F2.1 <i>grcur</i>	Does anyone currently receive a child support grant, foster care grant or care dependency grant to care for you?	Yes	1		
		No	2		F3.1
		Don't Know	-9		F3.1
		Refused	-8		F3.1
F2.2 <i>grcurtyp</i>	What type of grant is this?	Child support grant	1		
		Foster care grant	2		
		Care dependency grant	3		
		Don't Know	-9		

		Refused	-8		
F2.3	Who is the person that the grant is paid to? Interviewer: Select from drop down list If person not in household, pid = 77 If Don't Know write "-9" If Refused write "-8"	PID <i>grcurecpid</i>			
		Relationship to you <i>grcurecrel</i>		Warn if relationship code =01/02/03/04/05 / 06 / 07 / 13 / 16 /19/22/23/24	

Section F3: Contributions received

F3.1 <i>cr</i>	In the last 12 months, did you receive money, food or any other kind of contribution from people who do not usually sleep under this roof for four nights a week? If you receive maintenance for you or your child, please include it here.	Yes	1
		No→ SKIP TO SECTION F4	2

Interviewer: If don't know write "-9". If refused write "-8"	F3.2 Please name each person who has sent money, food, or any other kind of contribution to you in the last 12 months. <i>conrname#</i>	F3.3 Contributor's name Interviewer: write 77 if not listed on roster <i>crpid#</i>	F3.4 In which province or other country is [..] now? Interviewer: select from drop-down list <i>crprv#</i>	F3.5 What is the contributor's relationship to you? This person is your [...]? Interviewer: select from drop-down list Warn if relationship code =01/02	F3.6 In the past 12 months, how many times did [...] send you money? <i>crt#</i>	F3.7 In the past 12 months how much money in total did [...] send to you? <i>cryrv#</i> Rand	F3.8 In the past 30 days how much money in total did [...] send to you? <i>crmnv#</i> Rand	F3.9 In the past 12 months, how many times did [...] make a contribution in kind to you? <i>crkndt#</i>	F3.10 In the past 12 months, what was the total monetary value of [...]s in kind contribution to you Rand <i>crkndyrv#</i>	F3.11 In the past 30 days, what was the total monetary value of [...]s in kind contribution to you Rand <i>crkndmnv#</i>	F3.12 What types of items were received? Item Code (see box below) <i>crkndtyp#</i>		
	Computer Check	Has Column F3.2 been completed				If equal to zero skip			If equal to zero skip				
Skip					F3.9			Next line					
Validation Rule	F3.2 Must be complete												
											F3.12.1	F3.12.2	F3.12.3
1													
2													
3													
4													
5													

Item code for F3.12

3													
4													
5													

Item code for F4.12				
1 - Clothing for adults	2 - Clothing for children	3 - Groceries	4 - Airtime	5 - Furniture or appliances
6 - Linen	7 - Building materials	8 - Livestock	9 - Other	-5 - No other type of item

Section G: Personal ownership and debt

INTERVIEWER READ OUT: Now we would like to ask you about certain items that you may or may not own.

		1			
		Do you personally own at least one [...] in good working order?			
		Yes	No	Refused	Don't Know
G1	Radio <i>ownrad</i>	1	2	-8	-9
G2	Hi-Fi Stereo, CD player, MP3 player <i>ownhif</i>	1	2	-8	-9
G3	Sewing/knitting machine <i>ownsew</i>	1	2	-8	-9
G4	Motor vehicle (Private) in running condition <i>ownvehpri</i>	1	2	-8	-9
G5	Bakkie or truck in running condition <i>ownvehcom</i>	1	2	-8	-9
G6	Motorcycle/scooter <i>ownmot</i>	1	2	-8	-9
G7	Bicycle <i>ownbic</i>	1	2	-8	-9
G8	Computer <i>owncom</i>	1	2	-8	-9
G9	Camera <i>owncam</i>	1	2	-8	-9
G10	Cell phone <i>owncel</i>	1	2	-8	-9

INTERVIEWER READ OUT: Now we would like to ask about certain financial assets or debt you may have.

		1				2	3
		Do you personally have a [...]?				What was the value of your payment on your [...] last month?	What is the remaining outstanding balance on your [...]?
		If Answer Not=1 s to next item				Interviewer: If don't know write "-9". If refused write "-8" If none, write 0 Rands	Interviewer: If don't know write "-9". If refused write "-8" If none, write 0 Rands
		Yes	No	Refused	Don't Know		
G11	Home loan / Bond <i>dtbnd</i>	1	2	-8	-9	<i>dtbnd_p</i>	<i>dtbnd_b</i>
G12	Personal loan from a bank <i>dtbnk</i>	1	2	-8	-9	<i>dtbnk_p</i>	<i>dtbnk_b</i>
G13	Personal loan from a micro-lender <i>dtmic</i>	1	2	-8	-9	<i>dtmic_p</i>	<i>dtmic_b</i>
G14	Loan with a Mashonisa <i>dtmsh</i>	1	2	-8	-9	<i>dtmsh_p</i>	<i>dtmsh_b</i>
G15	Study loan with a bank <i>dstubnk</i>	1	2	-8	-9	<i>dstubnk_p</i>	<i>dstubnk_b</i>
G16	Study loan with an institution other than a bank <i>dstuo</i>	1	2	-8	-9	<i>dstuo_p</i>	<i>dstuo_b</i>
G17	Vehicle finance (car payment) <i>dtveh</i>	1	2	-8	-9	<i>dtveh_p</i>	<i>dtveh_b</i>
G18	Credit card <i>dtcre</i>	1		-8	-9	<i>dtcre_p</i>	<i>dtcre_b</i>
G19	Store card (For example, Edgars, Foschini or Woolworths store card) <i>dtstr</i>	1	2	-8	-9	<i>dtstr_p</i>	<i>dtstr_b</i>
G20	Hire purchase agreement	1	2	-8	-9	<i>dthp_p</i>	<i>dthp_b</i>

