NON-MARITAL FERTILITY IN SOUTH AFRICA: TRENDS, DETERMINANTS AND IMPLICATIONS

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By

REESHA KARA

ORCID ID

https://orcid.org/0000-0003-3824-0934

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ABSTRACT

Background: Non-martial fertility is traditionally associated with teenage pregnancy however international and South African literature has detailed increases in the number of adult women who are having children outside of a marriage. South African literature on non-marital fertility is sparse as it lacks a national overview of the trends and determinants of non-marital fertility among women aged 30 and older. The aim of this study was to present a national overview of non-marital fertility among women aged 30 and older. South African's attitudes to and opinions of non-marital fertility were also investigated, and the lived realities of older mothers were explored.

Methods: A mixed-methods research design was employed where the General Household Survey, National Income Dynamics Study and the South African Social Attitudes Survey were the main data sources. Using these data sets, descriptive and inferential statistics were computed using Stata. Using purposive and snowball sampling, four never-married older mothers (NMOMs) from KwaZulu-Natal (Durban) were identified as research participants. The in-depth life histories of these women were collected through face-to-face semi-structured interviews.

Results: The results show an 18.43% increase in never-married mothers aged 15-49 between 2002 and 2017 and interestingly, this increase is not necessarily driven by older mothers (30-49). NMOMs belonged to households with a lower average per capita total monthly household income (R1873.91) compared to all mothers aged 30-49 (R3428.76). NMOMs were also more likely to live in female-headed households (89.52%), to be household heads (64.22%) and to live in traditional areas (35.72%). Between 2002 and 2017, there was a 76.76% increase in mothers (aged 30-49) who were never married and a 7.74% decrease in those who were married, indicating a change in the marital profile of mothers. Despite this national increase in

non-marital fertility, South African's believe that premarital sexual activity is wrong, and that childbearing should take place within a marriage. Similar sentiments were echoed in the in-depth life histories as being the sole breadwinner and primary caregiver, the research participants experienced challenges as single mothers.

Conclusion and recommendations: The study has found that there has been an increase in non-marital fertility in South Africa between 2002 and 2017 and that there is an economic element to non-marital fertility in the country. Additional research into non-marital fertility at a national level is recommended with a focus on all women aged 15-49.

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LIST OF ACRONYMS AND ABBREVIATIONS

CAPI	Computer Assisted Personal Interviewing (Software)
CS	Community Survey
CSM	Continuous Sample Members
CPS	Current Population Survey
DHS	Demographic and Health Survey
EA	Enumeration Area
EU	European Union
GHS	General Household Survey
GDP	Gross Domestic Produce
HIV	Human Immunodeficiency Virus
HSRC	Human Science research Council
IES	Income and Expenditure Survey
ISSP	International Social Survey Programme
LFS	Labour Force Survey
LCS	Living Conditions Survey
NCV	National Certificate Vocational
NIDS	National Income Dynamics Study
NTC	National Training Certificate
NMOMs	Never-Married Older Mothers
OHS	October Household Survey
PSU	Primary Sampling Unit
PPS	Probability Proportional to Size
PSLSD	Project for Statistics on Living Standards and Development
QLFS	Quarterly Labour Force Survey
RCMA	Recognition of Customary Marriages Act 120 of 1998
SADHS	South African Demographic and Health Survey
SALDRU	Southern Africa Labour and Development Research Unit
STI	Sexually Transmitted Infections
Stats SA	Statistics South Africa
TSM	Temporary Sample Members
TFR	Total Fertility Rate
UCT	University of Cape Town

WFS	World Fertility Survey

Chapter One: Introduction

1.1 Background

Non-marital fertility is an increasingly common phenomenon both internationally and in South Africa. Within a South African context, early discussions on non-marital fertility were centred on culture and the influence of the socio-political climate of apartheid on Black [1] fertility behaviour (Moeno, 1977; Preston-Whyte, 1988; Preston-Whyte and Zondo, 1989). These descriptions discussed the value of childbearing in the absence of marriage, the socio-cultural reactions to non-marital fertility within Black communities and the influence of the migrant labour system on Black families and households (Preston-Whyte, 1988; Preston-Whyte and Zondo, 1989). Moeno (1977) explains that the socio-cultural reactions to births outside of marriage varied across ethnicities; however, in general, non-marital fertility was uncommon as it transgressed traditional fertility behaviour norms (Moeno, 1977). The political nature of South Africa in the early- to mid-1990s (apartheid era) restricted the collection of empirical data from all South Africans, and thus there are limited national statistical insights into non-marital fertility for that period (Garenne and Joseph, 2002; Moultrie and Timaeus, 2002; Moultrie et al., 2012; Norling, 2015; Udjo, 2014) while ethnographic accounts during the 1990s mainly focussed on Black women in townships (Moeno, 1977) and cities (Preston-Whyte, 1988; Preston-Whyte and Zondo, 1989) across the different provinces.

The first statistical account of non-marital fertility in South Africa was recorded in 1959, albeit in a small township in Johannesburg and is only representative of Black women (Moeno, 1977). Palmuleni (2010) estimated that in 1960, 5% of all births in South Africa were to unmarried women which increased to 27% in 1989 (Palamuleni, 2010). A large share of these births was to adolescent girls as, for example, in KwaZulu-Natal, 60-80% of births which took place in

[1] The South African national census (collected by Statistics South Africa) makes use of the following racial categories to classify the population: Black, Coloured, White and Indian. These categories are used in this thesis to describe any racial differences that are found in the result.

hospitals and clinics during the late 1970s and early 1980s were to Black adolescent girls (Preston-Whyte and Zondi, 1989). The increases in non-marital fertility were also noted at a provincial level where data from the Agincourt demographic surveillance site in KwaZulu-Natal showed that between 1992 and 1997, 21% of all births and 47% of births to women aged between 12 and 26 were non-marital (Garenne et al., 2001). Data from the same surveillance site revealed that between 1993 and 2012, 45% of women aged between 10[2] and 35 years had non-marital first births (Sennott et al., 2016). In contemporary South Africa, non-marital fertility is occurring in the context of changing household formations (characterised by an increase in female-headed households[3]) (Hosegood et al., 2009) and a notable increase in female labour supply during the post-apartheid period (Budlender and Lund, 2011; Casale and Posel, 2002; Casale, 2004; Casale and Posel, 2005; Ntuli, 2007). Public policy needs to take note of these changing demographic trends by acknowledging the fluid nature of family formation (Amoateng and Richter, 2003; Hall and Mokomane, 2018).

This study is concerned with non-marital fertility among women aged 30-49 years old in South Africa. Focusing on these women draws attention away from the traditional focus on teenage pregnancy and sheds light on middle-aged women who are more likely to be making purposeful decisions about family formation structure, childbearing and marriage (although this may not always be the case). These women are of prime working age and therefore, face the task of being active members of the labour market while deliberating on family planning decisions (taking into consideration South Africa's relatively late age of marriage) (Garenne et al., 2001; Palamuleni, 2010; Udjo, 2001). Additionally, understanding whether there is an 'economic' component to non-marital fertility is integral to understanding the dynamics of non-marital fertility in South Africa. This focus is especially important as being a never-married mother is associated with female headship, households (female-headed households) which are found to be at a greater risk of poverty compared to male-headed households (Rogan, 2013, 2014). As a result, by identifying an increase in non-marital fertility in the country (if any), this thesis

[2] Births to pre-adolescent girls have been noted in the Agincourt Health and Socio-Demographic Surveillance System data (Sennott et al., 2016) and does not necessarily suggest that it is a common occurrence in South Africa.

[3] HIV/AIDS has an important and multifaceted impact on female-headed households and non-marital fertility in South Africa however, understanding this impact is not within the scope of this study.

draws attention to a cohort of women who may be facing economic challenges which are specifically related to being never-married mothers.