	<i>dthp</i>						
G21	Loan from a family member or friends <i>dtloan</i>	1	2	-8	-9	<i>dtloan_p</i>	<i>dtloan_b</i>
G22	Bank account <i>asacc</i>	1	<u>2</u>	-8	-9		
G23	Pension or retirement annuity <i>aspen</i>	1		-8	-9		
G24	Unit trusts, stocks and shares <i>asfin</i>	1	<u>2</u>	-8	-9		
G25	Stokvel <i>dstsvl</i>	1	2	-8	-9		

Section H: Education

INTERVIEWER READ OUT: We would like to ask you about your education.					Validation rule	Skips
H1 <i>edschgrd</i>	What is the highest grade in school that you have successfully completed? Do not count the final year you were in school if you did not successfully complete the year. Interviewer: Select from drop-down list Codes 16 to 23 are not applicable	Highest school grade			valid range check codes are 00-15 + 24-25 Current value >Panel value	H33 if = 25
		If other, specify here <i>edschgrd_o</i>				
		Refused		-8		
		Don't Know		9		
H2.1 <i>edschyr</i>	In what year did you successfully complete this grade?	Year			Current value >Panel value	H3
		Refused		-8		
		Don't know		-9		
H2.2 <i>edschage</i>	How old were you when you successfully completed this grade?	Age				
		Refused		-8		
		Don't know		-9		
H3 <i>edschname</i>	What is the name of the school or educational institution where you completed this grade? Interviewer: If don't know write "-9". If refused write "-8"	School name			Pre-popped with display	
H4 <i>edschl</i>	What is the location of this educational institution? Interviewer: Please get street address, neighbourhood (Such as Rondebosch, Hanover Park or Athlone) or any other identifying information and name of nearest town or city (such as Worcester, Durban or Umtata) Interviewer: If don't know write "-9". If refused write "-8"	School location			Pre-popped with display	
H5.1 <i>edschstrt</i>	In what year did you first attend Grade 1/Sub A?	Year			Pre-popped with display	H6
		Refused		-8		
		Don't know		-9		
H5.2 <i>edsrtage</i>	How old were you when you first attended grade1/Sub A?	Age				
		Refused		-8		
		Don't know		-9		

H6 <i>edschmth</i>	What is the highest grade or level at school in which you studied mathematics? This refers to highest grade studied and not necessarily highest grade passed. Incomplete years should also be included. Interviewer: Select from drop-down list Codes 16 to 23 are not applicable Interviewer: If don't know write "-9". If refused write "-8"	Highest grade Mathematics		Current value >Panel value	
H7 <i>edter</i>	Have you successfully completed any diplomas, certificates or degrees outside of school?	Yes	1		
		No	2	Warn if w2_tertiyesno=1	CH10
		Refused	-8		CH10
		Don't know	-9		CH10
H8 <i>edterlev</i>	What is the highest level of education you have successfully completed? Do not include any courses that you did not successfully complete. Interviewer: Select from drop-down list. Codes 00 to 12 and 25 are not applicable.	Highest level of education		valid range: code 00-12 and 25 not applicable	
		If other, specify here <i>edterlev_o</i>			
		Refused	-8		
		Don't know	-9		

				Validation rule	Skips
H9 <i>edterins</i>	At what institution did you successfully complete the diploma, certificate or degree? Interviewer: If don't know write "-9". If refused write "-8"	Tertiary institution			
CH10	Computer CHECK! Is this respondent aged between 15 and 30?(i.e. Is (A14B1)<30?)	Yes	1		
		No	2		H24
H10 <i>ed10att</i>	Did you attend any school or classes or correspondence courses of any kind at any time in 2010? Include university, technical colleges or any courses as well as school.	Yes	1	Warn if w2_currentenrolyn = 2	
		No	2	Warn if w2_currentenrolyn = 1	H13
		Refused	-8		H13
		Don't Know	-9		H13
H11 <i>ed10res</i>	What was the result of this schooling in 2010?	Withdrew before completing the year	1		
		Failed the grade or programme	2		H13
		Passed the grade or programme	3		H13
		Continuing in programme, no grade given	4		H13
		Refused	-8		H13
		Don't Know	-9		H13
H12 <i>ed10wdx</i>	What was the main reason that you withdrew before completing the educational year? Interviewer: only one answer allowed.	Could not afford to stay at school	1		
		Wanted to look for a job	2		
		Was pregnant/had a baby	3		
		Was needed at home	4		
		Was ill/sick	5		
		Got a job/work	6		
		Grades were very poor/ was not allowed to continue	7		

		Suspended/expelled	8		
		Education is useless or uninteresting	9		
		Other, specify: <i>ed10wdx_o</i>	10		
		Don't Know	-9		
		Refused	-8		
H13 <i>ed11att</i>	Did you attend any school or classes or correspondence courses of any kind at any time in 2011? Include university, technical colleges or any courses as well as school	Yes	1		H15
		No	2		
		Refused	-8		H24
		Don't Know	-9		H24

				Validation rule	Skips
H14 <i>ed11ex</i>	What was the main reason you were never enrolled in school or attending classes during 2011?	Finished school / education	11		H24
		Could not afford to stay at school	1		
		Wanted to look for a job	2		
		Was pregnant/had a baby	3		
		Was needed at home	4		
		Was ill/sick	5		
		Got a job/work	6		
		Grades were very poor/ was not allowed to continue	7		
		Suspended/expelled	8		
		Education is useless or uninteresting	9		
		Other, specify: <i>ed11ex_o</i>	10		
		Don't Know	-9		
		Refused	-8		
H15 <i>ed11lev</i>	What level were you enrolled in during 2011? Interviewer: Select from drop-down list. If don't know write "-9". If refused write "8"	Level enrolled in			
CH16	Computer check: Is the education level mentioned in H15 less than code 16?	Yes	1		H17
		No	2		
H16 <i>ed11sub</i>	What subject or programme were you studying in 2011?	Arts/humanities	1		
		Science	2		
		Social science	3		
		Law	4		
		Theology	5		
		Commerce/management	6		
		Education	7		
		Medical services (incl.dentistry)	8		
		Engineering	9		
		Administration/clerical	10		
		Protection	11		
		Building sciences	12		
		Technical	13		
		Computing	14		
		Veterinary	15		
		Tourism	16		
		Beauty/hair/cosmetology	17		
		Other (specify) <i>ed11sub_o</i>	18		

		Refused	-8		
		Don't know	-9		
H17 <i>ed11name</i>	What was the name of the school or educational institution that you attended in 2011? Interviewer: If don't know write "-9". If refused write "-8"	School name			
H18 <i>ed11loc</i>	What is the location of this educational institution? Interviewer: Please get street address, neighbourhood (Such as Rondebosch, Hanover Park or Athlone) or any other identifying information and name of nearest town or city (such as Worcester, Durban or Umtata). If don't know write "-9". If refused write "8"	School location			

					Validation rule	Skips
H19	How much was spent on your [...] in 2011? Interviewer: If don't know write "-9". If refused write "-8"					
		Amount in Rands				
H19.1	School fees / tuition <i>ed11spnfee</i>					
H19.2	Uniform <i>ed11spnuni</i>					
H19.3	Books and stationary <i>ed11spnbks</i>					
H19.4	Transport to school <i>ed11spntrn</i>					
H19.5	Allowances and other school related expenses <i>ed11spno</i>					
H20 <i>ed11pay</i>	Did someone pay for your educational expenses in 2011?	Yes	1			
		No	2			H22
		Don't Know	-9			H22
		Refused	-8			H22
H21	Who paid for your educational expenses in 2011? Please mention all people as well as institutions that contributed. Multiple mentions possible. Interviewer: If the person is not a household member, pid = 77 Select from drop-down list If no second, third or fourth person skip to NGO		H21a PID	H21b Relationship		
		Person #1	<i>ed11paypid1</i>	<i>ed11paypr1</i>	Warn if relationship code =01/02/04/ 05 / 06 / 07 / 13 / 15 / 16 / 17/19/22/23/24	
		Person #2	<i>ed11paypid2</i>	<i>ed11paypr2</i>	Warn if relationship code 01/02/04/ 05 / 06 / 07 / 13 / 15 / 16 / 17/19/22/23/24	
		Person #3	<i>ed11paypid3</i>	<i>ed11paypr3</i>	Warn if relationship code 01/02/04/ 05 / 06 / 07 / 13 / 15 / 16 / 17/19/22/23/24	
		Person #4	<i>ed11paypid4</i>	<i>ed11paypr4</i>	Warn if relationship code 01/02/04/ 05 / 06 / 07 / 13 / 15 / 16 / 17/19/22/23/24	
			NGO	Yes	1	

	H21_5 <i>ed11pay ngo</i>	Bursary/Scholarship	No	2		
	Don't Know		-9			
	Refused		-8			
	Yes		1			
	No		2			
	Don't Know		-9			
	Refused		-8			
	H22 <i>ed11res</i>		What was the result of your education in 2011?			Withdrew from school before completing the year
Failed the grade or programme		2			H24	
Passed the grade or programme		3			H24	
Continuing in programme, no grade given		4			H24	
Refused		-8			H24	
Don't Know		-9			H24	

					Validation rule	Skips
H23 <i>ed11wdex</i>	What is the <u>main</u> reason that you withdrew before completing the educational year in 2011?	Could not afford to stay at school	1			
		Wanted to look for a job	2			
		Was pregnant/had a baby	3			
		Was needed at home	4			
		Was ill/sick	5			
		Got a job/work	6			
		Grades were very poor/ was not allowed to continue	7			
		Suspended/expelled	8			
		Education is useless or uninteresting	9			
		Other, specify: <i>ed11wdex_o</i>	10			
		Don't Know	-9			
		Refused	-8			
H24 <i>ed12cur</i>	Are you currently enrolled in any school or classes or correspondence courses of any kind? Include university, technical colleges or any courses as well as school.	Yes	1			H26
		No	2			
		Refused	-8			H33
		Don't Know	-9			H33
H25 <i>ed12curex</i>	What is the main reason you are not enrolled in school or attending classes?	Finished school / education	11			H33
		Could not afford to stay at school	1			
		Wanted to look for a job	2			
		Was pregnant/had a baby	3			
		Was needed at home	4			
		Was ill/sick	5			
		Got a job/work	6			
		Grades were very poor/ was not allowed to continue	7			
		Suspended/expelled	8			
		Education is useless or uninteresting	9			
		Other, specify: <i>ed12curex_o</i>	10			
		Don't Know	-9			
		Refused	-8			

H26 <i>ed12name</i>	What is the name of the school or educational institution that you are currently attending? Interviewer: if the same as 2011, write 7777. Interviewer: If don't know write "-9". If refused write "-8"	School Name		Prepped with display	
CH27	Computer Check : is H26 = "7777" (i.e. Same as before)	Yes	1		H28
		No	2		
H27 <i>ed12loc</i>	What is the location of this educational institution? Interviewer: Please get street address, neighbourhood (Such as Rondebosch, Hanover Park or Athlone) or any other identifying information and name of nearest town or city (such as Worcester, Durban or Umtata). Interviewer: If don't know write "-9". If refused write "-8"	School Location		Prepped with display	
H28 <i>ed12curlev</i>	What education level are you currently enrolled in? Select from drop down list Interviewer: If don't know write "-9". If refused write "-8"				

				Validation rule	Skips
CH29	Computer check: Is the education level mentioned in H28 less than code 16?	Yes	1		H31
		No	2		
H29 <i>ed12cursub</i>	What subject or programme are you studying?	Arts/humanities	1		
		Science	2		

		Social science	3		
		Law	4		
		Theology	5		
		Commerce/management	6		
		Education	7		
		Medical services (incl. dentistry)	8		
		Engineering	9		
		Administration/clerical	10		
		Protection	11		
		Building sciences	12		
		Technical	13		
		Computing	14		
		Veterinary	15		
		Tourism	16		
		Beauty/hair/cosmetology	17		
		Other (specify) <i>ed12cursub_o</i>	18		
		Refused	-8		
		Don't know	-9		
H30 <i>ed12curmat</i>	Does this institution require you to have a matric? If yes, does it require you to have matric exemption(university endorsement)?	Yes, with matric exemption	1		H33
		Yes, but no exemption required	2		H33
		No	3		H33