The South African literature highlights three main reasons for the low/declining levels of marriage. The first reason focuses on changes to the traditional socio-cultural norms of sexual behaviour, marriage and childbearing (Chimere-Dan, 1997). These changes, coupled with the high value placed on motherhood, have resulted in the continued childbearing outside of marriage (Hosegood et al., 2009; Moore and Govender, 2013; Posel and Rudwick, 2012; Rossouw et al., 2012; Udjo, 2001). The second reason identifies the commercialization of *ilobolo*[4] and its associated high cost as a barrier to marriage (Amoateng and Richter, 2003; Kalule-Sabiti et al., 2007; Posel et al., 2011; Posel and Rudwick, 2011, 2013, 2014). Thirdly, the growing mismatch between educated, career-focused and financially secure women and semi-to unskilled, financially insecure men has resulted in the lack of 'marriageable men'. The Economics literature has suggested that these trends have contributed to a 'poor marriage market' in the country (Gustafson and Worku, 2006; Moore, 2013; Moore and Govender, 2013; Posel and Rudwick, 2011; Rossouw et al., 2012; Rudwick and Posel, 2014). One of the more recent findings from the South African literature highlights racial differences in the falling marriage rates where Black women have far lower and steadily decreasing marriage rates compared to White women, yet they are just as likely as White women to be mothers (Posel et al., 2011; Posel and Rudwick, 2013).

Against this backdrop of falling marriage rates (Budlender and Lund, 2011), the feminisation of the labour force (Budlender and Lund, 2011; Casale and Posel, 2002; Casale, 2004) and a growth in female headship (Holborn and Eddy, 2011; Russel, 2003; Ziehl, 2001) appear to be key features of post-apartheid South Africa. The economic stability of female-headed households and the ability of female household heads to provide for household dependents has been a focus in the literature since female employment is more likely (relative to male employment) to be characterised by low wage and unstable working conditions (Budlender and Lund, 2011; Casale, 2004, Ntuli, 2007). Recent work has highlighted the vulnerability of these household structures by showing that female-headed households are found to be at a higher (and growing) risk of experiencing poverty compared to male-headed households (Rogan,

[4] Bride price. The concept of *ilobolo* is discussed later in this chapter.

2013, 2014). In contrast to these findings, recent literature has found that, in some middle- to low-income countries, female-headed households experienced a rapid decrease in poverty and are at a lower risk of multidimensional poverty compared to male-headed households (Milazzo and van de Walle, 2017; Montoya and Teixeira, 2017). These findings suggest that the social environments within which female headship occurs are likely to influence the poverty levels of households.

These (gendered) changes in family formation are not restricted to South Africa as similar patterns have been observed in several countries. The recent literature points to a shift from the perceived 'normative family' to a more flexible, negotiated and representative notion of the family in a number of high-income countries (Murray and Barnes, 2010; Williams, 2004). Presented as the 'whole family' approach in social policy, the family unit is positioned as the primary care provider. This means that support and solutions to social issues are drawn from the varied skills offered by the different family members (Hughes, 2010; Murray and Barnes, 2010; Williams, 2004).

Through the revision of labour policies, various high-income countries have shifted the focus away from the traditional 'male breadwinner' model to an 'adult worker' model which view both men and women as paid workers. The model is premised on the notion that women should be dependent on the labour market for all current (personal and childcare) and future needs (pension) and should not look to the state or their male partners for support (Williams, 2004). However, despite the recognition of women as paid workers, the burden of domestic care often continues to fall onto women, and therefore, various options for child and elderly care were included in European social and economic policies in the 1990s. As a result, employed women and men in many European countries and the United Kingdom are afforded time to provide care at home while continuing to enjoy full-time employment (Williams, 2004).

In contrast to these provisions of care in high-income countries, Chant (2008) through her observation of an ongoing 'feminisation of responsibility and obligations', argues that women in middle- to low-income countries face increasing responsibilities in the home and the labour

market. These responsibilities are often not recognised or rewarded, which has created a new and deeper form of exploitation that is often overshadowed by discussions surrounding the feminisation of poverty. Her main argument is that women in middle- to low-income countries are increasingly entering the labour force while continuing to perform the bulk of domestic responsibilities. They are obliged to behave according to traditional female stereotypes to avoid male conflict and to adhere to cultural norms. In addition, while men continue to enjoy domestic environments in which they do very little (if any) work, women are obliged to put household needs before their own (Chant, 2006, 2007, 2008).

In the South African context, attempts to redress apartheid-era inequalities have tended to overshadow the inclusion of the family in social policy (Amoateng and Richter, 2003; Amoateng et al., 2004; Russel, 2003). Instead of acknowledging families as the basic building blocks of society and in turn, positioning the family as the receiving unit of policy (Amoateng et al., 2004), social policy is tailored to meet the needs of individuals (for example, through the availability of individual cash transfers for child support and disability) (Sevenhuijsen et al., 2003). Furthermore, policies that acknowledge the family unit are not revised to target extended families (as opposed to nuclear families), despite evidence suggesting that the extended family structure is the norm in South Africa (Amoateng and Richter, 2003; Sevenhuijsen et al., 2003; Ziehl, 2001).

Changing gendered roles which place the bulk of domestic duties and additional economic responsibilities on women are overshadowed by a minimal focus on the family (Amoateng and Richter, 2003; Russel, 2003). Put differently, the 'feminisation of obligation and responsibility' is exacerbated further by the work-based notion of citizenship (Barchiesi, 2011) that has been embraced in the post-apartheid period and in which social protection is provided largely through employment. As a result, economically disadvantaged South African women have limited choice but to accept the additional economic responsibilities in order to access the social protection benefits, which are primarily associated with employment. The particular features of the feminisation of the labour force through which South African women have increasingly become concentrated in informal, insecure and low-paid employment (Budlender and Lund, 2011; Casale and Posel, 2002; Casale, 2004) means that the South African social

compact (e.g. between labour, state and capital) is increasingly out of step with the structure of families and the changing modes of social reproduction adapted by South African women.

To date, non-marital fertility, as a South African research focus, has been the domain of public health and sexual and reproductive health specialists and the interest has been mainly on adolescent and unwanted pregnancies (Kara and Maharaj, 2015). In South Africa, adolescent fertility is associated with various adverse economic, social and physiological outcomes for young mothers and their children (Senior and Chenhall, 2008). In many cases, only a third of young South African mothers re-enter the educational system after they have given birth (Grant and Hallman, 2008). The resultant lack of completed formal schooling impedes their opportunities for employment and financial stability which makes it difficult for young mothers to escape the poverty trap that is inherent in many South African societies (Panday et al., 2009; Willan, 2013). Adolescent non-marital childbearing transgresses cultural, moral and societal norms which results in the social exclusion of young mothers and their children. This is often compounded by poor support (if any) from the father of the child (Makiwane and Udjo, 2006). Lastly, young mothers are at risk of various health-related complications such as premature labour, pre-eclampsia and anaemia which are aggravated by poor nutrition and prenatal medical care (Grover and Sandhu, 2009; Woldemicael, 2005). Broadly, adolescent fertility is also associated with higher overall fertility, especially in societies with low levels of contraception use (Makiwane and Udjo, 2006).

This thesis aims to fill a gap in the social science literature by contributing new knowledge on non-marital fertility in South Africa within a context of increasing unemployment, single motherhood, changing household structures and a feminising labour force. Additionally, the policy considerations provide a perspective from which to understand and interpret the findings of the thesis. To date, non-martial fertility has primarily been addressed as a 'problem' among teenagers in South Africa (Ardington et al., 2014; Kara and Maharaj, 2015; Kaufman et al., 2001; Makiwane, 2010; Menendez et al., 2011; Odimegu et al., 2018; Panday et al., 2009; Rosenberg et al., 2015) and therefore more attention needs to be focused on the dynamics surrounding childbearing outside of a marriage among adult women.

South African studies have predominantly approached the changes in marriage (Budlender et al., 2004; Hosegood et al., 2009; Moore and Govender, 2013; Palamuleni, 2010; Posel et al., 2011; Posel and Rudwick, 2013; 2014) and fertility (Burger et al., 2012; Chimere-Dan, 1997; Rossouw et al., 2012; Udjo, 2001) separately, resulting in a need for literature on non-martial fertility at a national level. Furthermore, the existing research on non-martial fertility in South Africa is broadly related to population policy (Garenne et al., 2000), union formation (Madhavan et al., 2013; Nzimande, 2007; Sennott et al., 2016), social perceptions towards non-marital fertility (Moore, 2013; Posel and Rudwick, 2012; Zwang and Garenne, 2008), a comparison of the levels of marital and non-marital fertility (focusing mainly on fertility trends) (Garenne et al., 2001) and unplanned pregnancies (Haffejee et al., 2017). Given this broad outline of the existing literature on non-marital fertility in South Africa, it is evident that this thesis fills an empirical gap by identifying socioeconomic and demographic trends (and determinants of) in non-marital fertility among older women.