		Refused	-8		H33
		Don't know	-9		H33
H31 <i>edintmat</i>	Taking everything into account, do you intend to continue at school until you have successfully completed matric?	Yes	1		
		No	2		
		Refused	-8		
		Don't know	-9		
H32 <i>edintter</i>	Taking everything into account, do you intend to continue studying after matric, that is, after leaving school?	Yes	1		
		No	2		
		Refused	-8		
		Don't know	-9		
H33 <i>edlitcomp</i>	Are you computer literate?	Yes highly literate	1		
		Yes basic use	2		
		No	3		
		Refused	-8		
		Don't know	-9		
H34 <i>edlitdriv</i>	Do you have a driver's license?	yes	1		
		no	2		
		Refused	-8		
		Don't Know	-9		
H35 <i>edsaid</i>	Do you have a South African National Identity Book (green book)?	yes	1		
		no	2		
		Refused	-8		
		Don't Know	-9		
				Validation rule	Skips
H36 <i>edlitrdhm</i>	How well can you read in your home language?	Very well	1		
		Fair	2		
		Not well	3		
		Not at all	4		
		Refused	-8		
		Don't know	-9		
H37 <i>edlitwrthm</i>	How well can you write in your home language?	Very well	1		
		Fair	2		
		Not well	3		
		Not at all	4		
		Refused	-8		
		Don't know	-9		
CH 38	Computer check: Is the respondent's home language English? (i.e. Is B7 = 11?)	Yes	1		J1
		No	2		
H38 <i>edlitrden</i>	How well can you read in English?	Very well	1		
		Fair	2		
		Not well	3		
		Not at all	4		
		Refused	-8		
		Don't know	-9		
H39 <i>edlitwrten</i>	How well can you write in English?	Very well	1	Prepopped with display	
		Fair	2		

	Not well	3		
	Not at all	4		
	Refused	-8		
	Don't know	-9		

PLEASE NOTE THERE IS NO SECTION I.

Section J: Health

INTERVIEWER READ OUT: We would like to ask you about some health conditions that people sometimes complain about				Validation Rule	skips	
J1 <i>hl des</i>	How would you describe your health at present? Would you say it is excellent, very good, good, fair, or poor?	Excellent	1			
		Very good	2			
		Good	3			
		Fair	4			
		Poor	5			
		Refused	-8			
		Don't Know	-9			
INTERVIEWER READ OUT: Now I would like to ask you about some health conditions that people sometimes complain about.						
J2	In the last 30 days, have you experienced [...]?		Yes	No		
		1. Flu symptoms <i>hl30fl</i>	1	2		
		2. Fever <i>hl30fev</i>	1	2		
		3. Persistent cough <i>hl30pc</i>	1	2		
		4. Cough with blood <i>hl30cb</i>	1	2		
		5. Tight chest <i>hl30tc</i>	1	2		
		6. Chest pain <i>hl30cp</i>	1	2		
		7. Body ache <i>hl30b</i>	1	2		
		8. Headache <i>hl30h</i>	1	2		
		9. Back ache <i>hl30ba</i>	1	2		
		10. Joint pain / Arthritis <i>hl30jp</i>	1	2		
		11. Vomiting <i>hl30v</i>	1	2		
		12. Diarrhoea <i>hl30d</i>	1	2		
		13. Felt weak <i>hl30w</i>	1	2		
		14. Pain in upper abdomen <i>hl30pua</i>	1	2		
		15. Pain in lower abdomen <i>hl30pla</i>	1	2		
		16. Painful urination <i>hl30pu</i>	1	2		
		17. Swelling ankles <i>hl30sa</i>	1	2		
		18. Rash <i>hl30r</i>	1	2		
		19. Skin disorders <i>hl30sd</i>	1	2		
		20. Conjunctivitis or eye infection <i>hl30c</i>	1	2		
		21. Severe weight loss <i>hl30wl</i>	1	2		
		22. Yellow eyes <i>hl30ye</i>	1	2		
		23. Memory loss <i>hl30ml</i>	1	2		
		24. Serious injury (as the result of an accident or act of violence)? <i>hl30i</i>	1	2		
J3 <i>hl con</i>	When did you last consult someone about your health?	In the last 30 days	1			
		One to five months ago	2			

		Six to twelve months ago	3		
		More than one and less two years ago	4		J13.1a
		Two to four years ago	5		J13.1a
		Five to ten years ago	6		J13.1a
		More than ten years ago	7		J13.1a
		Never	8		J13.1a
		Refused	-8		J13.1a
		Don't Know	-9		

				Validation Rule	Skips
J4 <i>hlcontyp</i>	Where did this consultation take place? Interviewer: Read out options. One answer only.	Public hospital	1		
		Private hospital	2		
		Public health clinic	3		
		Private clinic	4		
		Private doctor	5		J7
		Nurse or chemist	6		J7
		Traditional healer	7		J7
		Refused	-8		
		Don't Know	-9		
J5 <i>hlconhos</i>	Name of hospital/clinic that you consulted? Interviewer: If don't know write "-9". If refused write "-8"	Hospital name			
J6 <i>hlconhos_l</i>	What is the location of this hospital/clinic? Interviewer: Please get street address, neighbourhood (Such as Rondebosch, Hanover Park or Athlone) or any other identifying information or name of nearest town or city (such as Worcester, Umtata or Cofimvaba) Interviewer: If don't know write "-9". If refused write "-8"	Hospital location			
J7 <i>hlconfee</i>	Was there a consultation fee for the visit?	Yes	1		
		No	2		J10
		Refused	-8		J10
		Don't Know	-9		J10
J8 <i>hlconfee_v</i>	What was the fee for the consultation? Interviewer: If don't know write "-9". If refused write "-8"	Amount	R		
J9 <i>hlconfee_p</i>	Who paid for it?	Shared household money	1		
		Respondent	2		
		Other household member	3		
		Money from outside household	4		
		Employer	5		
		Medical aid	6		
		Other (Specify) <i>hlconfee_p_o</i>	7		
		Refused	-8		
		Don't Know	-9		
J10 <i>hlconmed</i>	Was medicine prescribed?	Yes	1		J13
		No	2		

		Refused	-8		J13
		Don't Know	-9		J13
J11 <i>hlconmed_v</i>	How much was spent on medicine? Interviewer: If nothing was spent, write 0 If don't know write "-9". If refused write "-8"	Amount	R		
J12 <i>hlconmed_p</i>	Who paid for the medicine?	Medicine is free	1		
		Shared household money	2		
		Respondent	3		
		Other household member	4		
		Money from outside household	5		
		Employer	6		
		Medical Aid	7		
		Refused	-8		
		Don't Know	-9		

INTERVIEWER READ OUT: Now we would like to ask you about some particular health conditions.				Validation Rule	Skips
J13.1.a <i>hlthb</i>	Have you ever been told by a doctor, nurse or health care professional that you have Tuberculosis / TB?	Yes	1	Pre-popped with display (with "Yes")	
		No	2		J13.2a
		Refused	-8		J13.2a
		Don't Know	-9		J13.2a
J13.1.b <i>hlthb_yr</i>	In which year were you diagnosed with Tuberculosis / TB? Interviewer: If don't know write "-9". If refused write "-8"	Year		Current Value > B1 (DOB) Pre-popped with display	
J13.1.c <i>hlthb_med</i>	Are you currently taking medication for Tuberculosis / TB?	Yes	1		J13.2a
		No	2		
		Refused	-8		
		Don't Know	-9		
J13.1.d <i>hlthb_stl</i>	Do you still have Tuberculosis / TB?	Yes	1		
		No	2		
		Refused	-8		
		Don't Know	-9		
J13.2.a <i>hlbp</i>	Have you ever been told by a doctor, nurse or health care professional that you have High blood pressure?	Yes	1	Pre-popped	
		No	2	with display (with "Yes")	J13.3a
		Refused	-8		J13.3a
		Don't Know	-9		J13.3a
J13.2.b <i>hlbp_yr</i>	In which year were you diagnosed with High blood pressure? Interviewer: If don't know write "-9". If refused write "-8"	Year		Current Value > B1 (DOB) Pre-popped with display	
J13.2.c <i>hlbp_med</i>	Are you currently taking medication for High blood pressure?	Yes	1		J13.3a
		No	2		
		Refused	-8		

		Don't Know	-9		
J13.2.d <i>hlbp_stl</i>	Do you still have High blood pressure?	Yes	1		
		No	2		
		Refused	-8		
		Don't Know	-9		
J13.3.a <i>hldia</i>	Have you ever been told by a doctor, nurse or health care professional that you have Diabetes or high blood sugar ?	Yes	1	Pre-popped with display (with "Yes")	J13.4a
		No	2		J13.4a
		Refused	-8		J13.4a
		Don't Know	-9		J13.4a
J13.3.b <i>hldia_yr</i>	In which year were you diagnosed with Diabetes or high blood sugar? Interviewer: If don't know write "-9". If refused write "-8"	Year		Current Value > B1 (DOB) Pre-popped with display	
J13.3.c <i>hldia_med</i>	Are you currently taking medication for Diabetes or high blood sugar?	Yes	1		J13.4a
		No	2		
		Refused	-8		
		Don't Know	-9		

				Validation Rule	Skips
J13.3.d <i>hldia_stl</i>	Do you still have Diabetes or high blood sugar?	Yes	1		
		No	2		
		Refused	-8		
		Don't Know	-9		
J13.4.a <i>hlstrk</i>	Have you ever been told by a doctor, nurse or health care professional that you have had a Stroke ?	Yes	1	Pre-popped with display (with "Yes")	J13.5a
		No	2		J13.5a
		Refused	-8		J13.5a
		Don't Know	-9		J13.5a
J13.4b <i>hlstrk_yr</i>	In which year were you diagnosed with a Stroke? Interviewer: If don't know write "-9". If refused write "-8"	Year		Current Value > B1 (DOB) Pre-popped with display	
J13.4.c <i>hlstrk_med</i>	Are you currently taking medication for a Stroke?	Yes	1		J13.5a
		No	2		
		Refused	-8		
		Don't Know	-9		
J13.4.d <i>hlstrk_stl</i>	Do you still experience the effects of the Stroke?	Yes	1		
		No	2		
		Refused	-8		
		Don't Know	-9		
J13.5.a <i>hlstrk</i>	Have you ever been told by a doctor, nurse or health care professional that you have Asthma ?	Yes	1	Pre-popped with display (with "Yes")	J13.6a
		No	2		J13.6a
		Refused	-8		J13.6a

		Don't Know	-9		J13.6a
J13.5.b <i>hlast_yr</i>	In which year were you diagnosed with Asthma? Interviewer: If don't know write "-9". If refused write "-8"	Year		Current Value > B1 (DOB) Pre-popped with display	
J13.5.c <i>hlast_med</i>	Are you currently taking medication for Asthma?	Yes	1		J13.6a
		No	2		
		Refused	-8		
		Don't Know	-9		
J13.5.d <i>hlast_stl</i>	Do you still have Asthma?	Yes	1		
		No	2		
		Refused	-8		
		Don't Know	-9		
J13.6.a <i>hlhrt</i>	Have you ever been told by a doctor, nurse or health care professional that you have Heart problems ?	Yes	1	Pre-popped with display (with "Yes")	J13.7a
		No	2		J13.7a
		Refused	-8		J13.7a
		Don't Know	-9		J13.7a
J13.6.b <i>hlhrt_yr</i>	In which year were you diagnosed with Heart problems? Interviewer: If don't know write "-9". If refused write "-8"	Year		Current Value > B1 (DOB) Pre-popped with display	