1.2 Rationale, objectives and research questions

This thesis aims to investigate non-marital fertility among a cohort of South African women who are older mothers who have given birth outside of a marital union. The aim is to identify whether there has been an increase in non-marital fertility in South Africa and in particular, among older mothers. In addition, this thesis sets out to identify key trends in non-marital fertility over a fifteen-year period of time (2002-2017) and in doing so, to focus on changes in the socioeconomic and demographic profile (characterised by race, household formation, urban/rural, education, household income and employment status) of never-married older mothers (NMOMs). The study then proceeds to explore South Africans' views on issues related to non-marital fertility which include a broadly focus on opinions on premarital sexual intercourse, the effect of *ilobolo* on marriage rates and opinions on whether childbearing should take place within a marriage. In providing a comprehensive understanding of non-marital fertility in the country, the thesis also aims to understand the lived realities of South African NMOMs and to highlight how having children outside of a marriage has shaped their lives.

The key research questions to be addressed:

1. Has there been an increase in the levels of non-marital fertility in South Africa and in particular, among older women?

2. What are the key trends in the characteristics of never-married mothers aged 30-49 years in South Africa?

3. What are the possible socioeconomic and demographic correlates of non-marital fertility among women aged 30-49 years in South Africa?

4. Whether and how South Africans' attitudes and opinions are associated with non-marital fertility and whether these views have changed over time?

> 4.1 Do you think it is wrong or not wrong if a man and a woman have sexual relations before marriage?
>
> 4.2 Should people first get an education and start a working career before getting married?
>
> 4.3 Is the payment of *ilobolo* the main reason why people do not get married these days?
>
> 4.4 Should a person be married before having a child?
>
> 4.5 Can one parent can bring up a child as well as two parents can?
>
> 4.6 Should women in South Africa feel free to remain unmarried and get interesting jobs, as is common in America and Europe?
>
> 4.7 Is it a good idea for a couple who intends to get married, live together first?

5. How does the lived realities of several NMOMs reflect cultural, economic and social elements of non-marital fertility?

A key hypothesis is that there is an economic component which influences the levels of non-marital fertility in South Africa where, in a context of growing male unemployment and poor job opportunities, *ilobolo* serves as a barrier to marriage for a large number of Black women

(and men) (Posel and Rudwick, 2012). Conversely, for a select few South Africans, non-marital fertility is a choice in the absence of equally skilled and financially stable male partners (Gustafsson and Worku, 2006). If these two 'economic' factors are indeed determinants of non-marital fertility in South Africa, then the analysis of data from the General Household Surveys (GHS) and the National Income Dynamics Study (NIDS) should reveal two things. Firstly, there would be expected to be a large share of Black [5] never-married older mothers (NMOMs)[6] with low educational levels who are economically disadvantaged[7]. These women might either be unemployed (or economically inactive) or employed in low-paying, unstable jobs. Secondly, there would be expected to be a smaller share of NMOMs who have high levels of education (any form of tertiary education) and are successfully attached to the labour market. This hypothesis is related, in particular, with suggestions of a poor marriage market in South Africa (Gustafsson and Worku, 2006; Hunter, 2016; Posel and Rudwick, 2012). Additionally, the results from the South African Social Attitudes Survey (SASAS) and the life histories of the research participants should provide a unique perspective of non-martial fertility in South African which focuses on the broader cultural shifts in the relationship between marriage and childbearing, the effect of *ilobolo* on marriage (if any) and views on female employment and marriage.

1.3 Data and methodology

This thesis adopts a mixed methods research design to answer the research questions which are outlined above. The three main data sources that are used in the quantitative component of the thesis are the General Household Survey (GHS), the National Income Dynamics Study (NIDS)

[5] Black women in particular because ilobolo is a Black marriage custom and Black people constitute the larger share of the population.

[6] NMOMs are women who had at least one birth after the age of 29, have never been married and are aged between 30-49 at the time of enumeration.

[7] Economic disadvantage will be ascertained based on the analysis of socioeconomic variables such as education, employment status, and the average per capita total monthly household income.

and the South African Social Attitudes Survey (SASAS). These data sets are nationally representative and are used to outline the extent of non-marital fertility in South Africa (the GHS and the NIDS) while the SASAS, which quantifies opinions and beliefs is used to understand South Africans' attitudes towards various issues related to marriage and childbearing. Lastly, the qualitative component of the study presents the life histories of four NMOMs. These narratives offer insights into the decisions and events that have resulted in the research participants having children outside of a marriage and how becoming a NMOM has shaped their lives.

The quantitative analysis techniques that are employed in this thesis include descriptive statistics, bivariate analysis and logit regression models. With regards to the qualitative methods of analysis, unstructured face-to-face interviews were used for the collection of data and thematic analysis was used to analyse the life histories of the participants. This method of data collection offers a useful complement to the statistical analysis as it situates women's lived realities within the broader social and historical context of South Africa.

1.4 Definitions

Focusing on defining lone mothers in South Africa, Ntshongwana and colleagues (2015) suggest that the concept of lone mothers is socially constructed and used to refer to the varying stages of single parenthood. A lone mother can be a woman who does not have a partner/spouse or does not cohabit with a partner/spouse but importantly, is the primary caregiver of child/ren younger than the age of eighteen. This broad definition of a lone mother includes women who have biological, adopted or fostered children. Ntshongwana and colleagues (2015) suggest that there are various pathways to becoming a lone mother which include widowhood, divorce or separation, and, lastly, non-cohabitation with a partner or spouse. A significant differentiation between lone mothers and NMOMs is that the latter has never been married (i.e., these are women who have never been divorced or widowed).

The operational definition of NMOMs, as used in this thesis, includes never-married women who have had at least one child after the age of 29. In other words, these women are not divorced, separated, widowed, cohabiting or between unions and are aged between 30-49 at the time of enumeration. Given South Africans' late age at first marriage, limiting the sample to mothers who had at least one child after the age of 29 includes those women who may marry for the first time (Moore and Govender, 2013). Women who meet these demographic criteria are referred to as never-married older mothers (NMOMs) throughout the thesis. Lastly, the conceptual definition of non-marital fertility used throughout this thesis refers to children born to NMOMs. This means that conceptions which lead to births outside of a marriage are referred to as non-marital fertility or non-marital childbearing (Upchurch et al., 2002).

1.5 Structure of the thesis

The thesis is structured as follows. Chapter Two begins with an outline of the life-course theoretical perspective, which precedes a review of the literature on the fertility transition in Europe, Africa and South Africa. The dynamics of marriage within a South African context is then discussed, followed by global insights into changes in family formation and household structures. In providing a context for understanding non-marital fertility in South Africa, the literature on the migrant labour system, education, the labour market, and changing gendered roles in South Africa is reviewed. The chapter concludes with an overview of non-marital fertility in high-income countries before addresses the concept of non-marital fertility within a South African context. In doing so, the reviewed literature highlights the lack of research and empirical findings on non-marital fertility within a South African context.

Chapter Three provides an overview of the data sources available to analyse non-marital fertility in South Africa. This chapter highlights some of the main challenges with finding suitable survey data to address a topic which requires a combination of demographic and socioeconomic variables. The chapter then discusses the data sources selected for analysing the trends in and determinants of non-marital fertility in this thesis (i.e., the GHSs and NIDSs). The latter half of the chapter outlines the methodologies used to identify NMOMs in the

different datasets and provides an overview of the key explanatory variables that are used in the analysis. The chapter also provides information on the SASAS and its suitability for use in this thesis, and lastly, a description of the qualitative research methods that are used to collect information on the life histories of four NMOMs are reviewed. The chapter concludes with a detailed description of the different analysis techniques used in the qualitative and quantitative data analysis.

The first half of Chapter Four presents a discussion of the structural differences between the NIDS and the GHS in relation to its effect on estimating non-marital fertility in South Africa. Following this discussion is a look at the empirical differences in the individual and household level estimates between the two surveys. The latter half of the chapter begins to paint a picture of the national levels of non-marital fertility in South Africa. The chapter presents an analysis of the socioeconomic and demographic characteristics of never-married mothers[8] and NMOMs in South Africa using the 2017 NIDS and GHS datasets.