				Validation Rule	Skips
J13.7.a <i>hlcan</i>	Have you ever been told by a doctor, nurse or health care professional that you have Cancer ?	Yes	1	Pre-popped with display (with "Yes")	
		No	2		J14
		Refused	-8		J14
		Don't Know	-9		J14
J13.7.b <i>hlcan_yr</i>	In which year were you diagnosed with Cancer? Interviewer: If don't know write "-9". If refused write "-8"	Year		Current Value > B1 (DOB) Pre-popped with display	
J14 <i>hlser</i>	Do you have any other major illnesses or disability not mentioned above?	Yes	1		
		No	2		J16
		Refused	-8		J16
		Don't know	-9		J16
J15	If yes, what are they?	Physically handicapped	1		
<i>hl#</i>	Interviewer: Do not read out Multiple mentions allowed	Problems with sight, hearing or speech	2		
		Psychological or psychiatric disorder	3		
		HIV/AIDS	4		
		Epilepsy/ fits	5		
		Emphysema	6		

		Alzheimer's disease	7		
		Other (Specify)	8		
J16 <i>hlvisaid</i>	Do you use spectacles, glasses, or contact lenses, including for reading?	Yes	1	Pre-popped with display (with "Yes")	
		No	2		
		Refused	-8		
		Don't Know	-9		
J17 <i>hlvistest</i>	When was your vision last tested?	Year			
		Never	7777		
		Can't remember	5555		
		Refused	-8		
		Don't Know	-9		
J18 <i>hlvisdes</i>	How is your vision? If you wear glasses, how is your vision with your glasses?	Excellent	1		
		Very good	2		
		Good	3		
		Fair	4		
		Poor	5		
		Blind	6		
		Refused	-8		
		Don't Know	-9		
J19 <i>hlhraid</i>	Do you use a hearing aid?	Yes	1	Pre-popped with display (with "Yes")	
		No	2		
		Refused	-8		
		Don't Know	-9		

				Validation Rule	Skips
J20 <i>hlhrdes</i>	How is your hearing? If you use a hearing aid how is your hearing with the hearing aid?	Excellent	1		
		Very good	2		
		Good	3		
		Fair	4		
		Poor	5		
		Deaf	6		
		Refused	-8		
		Don't Know	-9		
J21 <i>hlhfexer</i>	How regularly do you exercise? Interviewer: Read out options. One answer only.	Never	1		
		Less than once a week	2		
		Once a week	3		
		Twice a week	4		
		Three or more times a week	5		
		Refused	-8		

		Don't Know	-9		
J22 <i>hlfsmk</i>	Do you smoke cigarettes?	Yes	1		J25
		No	2		
		Refused	-8		
		Don't Know	-9		
J23 <i>hlfsmkre g</i>	Did you ever smoke cigarettes regularly?	Yes	1		
		No	2		J27
		Refused	-8		J27
		Don't Know	-9		J27
J24 <i>hlfsmkls t</i>	How old were you when you last smoked cigarettes regularly? Interviewer: If don't know write "-9". If refused write "-8"	Age			
J25 <i>hlfsmkfr s</i>	How old were you when you first smoked cigarettes regularly? Interviewer: If don't know write "-9". If refused write "-8"	Age			
J26 <i>hlfsmkq nt</i>	On average, how many cigarettes per day did you/ do you smoke? Interviewer: If don't know write "-9". If refused write "-8"	Number of cigarettes			
J27 <i>hlfc</i>	How often do you drink alcohol?	I have never drank alcohol	1		J29
		I no longer drink alcohol	2		J29
		I drink very rarely	3		
		Less than once a week	4		
		On 1 or 2 days a week	5		
		On 3 or 4 days a week	6		
		On 5 or 6 days a week	7		
		Every day	8		
		Refused	-8		
		Don't Know	-9		

				Validation Rule	Skips
J28 <i>hlfcq nt</i>	On a day that you have an alcoholic drink, how many standard drinks do you <u>usually</u> have? <i>A standard drink is a small glass of wine; a 330 ml can of regular beer, a tot of spirits, or a mixed drink.</i>	13 or more standard drinks	1		
		9 to 12 standard drinks	2		
		7 to 8 standard drinks	3		
		5 to 6 standard drinks	4		
		3 or 4 standard drinks	5		
		1 or 2 standard drinks	6		
		Refused	-8		
		Don't Know	-9		
J29	I do not want to know the result, but have	Yes	1	Pre-popped	
<i>hlfhivts t</i>	you ever had an HIV test?	No	2	with display (with "Yes")	
		Don't Know	-8		

		Refused	-9		
J30 <i>hlmedaid</i>	Are you covered by medical aid?	Yes	1		
		No	2		K1
		Refused	-8		K1
		Don't Know	-9		K1
J31 <i>hlmedpid</i>	Who in the household is the Main medical aid member? Interviewer: If self, write 00. If person not in household, write 77 Interviewer: If don't know write "9". If refused write "-8"	PID			

Section K: Emotional health

INTERVIEWER READ OUT: We would like to know how your general well-being has been over the past week.

I am going to read a list of some of the ways you may have felt or behaved during the last week. Please state how often you have felt this way during the **past week**. **Interviewer: Select one option on each line**

	During the past week...	Rarely or none of the time (less than 1 day)	Some or little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	All of the time (5-7 days)	Refused	Don't Know
K1 <i>emobth</i>	I was bothered by things that usually don't bother me	1	2	3	4	-8	-9
K2 <i>emomnd</i>	I had trouble keeping my mind on what I was doing	1	2	3	4	-8	-9
K3 <i>emodep</i>	I felt depressed	1	2	3	4	-8	-9
K4 <i>emoeff</i>	I felt that everything I did was an effort	1	2	3	4	-8	-9
K5 <i>emohope</i>	I felt hopeful about the future	1	2	3	4	-8	-9
K6 <i>emofear</i>	I felt fearful	1	2	3	4	-8	-9
K7 <i>emoslp</i>	My sleep was restless	1	2	3	4	-8	-9
K8 <i>emohap</i>	I was happy	1	2	3	4	-8	-9
K9 <i>emolone</i>	I felt lonely	1	2	3	4	-8	-9
K10 <i>emogo</i>	I could not "get going"	1	2	3	4	-8	-9

Section L: Household decision-making

INTERVIEWER READ OUT: In this section we want to ask you how decisions are made within your household.