Building on the analysis of the characteristics of NMOMs and never-married mothers, Chapter Five presents a trend analysis of the socioeconomic and demographic characteristics of these mothers. The main aim of this chapter is to identify whether there has been a significant change in the percentage of non-marital fertility among mothers aged 15-49 and 30-49. The chapter also seeks to identify whether there have been changes in the socioeconomic and demographic profiles of NMOMs between 2002 and 2017. In most cases, the trend analysis is presented for various groups of mothers to establish whether any changes which are noted, are specific to NMOMs, never-married motherhood or to mothers in general. The chapter ends with a focus on socioeconomic status and presents a trend analysis of selected socioeconomic and demographic characteristics for NMOMs of a high and low socioeconomic status. The main aim of this section is to identify whether non-marital fertility is more common among mothers of a high or low socioeconomic status. Data from the 2002 to 2017 GHS and from the 2008 to 2017 NIDS are used in the analysis presented in Chapter Five.

[8] Never married mothers are women who have at least one child (at any age), are aged 15-49 at the time of enumeration and have never been married.

Based on a series of logit regression estimations, Chapter Six predicts the likelihood of being a NMOM, an older mother[9] and a never-married mother aged 15-49. These models are estimated from a set of demographic, spatial, socioeconomic, household and personal characteristics to identify the log odds of a woman who is more likely to be either a NMOM, older mother or never-married mother aged 15-49. In particular, the model which estimates the likelihood of being an older mother is aimed at identifying if and how marital status is associated with motherhood among women the age of 30 and older.

The analysis that is presented in Chapter Seven provides a unique perspective to the story of non-marital fertility in South Africa as the SASAS quantifies South Africans' attitudes to various social issues related to childbearing and marriage. The chapter begins with a trend analysis between 2003 and 2016, which outlines the changes in South Africans' attitudes towards premarital intercourse. Using data from the 2003 and 2005 rounds of the SASAS, the chapter presents a snapshot of opinions on topics related to education, childrearing, employment, single parenthood, culture and marriage. Where possible, the analysis is disaggregated by key demographic characteristics to identify whether the opinions differ based on gender, race and/or marital status. Through the use of multivariate logit regression analysis, the chapter concludes by identifying the characteristics of individuals who are more likely to agree with specific statements related to non-marital fertility and marriage. The life histories of four NMOMs are presented in Chapter Eight. This chapter provides insights into the events surrounding the research participants becoming never-married mothers and later NMOMs. In particular, these narratives shed light on how the participants feel about having children outside of a marriage and how they have dealt with being single mothers for the first time. The chapter concludes with a look at whether the qualitative findings add context to and assist in understanding the findings that are reported in the empirical chapters (using data from the GHS, the NIDS and the SASAS) or contrasts with these findings.

[9] An older mother had at least one child after the age of 29. The marital status of an older mother is not of importance to the analysis.

Chapter Two: Literature review

2.1 Introduction

In light of the global increase in non-marital fertility (Jalovaara and Andersson, 2018; Klusener, 2015; Klusener and Goldstein, 2016; Rutigliano and Esping-Andersen, 2018; Stipkova, 2015; Surkyn and Lesthaeghe, 2004; Ventura, 2009; Wildsmith et al., 2011), the international literature outlines two main trajectories that are associated with having a non-marital birth. The first path considers non-marital fertility as a choice among financially stable women while the second path details non-marital births as an outcome that is experienced by economically disadvantaged women. The international literature suggests that for better educated and employed women, non-marital fertility has become a popular choice (Martinez et al., 2012; Upchurch et al., 2002; Ventura, 2009; Wildsmith et al., 2011; Wu et al., 2000). For these women, employment provides the financial stability that is required for raising a child without the support of a partner (South, 1999). In contrast, the second path describes non-marital births as being more prevalent among economically disadvantaged women. It is likely the case that these women practice poor family planning (if any) and have low levels of contraceptive use. Children born to these women have limited access to resources which contributes to the widening of social class disparities in relation to childhood development (Mclanahan, 2004).

In South Africa, non-marital fertility as a choice[10] is embedded within a patriarchal context. These women prefer to remain single (and to continue having children) to avoid abuse, alcoholism and husbands who refuse to acknowledge the changing gendered roles (James, 2017; Moore, 2013; Moore and Govender, 2013). A steady decrease in marriage rates (Statistics South Africa, 2019) have contributed to a rise in the levels of non-marital fertility in the country. The broader demographic literature suggests that South African marriage rates began declining during the 1960s and remain on a downward trajectory (Posel and Rudwick, 2013). The analysis of marriage data shows a decrease in the percentage of married women

[10] The South African literature on non-marital fertility primarily focuses on adolescent fertility and economically disadvantaged women who have had non-marital births. As a result, research on non-marital births to educated and financially stable South African women is somewhat limited currently.

aged 15-49 from 35% in 1995 to 30% in 1999 (Budlender et al., 2004) and a further decrease to 27.6% in 2007 (Palamuleni, 2010). This decrease in marriage rates is mirrored by a simultaneous increase in the levels of never-married women as 58% of women aged 15-49 were never-married in 1995 compared to 60% in 1999 (Budlender et al., 2004). Reconstructed census data shows that 8.2% of women older than the age of 40 were never married in 1970, this increased to 13.9% in 1991 and to 29.2% in 2011 (Garenne, 2016).

A decline in marriage rates are also noted within provinces, for example in KwaZulu-Natal, 12% of women aged 20-45 were 'currently married' between 2008 and 2009 while less than one-third of women aged 45-49 years were ever married during the same time period (Channon et al., 2016). There are various reasons that are attributed to the declining marriage rates in South Africa some of which include a lack of marriageable men (Gustafsson and Worku, 2006; Moore, 2013; Moore and Govender, 2013; Posel and Rudwick, 2011; Rossouw et al., 2012; Rudwick and Posel, 2014), the high cost of *ilobolo* (Kalule-Sabiti et al., 2007; Posel et al., 2011; Posel and Rudwick, 2012, 2013, 2014) and apartheid era policies (specifically the migrant labour system and the 1952 Pass Laws Act) (Gustafson and Worku, 2006; Hosegood et al., 2009; Hunter, 2006; Kalule-Sabiti et al., 2007; Posel and Rudwick, 2013; Russel, 2003).

This chapter reviews the literature that describes the socioeconomic and demographic characteristics of NMOMs and their social environments. As the various arguments are presented, it is important to keep in mind that non-marital childbearing could be a result of active family planning or the effect of social and financial circumstance and possibly poor contraceptive use by women with different socioeconomic and demographic characteristics. The chapter is structured as follows. The next section presents an overview of the life-course theoretical perspective and its relevance within a context of increasing levels of non-marital fertility. The chapter goes on to review literature on the fertility transition in Europe, Africa and South Africa before addressing marriage dynamics in South Africa. Literature on the changing family formation and household structures is then provided. The following sections provide context to non-marital fertility in South Africa by reviewing literature on the effects of the migrant labour system on Black family structure, education and the labour market and changing gendered roles. The chapter ends with an overview of non-marital fertility within high-income countries and then focuses on non-marital fertility in South Africa.

2.2 The life-course theoretical perspective

Drawing on the influence of women's characteristics[11] on non-marital births (Garenne et al., 2000, 2001; Madhavan et al., 2013), this thesis considers the life-course perspective (Smith-Greenaway and Clark, 2018; Upchurch et al., 2002) to understand non-marital fertility in South Africa. The perspective is based on an adapted perspective of Becker's (1960) work which describes childbearing as a rational economic decision. Firstly, the perspective is adapted to acknowledge that childbearing also occurs outside of a marriage (Smith-Greenaway and Clark, 2018) as Becker's (1960) traditional economic models are based on the premise that childbearing almost exclusively takes place within a marriage (Becker, 1960). Secondly, the perspective acknowledges that childbearing decisions are dynamic, and fluid and change based on a woman's past experiences (Smith-Greenaway and Clark, 2018; Upchurch et al., 2002).

In particular, the life-course perspective proposes two main notions of non-marital fertility which draws attention to the impact of social and economic conditions on decisions surrounding non-marital childbearing (Smith-Greenaway and Clark, 2018). The first notion explains that the financial security which was traditionally provided by marriage is losing its relevance for economically self-sufficient and independent women. While the second notion details that women would rather opt for having a child outside of marriage in a context where the financial benefits that are provided by the father are limited (Upchurch et al., 2002). The difference between these two ideas is that the first is specifically focused on women while the second idea focuses on the child.

Within a South African context, the relationship between the scarcity of marriageable men and an increase in non-marital births is particularly related to financially independent, educated and employed women. Given that the larger share of unmarried mothers in South Africa are of a lower socioeconomic status, it is possible that for these women, marriage provides limited financial benefits. The impact of *ilobolo* should also be considered as its' payment is often directly linked to the socioeconomic status of Black men. In this regard, having a child outside of a marriage is influenced by the affordability of *ilobolo* payment. Overall, the life course

[11] This thesis focuses on women's socioeconomic and demographic characteristics.

perspective acknowledges that women's childbearing decisions are influenced by life experiences gained through their various roles and responsibilities (Smith-Greenaway and Clark, 2018; Upchurch et al., 2002).

Additionally, within the framework of the life course perspective, Crosnoe and Wildsmith (2011) indicate that the linked lives concept offers an additional understanding of the effect that being an unmarried mother has on a child. Put simply, the linked lives concept means that the experiences and behaviours of individuals are linked to people with whom they share close relations. Placing this concept within the context of non-marital fertility, the linked lives concept suggests that an unmarried mother's life trajectory is closely linked to the life trajectory of her child (Crosnoe and Wildsmith, 2011). Overall, this perspective offers a framework within which to understand the effects that being an unmarried mother and her living arrangements (for example: female-headed households) have on the educational and overall development of children (born to unmarried mothers).

2.2.1 Empirical support for the life-course perspective

The second demographic transition is characteristic of the demographic trends of low fertility (below 2.1 births per woman) and mortality levels, a sustained negative population growth and an increased longevity which have resulted in a change of family formation structures, delayed marriage, single parenthood, increasing levels of non-marital fertility, familial instability, increased levels of childlessness, divorce, older ages at first marriage, high career transitions, a shift from civic involvement in favour of individualism and raising levels of pre- and post-marital cohabitation (Geyer and Mosidi, 2019; Lesthaeghe, 2010; Lichter and Qian, 2018; Mclanahan, 2004; Raley, 2001; Surkyn and Lesthaeghe, 2004; van de Kaa, 2002). In general, the second demographic transition continues with the characteristics of the first demographic transition (declining levels of fertility and mortality) but includes changes in the social behaviours of individuals which differ by country (Geyer and Mosidi, 2019).

Empirical evidence of the second demographic transition has been documented in Scandinavia and the Unites Stated in the 1950s (Lesthaeghe, 2010) and has become a common feature in European and Asian countries (Japan and Korea) in the late 1980s (Surkyn and Lesthaeghe,

2004). The drivers of this change include modernisation (a feature of industrialised countries) and the growing economic independence of women (Mclanahan, 2004). Within a high-income country context, the economic independence of women is characterised by females being in control of their fertility, postponed marriage and fertility and a disconnect between marriage and childbearing (Lesthaeghe, 2010; van de Kaa, 2002).

Influenced by these demographic and socioeconomic changes, women often follow one of two trajectories which have diverging implications for children. Similar to the life-course perspective (Upchurch et al., 2002) that is outlined above, the first trajectory is associated with an increase in employed women and delayed childbearing. The children that are born to women who are following this trajectory often have access to a variety of resources that are secured by maternal employment. Additionally, delayed childbearing is associated with having fewer children which contributes to the availability of resources and quality time spent as a family unit. In some cases, this trajectory also offers a stable union and additional time spent with fathers (Lichter and Qian, 2018; Mclanahan, 2004; Morgan, 2003).

The second trajectory is associated with increased non-marital childbearing and divorce and is often followed by women with limited life opportunities and resources. The children that are born to women who are following this trajectory have access to fewer resources and limited parental time as mothers spend additional hours in low-paying unstable employment. This trajectory is characterised by unstable family unions and minimal time spent with biological fathers (Lichter and Qian, 2018; Mclanahan, 2004). While the first trajectory appears to be representative of the larger share of never-married mothers in the United States (Raley, 2001; Ventura, 2009; Wildsmith et al., 2011; Wu et al., 2000) and European countries (Jalovaara and Andersson, 2018; Klusener, 2015; Klusener and Goldstein, 2016; Mack, 2017; Surkyn and Lesthaeghe, 2004), the second trajectory bares resemblance to the larger share of never-married mothers within a South African context (Garenne et al., 2001; Hosegood et al., 2009; Palamuleni, 2010; Udjo, 2001).

2.3 The fertility transition

2.3.1 European fertility transition

The European fertility decline (led by England), between 1830 to 1970 was driven by societal changes that were brought on by the industrial revolution and improved rights for women (Morgan, 2003). During this period, increases in education and employment served to inform women about family planning techniques, including the correct use of contraceptives. The advances in medicine improved the survivorship of children, increasing the desirability of smaller family sizes. Within smaller families, value is placed on the quality of life, as parents can provide individualised attention and resources to fewer children (not more than two children). This is compared to families with more than two children who require resources and parental time to be shared across a larger number of children (Morgan, 2003). The industrial developments also meant that children were no longer required for family labour. This contributed to a change in fertility behaviour together with urbanisation, improved human capital and health (Morgan, 2003). After 1970, fertility levels continued to decline across all European countries and continues to decline in countries all over the world. This sustained fertility decline is associated with changes in the social norms which regulate fertility control and the intrinsic benefits of having smaller family sizes. Cultural changes in the reproductive behaviour of women and the preference for a quality of life over a larger number of children have been driving down the levels of fertility globally and is most apparent in countries with higher levels of female education, urbanisation, population density and low levels of infant mortality (Spolaore and Wacziarg, 2019).

The continuous and unchecked fertility decline has resulted in a population crisis in many European countries as fertility levels have reached below replacement level. Having 2.1 live births per woman is the universal replacement fertility rate where the population replaces itself (not taking migration into account) (Morgan, 2003). At present, the (2017) European Union (EU) total fertility rate (TFR)[12] is well below replacement levels at 1.6 live births. The

[12] Total fertility rate is the number of live births a woman is expected to have if she lives to the end of her childbearing years (15-49) and bears children in accordance with the estimated age-specific-fertility rates of the

individual European countries boast even lower TFRs with Cyprus, Italy and Spain having the lowest TFR in 2017 (1.3 live births to a woman). Even countries that experienced the highest European TFR in 2017 (Sweden and France TFR = 1.9 live births per woman) did not come close to reaching at least replacement level fertility (World Bank, 2019). Having very low fertility levels (below replacement level) seems to be becoming a global trend as in 2002, 45% of the world's population were living in countries which were already experiencing very low fertility levels while 3% of the worlds' population were living in countries that had not yet entered into a fertility transition. The rest of the world's population was living in countries that were in the process of a fertility transition and based on past European trends, will only exit the transition once their fertility rate has reached replacement level or lower (Morgan, 2003).

Experiencing very low fertility levels impacts countries in a multitude of ways. Primarily, the population age structure is altered from having an age pyramid that bulges at younger age groups (for example, the world age pyramid bulges between ages 0-40) to an age pyramid that bulges towards the middle and top (older ages) (Eurostat, 2018; Muszynska and Rau, 2012). This is evident in the EU age pyramid, which bulges between ages 45-70, reflecting the effect of the baby-boom period where some European countries experienced high fertility levels until the mid-1960s. Underscoring this change in age structure is an increase in the old-age dependency ratio[13] in these countries (Muszynska and Rau, 2012). The EU dependency ratio is projected to increase from 28.8% in 2015 to 51.40% in 2065, an estimated 21.8 percentage points above the world average (Eurostat, 2018).

A consequence of an ageing population is that it places additional financial burdens on the state. This means that there are fewer individuals of working age who are contributing to the economy (and contributing towards state tax) amidst a larger share of individuals who are economically inactive and require state-aided financial assistance. In these situations, governments need to make additional finances available for social expenditure in the form of

specified year. This rate is influenced by a country's level of human and economic development, education and health care services (among other factors).