	Please mention who makes decisions in your household	L1 Main decision maker Name	L2 If joint, who is the second decision maker? Name	Refused	Don't Know
1	Who makes decisions about day-to-day household expenditures (e.g. groceries)?	<i>decdpid</i>	<i>decdpid2</i>	-8	-9
2	Who makes decisions about large, unusual purchases such as appliances, vehicles or furniture?	<i>declrgpid</i>	<i>declrgpid2</i>	-8	-9
3	Who makes decisions about who is allowed to live in the household as part of the household (for example, if a relative or family member does not have a place to stay)?	<i>decmempid</i>	<i>decmempid2</i>	-8	-9
4	Who makes decisions about where the household should live?	<i>declvpid</i>	<i>declvpid2</i>	-8	-9
5	Who makes decisions about where your children should go to school? Interviewer: If no school-age children, write 77 If I5_1 = 77, -8, or -9: should skip to m1	<i>decschpid</i>	<i>decschpid2</i>	-8	-9

Section M: Well-being and social cohesion

INTERVIEWER READ OUT: Next, we want to ask you some questions about your relationship with your neighbours and the social interactions that you have with those around you.

M1	Think about the area (village or suburb) in	Strong preference to stay	1					
<i>wblv</i>	which you live. How strong is your preference to continue living in this area? Interviewer: Read out options	Moderate preference to stay	2					
		Unsure (no strong preference to stay or leave)	3					
		Moderate preference to leave	4					
		Strong preference to leave	5					
		Refused	-8					
		Don't Know	-9					
M2 <i>fwbreli</i> <i>nc</i>	How would you classify your household in terms of income, compared with other households in your village/suburb? Interviewer: Read out options	Much above average income	1					
		Above average income	2					
		Average income	3					
		Below average income	4					
		Much below average income	5					
		Refused	-8					
		Don't Know	-9					
M3	Please imagine a six step ladder where the poorest people in South Africa stand on the bottom (the first step) and the richest people in South Africa stand on the highest step (the sixth step).							
		Poorest 1	2	3	4	5	Richest 6	
M3.1 <i>fwbstp</i> <i>15</i>	On which step was your household when you were 15?	1	2	3	4	5	6	
	Don't Know	-9						
	Refused	-8						
M3.2 <i>fwbstp</i> <i>td</i>	On which step are you today?	1	2	3	4	5	6	
	Don't Know	-9						
	Refused	-8						
M3.3 <i>fwbstp</i> <i>2yr</i>	On which step do you expect to be 2 years from now?	1	2	3	4	5	6	
	Don't Know	-9						
	Refused	-8						
M3.4 <i>fwbstp</i> <i>5yr</i>	On which step do you expect to be 5 years from now?	1	2	3	4	5	6	
	Don't Know	-9						
	Refused	-8						
M4 <i>fwbinc</i> <i>5yr</i>	You expect to be on step [...] in 5 years. In terms of today's Rands, approximately how much income per month do you expect that your household will have in 5 years?	Amount						R
		Refused						-8
		Don't Know						-9
M5 <i>wbsat</i>	Using a scale of 1 to 10 where 1 means "Very dissatisfied" and 10 means "Very satisfied", how do you feel about your life as a whole right now?	Satisfaction level (1-10)						
		Refused						-8
		Don't Know						-9
M6 <i>wbsat</i> <i>10yr</i>	Are you happier, the same or less happy with life than you were 10 years ago?	Happier						1
		The same						2
		Less happy						3
		Refused						-8
		Don't Know						-9

M7 <i>relnb</i>	How important are religious activities in your life?	Not important at all	1
		Unimportant	2
		Important	3
		Very important	4
		Don't Know	-9
		Refused	-8
M8 <i>rel</i>	What religion are you?	Not religious	1
		Christian	2
		Jewish	3
		Muslim	4
		Hindu	5
		African traditional spiritual beliefs	6
		Other (specify) <i>rel_o</i>	7
		Don't Know	-9
		Refused	-8
M9 <i>trstcls</i>	Imagine you lost a wallet or purse that contained R200 and your contact details and it was found by <u>someone who lives close by</u> . Is it very likely, somewhat likely or not likely at all to be returned with the money in it?	Very likely	1
		Somewhat likely	2
		Not likely at all	3
		Don't Know	-9
		Refused	-8
M10 <i>trststrn</i>	Imagine you lost a wallet or purse that contained R200 and your contact details and it was found by <u>a complete stranger</u> . Is it very likely, somewhat likely or not likely at all to be returned with the money in it?	Very likely	1
		Somewhat likely	2
		Not likely at all	3
		Don't Know	-9
		Refused	-8

Section N: Measurements

INTERVIEWER READ OUT: Now we would like to take your height, weight, waist and blood pressure measurements.

				Validation Rule	Skip
N1.1 <i>height_1</i>	Respondent's Height – Measure 1 If Don't Know write "-9" If Refused write "-8"			____ . ____ centimetres	
	Computer CHECK! Is the height measurement less than 130.0cm	Yes → Re-do height measure, and correct N1.1 if appropriate			1
		No			2
N1.2 <i>height_2</i>	Respondent's Height – Measure 2			____ . ____ centimetres	
CN1.3	Computer CHECK! Is -1 < (N1.1-N1.2) <= 1 (Is the difference between N1.1 and N1.2 less than 1cm?)	Yes	1		N2.1
		No	2		
N1.3 <i>height_3</i>	Respondent's Height – Measure 3			____ . ____ centimetres	
N2.1 <i>weight_1</i>	Respondent's Weight – Measure 1			____ . ____ kilograms	
	Computer CHECK! Does the scale display a figure of more than 150 grams	Yes → Reset the scale to 0 grams, and correct N2.1			1
		No			2
N2.2 <i>weight_2</i>	Respondent's Weight – Measure 2			____ . ____ kilograms	
CN2.3	Computer CHECK! Is -1 < (N2.1-N2.2) <= 1 (Is the difference between N2.1 and N2.2 less than 1 kg?)	Yes	1		N3.1
		No	2		
N2.3 <i>weight_3</i>	Respondent's Weight – Measure 3			____ . ____ kilograms	
N3.1 <i>waist_1</i>	Respondent's Waist – Measure 1			____ . ____ centimetres	
N3.2 <i>waist_2</i>	Respondent's Waist – Measure 2			____ . ____ centimetres	
	Computer CHECK! Is -2 < (N3.1-N3.2) <= 1 (Is the difference between N3.1 and N3.2 less than 1 cm?)	Yes	1		N4.1