[13] The old-age dependency ratio is calculated by dividing the number of people aged 65 and older by the number of working-age people (aged 15-64) multiplied by 100 (Muszynska and Rau, 2012).

state pensions, healthcare, long-term care and frail care (Eurostat, 2018; Muszynska and Rau, 2012).

Focusing on the relationship between education, employment and fertility, Wu and MacNeill (2002) propose three perspectives to understand childbearing decision making by women aged 30 and older in high-income countries. In the first perspective, an exposure hypothesis posits that a woman's exposure to education and employment presents her with alternatives to the traditional gendered roles. These non-traditional roles together with education and employment, empower women with resources to establish alternatives to motherhood and in doing so, their scope of life choices increases (Wu and MacNeill, 2002). The second perspective, referred to as the distraction hypothesis suggests that education and employment influence the timing of childbearing. The easy access to effective contraceptive measures makes it possible for women to postpone childbearing while focusing on educational achievements and career development. Primarily, this hypothesis suggests a change in the timing of childbearing but not in avoiding motherhood altogether (Wu and MacNeill, 2002).

The last perspective focuses on the interaction between education and employment and its effect on childbearing. This perspective claims that in some cases, better-educated women gain employment prestige and increased earnings which translates to additional time spent in the labour force. In these situations, taking time off or leaving employment in favour of motherhood has higher associated costs which influences a woman's decision to have children. On the other hand, less educated women who are in full-time employment may tend to be more willing to postpone employment for childbearing around the age of 30. The decision to postpone employment is influenced by these women being financially stable as a result of their continuous employment (Wu and MacNeill, 2002).

2.3.2 African fertility transition

Decreases in the fertility levels in many African countries were first noted in the early 1970s[14] (Garenne and Joseph, 2002), decades after most European countries were well on their way to reaching below replacement level fertility. African countries faced serious challenges in timeously identifying and tracking fertility decline due to the lack of quality and reliable fertility measurement data (Garenne and Joseph, 2002; Moultrie and Timaeus, 2002; Moultrie et al., 2012; Norling, 2015; Udjo, 2014). The introduction of the Demographic and Health Survey (DHS) and World Fertility Survey (WFS) made available invaluable information that was used to track fertility trends and behaviours. Due to the varying political and cultural dispensations on the African continent, African countries experience different TFRs and determinants of fertility decline (Tsui et al., 2017). Countries in the Middle East and North Africa[15] experienced a TFR of 2.8 live births per woman in 2017, down from 6.8 live births per woman in 1970. Of these countries, Iraq had the highest TFR of 4.3 live births per woman (in 2017) while interestingly, Iran and Lebanon experienced below replacement level fertility with TFR's of 1.6 and 1.7 live births per woman, respectively. Countries like Libya and Tunisia were close to replacement level in 2017 with 2.2 live births per woman (World Bank, 2019).

These fertility rates differ significantly from countries in sub-Saharan Africa as firstly, on average, countries in sub-Saharan Africa[16] experienced a fairly high TFR in 2017 of 4.8 live births per woman compared to the EU (1.6 live births per woman in 2017) and the Middle Eastern and the North African countries (2.8 live births per woman in 2017). Of these countries, Mauritius had the lowest TFR in 2017 of 1.4 live births per woman, having reached very low fertility while Niger continues to experience high fertility, having a TFR of 7.2 live births per woman in 2017 (World Bank, 2019). Recent research found that declining TFRs are closely linked to a woman's desired family size (Tsui et al., 2017) as seen in the case of Ghana (Fledderjohann, 2017). The reported ideal family size in Ghana changed from 5.3 to 4.3

[14] The decreases in urban fertility levels were first noted in the early 1970s while the decreases in the fertility levels in rural areas was observed ten years later (Garenne and Joseph, 2002).

[15] This excludes high income countries.

[16] Excludes high income countries.

children per woman between 1988 and 2008. Over the same period, the TFR in Ghana declined from 6.4 to 4.0 births per woman (Fledderjohann, 2017).

Accordingly, Moultrie and colleagues (2012) present evidence from 24 African countries that reveal increases in the interval between births. These intervals are found to be independent of the number of children a mother has had or a mother's age. This serves as empirical support for the notion that Africa and in particular, sub-Saharan Africa is experiencing a fundamentally different fertility transition compared to the European fertility transition (including other high-income countries) (Moultrie et al., 2012). Explained further, the demographic literature on fertility decline details that in relation to fertility control, contraceptives are used for two mutually exclusive and exhaustive purposes; to either space births or to stop childbearing when the desired family size is reached[17] (Moultrie et al., 2012; Timaeus and Moultrie, 2008). In comparison, Moultrie et al. (2012) argues that in sub-Saharan Africa, contraceptives are commonly used to postpone births (instead of space or stop births) as the duration of birth intervals (four years or longer) are far too long to be considered birth spacing[18]. As a result, Moultrie and colleagues suggest that in sub-Saharan Africa, contraceptives are being used to postpone births (Timaeus and Moultrie, 2008).

The main difference between birth spacing, the limiting of family size and fertility postponement[19] is related to the reason for using contraceptives to control births. Firstly, contraceptives are used to space out births, contingent on the age of the youngest child (birth spacing). Secondly, contraceptives are used to control family size and is often contingent on the age of the mother and the desired family size (the limiting of family size) (Moultrie et al., 2012; Timaeus and Moultrie, 2008). Thirdly and in comparison, contraceptives are used to

[17] Contraception is also used for the prevention of STIs and the mutually exclusive and exhaustive reasons mentioned above are only in relation to fertility control.

[18] The duration of birth spacing is usually the time it takes for a baby to be weaned off breastfeeding and begin walking (Moultrie et al., 2012).

[19] Moultrie et al. (2012) describe fertility postponement as the act of delaying having another child for reasons other than to space births or to control family size. In these cases, fertility is usually postponed through the use of contraceptives – birth control in particular.

postpone childbearing (postponement) indefinitely. In this instance, contraceptive use is not contingent on the number of children a woman has had or the age of the mother. Instead, the reason for postponing fertility is likely related to concerns about the stability of a relationship, financial stability, housing and ill health (Moultrie et al., 2012; Naidoo, 2010; Timaeus and Moultrie, 2008). In this sense, birth postponement has the potential to impact aggregate fertility and potentially be a driver of fertility decline in Africa.

Although also sparked by the industrial revolution, the African fertility transition is driven by a different set of factors. In most African countries, the decline of fertility levels is attributed to urbanisation, increased female education and employment, the use of modern contraceptives and delayed marriage (Chimere-Dan, 1997; Cohen; 1998; Garenne and Joseph, 2002; Tsui et al., 2017). In some cases, these changes may have been influenced by Western behaviours learnt through the media (television) (Garenne and Joseph, 2002). In sub-Saharan Africa, the declining fertility levels are associated with decreasing levels of infant and child mortality and economic and technological developments (Tsui et al., 2017).

The fertility decline in the West African countries is associated with changes in social systems (Derose et al., 2010). Derose et al. (2010) describes that in these predominantly patriarchal societies (of West Africa), structural changes which affect men are seen as drivers of fertility decline. For example, the higher cost of schooling in these countries (resulting from structural adjustment programs) had impacted men's role as breadwinners. In turn, this influenced their reproductive behaviours which contributed to the declining levels of national fertility. In contrast, the increased burden of care (experienced by mothers) brought on by the survivorship of children did little to influence family size (Derose et al., 2010). The control and authority that men have over women in these societies means that, compared to changes in men's livelihoods, changes in women's household responsibilities do not have a strong influence over fertility change behaviour (Derose et al., 2010). These findings highlight the importance of including men in interventions that are aimed at fertility decline.

2.3.3 South African fertility transition

South Africa is believed to have led the fertility transition in sub-Saharan African with decreases in fertility levels noted as early as the 1960s[20] (Chimere-Dan, 1997; Houle et al., 2016; Moultrie and Timaeus, 2002; Norling, 2015; Palamuleni et al., 2007; Timaeus and Moultrie, 2008). The country experienced a period of accelerated fertility decline in the mid-1980s, while data suggest that the fertility decline seems to be stalling in recent years (Burger et al., 2012). The South African TFR more than halved from 6 to 2.4 live births per woman between 1960 and 2017 while decreasing rapidly from 4.3 to 2.7 (live births per woman) between 1985 and 2005 (World Bank, 2019).

The South African fertility transition is also characterised by racial differences (Chimere-Dan, 1997; Geyer and Mosidi, 2010; Swartz, 2002) where White women reached below replacement level fertility (1.9 births per woman) in 1989 (Palamuleni et al., 2007). The fertility decline among Indian women was first documented around the 1950s. The TFR for Indian women decreased to 2.5 births per women in the 1990s from about 6 births per woman in the 1950s (Chimere-Dan, 1997; Palamuleni et al., 2007). The fertility levels of Coloured women increased between the mid-1940s and the early 1960s and subsequently decreased rapidly. In the late 1960s, the TFR of Coloured women decreased from 6.5 to 2.5 births per woman in the mid-1990s (Palamuleni et al., 2007). The fertility decline, among Black women, began in the early 1960s and continues on a downward trajectory (Chimere-Dan, 1997; Palamuleni et al., 2007). The TFR of Black women declined from 6.6 births per woman in 1960 to 3.3 births per woman in the 1990s (Palamuleni et al., 2007). These racial differences in the TFR are reflective of the socioeconomic differences in the standard of living between people of different race groups that was enforced by the apartheid era policies (Burger et al., 2012; Chimere-Dan, 1997; Palamuleni et al., 2007).

Family planning policies are perceived to be the main drivers of fertility decline among Black women in the mid-1980s (Norling, 2015). These population control policies that were introduced during the apartheid era were aimed at reducing the numeral strength of the Black

[20] See Moultrie and Timaeus (2002) for a detailed account of the various censuses that collected demographic information on the African population during the apartheid era.

population by limiting the number of births to Black women (Palamuleni et al., 2007; Rossouw et al., 2012; Swartz, 2002). In particular, the National Family Planning Programme (1974) and the Population Development Programme (1984) were introduced as key features of the planned demographic control of the Black population. However, in order to encourage the acceptance of these programs by the Black population, the apartheid government publicized that the idea of a large family size is the main cause of poverty (Chimere-Dan, 1993, 1997). These policies, which introduced contraception as a family planning tool to Black women were focused on making contraceptives easily and widely accessible, disseminated information on the benefits of family planning and invested in the education, primary health care and economic participation of these women[21] (Chimere-Dan, 1993; Swartz, 2008).

One of the main controversies surrounding these population control policies was the contradictory nature of the policies. The main aim of the policies was to control the growth of the Black population, while in contrast, the apartheid government promoted population growth among the White population. White women were encouraged to increase their family sizes, and White people from the various European countries were encouraged to immigrate to South Africa (Chimere-Dan, 1997; Norling, 2015; Swartz, 2002). Additionally, these population control policies, which were established within a health services framework and were designed to focus on the health and welfare of women, failed to provide adequate services to Black women (Chimere-Dan, 1997; Swartz, 2002).

Another controversy is that these fertility controls and other apartheid policies like the migrant labour system and the restriction of the free movement of Black people created an environment that promoted non-marital fertility among Black adolescents and older women[22] (Chimere-Dan, 1997). The restriction of Black movement and the migrant labour system did not favour the establishment of cohesive Black families and thus weakened the Black family structure. The availability of contraception challenged traditional Black culture which, steeped in

[21] Investing in education, primary healthcare and economic participation all within the discriminatory apartheid framework.

[22] The main point here is that these policies created a platform for births outside of a marriage and does not suggest that the policies contributed to the increase in non-marital fertility.

patriarchy, encourages childbearing thus further weakening the gender relations between Black men and women (Chimere-Dan, 1997; Norling, 2015). As a result, Chimere-Dan (1997) contests the notion that non-marital fertility is a characteristic of Black South African culture and instead states that it is a result of the historical (apartheid) population control policies. This suggests that during the apartheid era, culture, population policy and apartheid controls on free movement influenced the fertility behaviours of Black women. Changes in these factors in post-apartheid South Africa did little to reverse its effect on the fertility behaviours of Black women.

Given these measures (population control policies used in the apartheid era) that were aimed at reducing the fertility levels in the country, demographers indicate that the South African TFR should be lower than the current 2.4 births per woman (Burger et al., 2012; Norling, 2018; Timaeus and Moultrie, 2008). In providing a possible reason for the slow pace of fertility decline in South Africa, Timaeus and Moultrie (2008) argue that instead of reducing fertility levels, the apartheid era population control policies ensured the widespread use of contraceptives by Black women (Norling, 2015). By the late 1980s, 50% of Black women who were living in White areas[23] and 40% who were living in homelands[24] were using a method of modern contraception compared to 24% and 11% in 1974, respectively (Norling, 2015). Being able to control their fertility gave black women greater control over their lives during a time where the state and institutional structures limited their autonomy and agency (Swartz, 2002; Timaeus and Moultrie, 2008). To this end, Timaeus and Moultrie (2008) suggest that contraceptives (specifically injectable contraceptives) were used by Black women to postpone childbearing at that point in time (during apartheid) while remaining open to the idea of having additional children at some point in the future (Geyer and Mosidi, 2010; Norling, 2015). Studies show that until 1970, the median birth interval in South Africa was approximately 33 months for Black women who were living in rural and urban areas. After the introduction of the population control policies, the approximate median birth interval increased to 60 months (Timaeus and Moultrie, 2008).

[23] Areas demarcated for the use of the White population during the apartheid era.

[24] Homelands were areas reserved for use by the Black population during the apartheid era.

Contributing to the slow pace of fertility decline in South Africa are apartheid era policies which distorted and disrupted family life (Timaeus and Moultrie, 2008). Discriminatory institutions like the migrant labour system[25] and the forced removal and restricted urbanisation of Black people negatively influenced the formation of families and stable relationships. The resulting large number of Black men who were absent from their households changed the gender relations between men and women which despite male opposition, facilitated the easy adoption of contraception by Black women (Burger et al., 2012; Chimere-Dan, 1997; Swartz, 2002; Timaeus and Moultrie, 2008). In post-apartheid South Africa, urbanisation is found to contribute to the decline of fertility levels. This is the case as newly urbanised individuals are influenced by the behaviours of city dwellers who have a greater awareness of and exposure to the various modern contraception methods (Chimere-Dan, 1997).

2.4 Marriage within a South African context

2.4.1 South African marriage laws and the measurement of marriage in South Africa

Marriage in South Africa is legalised under two Acts; the Marriages Act 25 of 1961 and the Recognition of Customary Marriages Act 120 (RCMA). Under the Marriages Act, civil marriages which are ordained by a licensed marriage officer are legally recognised and provides a framework by which partners are bound[26] (Budlender et al., 2004). The RCMA was introduced in 1998 as the Marriage Act 25 of 1961 failed to recognise cultural marriages. Specifically, the RCMA legalized customary marriages that are conducted according to traditions observed by the indigenous people of South Africa, meaning that the RCMA legalised traditional Black South African marriages (Budlender et al., 2004; Moore and Himonga, 2018). In post-apartheid South Africa, individuals can either register a customary marriage (which has to follow Black South African traditional marriage customs) or a civil marriage while traditional Hindu, Muslim and Jewish marriages remain legally unrecognised. In these cases, couples who marry according to Hindu, Muslim or Jewish traditions need to register a civil marriage according to the Marriage Act 25 of 1961. These two Acts (the RCMA

[25] A detailed discussion of the migrant labour system is provided later in the chapter.

[26] This framework stipulates the legal procedures which must be followed when a partner dies, the couple divorce, the division of expenses and the responsibilities during the marriage and other such procedures.

and the Marriages Act 25 of 1961) continue to represent the legal coverage of marriage in South Africa[27] (Budlender et al., 2004; Moore and Himonga, 2018).

Overall, the registering of customary marriages has positively benefited Black women who are now legally represented in divorce settlements, inheritances, child maintenance, pension, medical aid and property issues (Budlender et al., 2004). However, the complex nature of customary marriages makes it challenging to identify at which point during the cultural process a couple is considered to be married. This confusion is compounded by the unregulated duration of customary marriages (Moore and Himonga, 2018). In most cases, traditional Black marriages occur through a series of processes which can extend over several years. As a result, the actual point at which a couple is considered married may vary based on the stage of the marriage negotiations (Udjo, 2002).