CN3.3	(N3.1N3.2) <= 2 (Is the difference between N3.1 and N3.2 less than 2cm?)	No	2		
N3.3 <i>waist_3</i>	Respondent's Waist – Measure 3			____ ____ ____ . ____ centimetres	
N4.1	Blood pressure – Reading 1	N4.2	Blood pressure – Reading 2		
1. SYSTOLIC <i>bpsys_1</i> ____ ____ ____ 2. DIASTOLIC <i>bpdia_1</i> ____ ____ ____ 3. PULSE <i>bppls_1</i> ____ ____ ____		1. SYSTOLIC <i>bpsys_2</i> ____ ____ ____ 2. DIASTOLIC <i>bpdia_2</i> ____ ____ ____ 3. PULSE <i>bppls_2</i> ____ ____ ____			
N5	INTERVIEWER CHECK! Have you filled out the health information sheet and given it to the respondent?	Yes			1
		No			2

Please note that there is no Section O, P or Q.

Section R: Alternative contact information

INTERVIEWER READ OUT: Because the survey is designed to measure change over time we would like to contact you again in two years time.

R1 <i>relocate</i>	What is the likelihood that you will move during the next two years?	Definitely	1
		Possibly → SKIP TO R5	2
		Unlikely → SKIP TO R5	3
		Definitely not → SKIP TO R5	4
		Refused	-8
		Don't Know	-9

INTERVIEWER READ OUT: If you already know your new address, can you please give it to us?

R2: Street address (or physical description) <i>altstradd</i>			
R3: Community/Suburb <i>altsub</i>		R4: Postal code <i>altposcd</i>	

INTERVIEWER READ OUT: If we are not able to find you again in 2 years time, are there three people who would know where you are? These people must not be currently living with you. All information you provide is kept confidential. No one outside of the research team will have access to this information, and the information will only be used for research purposes. No identification will be used in printed reports.

Contact 1

R5: Title <i>altcontitle1</i>		R6: Surname <i>altconname2</i>		R7: First name <i>altconname1</i>	
--------------------------------------	--	---------------------------------------	--	--	--

R8: Street address (or physical description) <i>altconstradd1</i>			
R9: Suburb/Village <i>altconsub1</i>		R10: Postal code <i>altconposcd1</i>	
R11: Phone number <i>altcontel1</i>		R12: Cell phone number <i>altconcel1</i>	
R13: Email address <i>altconeml1</i>		R14: Relationship to respondent <i>altconrel1</i>	

Contact 2

R15: Title <i>altcontitle2</i>		R16: Surname <i>altconsname2</i>		R17: First name <i>altconname2</i>	
R18: Street address (or physical description) <i>altconstradd2</i>					
R19: Suburb/Village <i>altconsub2</i>		R20: Postal code <i>altconposcd2</i>			
R21: Phone number <i>altcontel2</i>		R22: Cell phone number <i>altconcel2</i>			
R23: Email address <i>altconeml2</i>		R24: Relationship to respondent <i>altconrel2</i>			

Contact 3

R25: Title <i>altcontitle3</i>		R26: Surname <i>altconsname3</i>		R27: First name <i>altconname3</i>	
R28: Street address (or physical description) <i>altconstradd3</i>					
R29: Suburb/Village <i>altconsub3</i>		R30: Postal code <i>altconposcd3</i>			
R31: Phone number <i>altcontel3</i>		R32: Cell phone number <i>altconcel3</i>			
R33: Email address <i>altconeml3</i>		R34: Relationship to respondent <i>altconrel3</i>			

THANK YOU!

R35 <i>intrvend</i>	Interview end time	__ __: __ __
-------------------------------	---------------------------	--------------

Section S: Interviewer evaluation

To be completed by interviewer only

S1 <i>intln g#</i>	Languages used during interview Interviewer: Multiple mentions allowed	IsiNdebele	01	
		IsiXhosa	02	
		IsiZulu	03	
		Sepedi	04	
		Sesotho	05	
		Setswana	06	
		Siswati	07	
		Tshivenda	08	
		Isitsonga	09	
		Afrikaans	10	
		English	11	
		Other ()	12	
S2 <i>intre sp</i>	In general, how did the respondent act towards you during the interview?	Hostile	1	
	Neither hostile nor friendly	2		
	Friendly	3		
S3 <i>intre spact</i>	How attentive was the respondent to the questions during the interview?	Not at all attentive	1	
	Somewhat attentive	2		
	Very attentive	3		
S4 <i>intre sphe ar</i>	Were other persons within hearing range at any time during the interview?	No other person within hearing range at any time	1	
	1+ persons within hearing range for part of the interview	2		
	1+ persons within hearing range for all of the interview	3		
S5 <i>intre spqu e</i>	Did more than one person help to complete this questionnaire?	Yes	1	
	No	2	S7	
S6	If so, which household members helped to complete the questionnaire? Fill in the names of those who assisted Interviewer: If no second or third person skip to S7	Pid1 <i>intresppid1</i>		
		Pid2 <i>intresppid2</i>		
		Pid3 <i>intresppid3</i>		
S7 <i>intco m</i>	Any additional comments about specific questions or data quality?.....			