Additionally, the *ilobolo* payment, which is often spread over an undefined period contributes to the uncertainty of when people are perceived to be married. With regards to the *ilobolo* payment, couples can either be regarded as being married when the first *ilobolo* instalment is made, upon completion of the *ilobolo* payment or at some point during the course of payment (Budlender et al., 2004). The lack of a formal definition of the traditional marriage process and/or a regulated reference to the exact point during a traditional Black South African marriage the couple is wed contributes to the uncertainty of when a couple is considered to be married (Moore and Himonga, 2018; Udjo, 2002).

The issues outlined above make it challenging to measure customary marriages as marriage measurement data does not have the capacity to consider the different stages of a traditional marriage or when meaning is ascribed to a marriage (Budlender et al., 2004). Stemming from the lack of a clear definition of a traditional marriage, marriage statistics may be influenced by perceptions of what constitutes a marriage and the desire to be seen as being married. These inconsistencies in the regulation of customary marriages (Moore and Himonga, 2018) can lead

[27] Besides regulating civil and customary marriages, The Civil Unions Act 17 of 2006 makes it possible for same-sex couples to legalise their union as a civil partnership affording them the same status, benefits and responsibilities that are provided in a civil/customary marriage.

to an underestimation of marriage using the census data or an under-reporting of marriage based on the vital statistics data.

Overall, the passing of the RCMA means that South African marriage laws are now inclusive of traditional Black marriages which makes it possible to obtain representative marriage statistics (Moore and Himonga, 2018). In South Africa, the main sources of marriage data are the population census (conducted every ten years) and the vital registration database (Budlender et al., 2004). An important difference between these sources of data is that the census data on marriage could be influenced by people's perceptions of when they were married as it is self-reported and is not verified against an official marriage certificate. In comparison, the vital registration data are national administrative data which provides statistics on the number of marriages that were registered in a year (Budlender et al., 2004).

2.4.2 South African marriage dynamics

The delinking of marriage, sexual activity and childbearing have impacted the intrinsic value that was ascribed to marriage (Budlender and Lund, 2011; Chimere-Dan, 1997; Moeno, 1977; Naidoo, 2010; Palamuleni et al., 2007; Preston-Whyte, 1988; Preston-Whyte and Zondo, 1989; Swartz, 2002). This has resulted in delayed marriage, older ages at first marriage and an overall decrease in marriage rates in the country (Chimere-Dan, 1997; Naidoo, 2010). For example, the number of civil marriages that were registered in South Africa between 2003 and 2016 dropped by a total of 39 177 cases. Similarly, the number of customary marriages in the country dropped from 17 283 cases to 3978 cases during the same time period (Statistics South Africa, 2019). Using national census data, Palamuleni and colleagues (2007) found that 55% of women aged 15-49 were never-married in 2001 while the analysis of household survey data shows that between 1996 and 1999, 30-35% of women aged 15-49 were married (Budlender and Lund, 2011).

Concurrent with this decline in marriage rates, marriage is also being postponed with South Africa having the highest average age at first marriage of all African countries. The median age of males at first marriage increased from 34 years in 2012 to 36 years in 2016 and similarly, the median age at first marriage for women increased from 30 years to 32 years between 2012

to 2016 (Statistics South Africa, 2019)[28]. This is compared to West African countries like Malawi, Mali, Burkina Faso, Guinea and Niger where the median age at first marriage for women remains below 18 years (Statistics South Africa, 2019). Cultural, political and social differences are noted as the main reason for the large variations in the average age at first birth between countries on the same continent. In South Africa, older ages at first marriage lengthens the time available for women to engage in premarital sexual intercourse, exposing them to various consequences such as the contraction of STIs, sexual acts with multiple partners and a greater risk of pregnancy (Clark et al., 2017; Udjo, 2001; Zwang and Garenne, 2008).

The marriage rates in South Africa also differ by province with KwaZulu-Natal having the lowest and fastest declining marriage rate compared to other provinces and the country as a whole (Channon et al., 2016; Hunter, 2016; Palamuleni, 2010). These differences seem to be strongly associated with the practice of *ilobolo* as KwaZulu-Natal is home to the largest share of isiZulu speaking people (Posel et al., 2011). For Black men who married between 1985 and 1998, the average cost of *ilobolo* was about 13 times their average monthly earnings in 1998, a value of R20 000 (in 2000 prices). With the high cost of *ilobolo* sitting in tension with high rates of male unemployment and low earnings, the likelihood of some men being able to pay the *ilobolo* value is minimal. This is reflected in the decline of marriage rates in KwaZulu-Natal from 31% in 1995 to 12% in 2008 compared to a national decrease from 38% to 24%, respectively (Posel et al., 2011).

The racial differences in the declining marriage rates (Geyer and Mosidi, 2019; Marteleto et al., 2016) suggest that dual marriage trends are being experienced in South Africa[29] (Palamuleni et al., 2007). Decreases in marriage rates among Black women have been documented since the 1960s (Budlender and Lund, 2011), although remaining unmarried was rare at that time (Posel and Rudwick, 2013). Between 1960 and 2001, 2.9% of Black women

[28] Udjo (2014) investigates South Africa's high (amongst the highest in the world) mean age at first marriage using the 2011 census data and found that once the estimates have been corrected for the misreporting of age, the mean age at first marriage drops to 26.1 years for females and 27.4 years for males (Udjo, 2014).

[29] South African fertility follows two trends; a European trend followed by White women and an African trend followed by Coloured and Black women (Palamuleni et al., 2007).

aged 50 and older were never married in 1960, this increased to 19% in 1996 and to 17% in 2001 (Budlender and Lund, 2011). In post-apartheid South Africa, Black and Coloured women experience similar marriage patterns which differ from those experienced by White and Indian women (Geyer and Mosidi, 2010; Swarts, 2002). In particular, Black women have lower marriage rates compared to Coloured, White and Indian women (Budlender and Lund, 2011; Geyer and Mosidi, 2010; Swartz, 2002) and the largest disparity in marriage rates noted between Black and White women (Posel and Rudwick, 2013). The steady decline of marriage rates between 1995 and 2010 among Black women the age of 20 and older suggests that Black women are not postponing marriage but are rather increasingly choosing to remain single (Posel and Rudwick, 2013). Furthermore, the documented increases in the cohabitation rates among Black women are not large enough to offset the decrease in Black marriage rates (Makiwane et al., 2017; Posel and Rudwick, 2012, 2013, 2014).

In providing further evidence of racial differences related to marriage rates, Garenne (2016) indicates that between 1920 and 2011, Black women led the increase in the share of never-married women in South Africa followed by Coloured, White and Indian women (Garenne, 2016). These racial differences mirror those found in the United States, where Black American women account for the largest increase in the proportion of never-married women. Similar racial differences are also noted in other countries in sub-Saharan Africa (Moore and Govender, 2013). In general, the decrease in South African marriage rates is characterised by racial differences where Black women are least likely to marry, postpone marriage or cohabit and, as marriage rates continue to fall, differentials between White and Black marriage rates widen.

Cohabitation in South Africa is also characterised by racial differences as rates for White women have increased but remain lower than marriage rates. This suggests that for White women, cohabitation is a prelude to marriage (Posel et al., 2011). Conversely, the convergence of cohabitation and marriage rates for Black women implies that for these women, cohabitation represent either an alternative to marriage or the end state of a relationship (Amoateng and Heaton, 2015). However, the low levels of marriage among Black women are not explained by the minimal increases in the cohabitation levels noted between 1995 and 2008 suggesting that, for Black women, cohabitation is not an accepted alternative to marriage (Posel et al., 2011).

The racial differences in the declining South African marriage rates do not appear to be underpinned by differences in the marriage aspirations between women of different race groups but are associated with structural factors that prohibit marriage among Black people (Posel and Rudwick, 2012). During the apartheid era, the migrant labour system and the influx control regulations were instrumental in the decrease of marriage rates among Black people (Amoateng and Heaton, 2015; Chimere-Dan, 1997; Posel and Rudwick, 2013). These policies restricted the free movement of Black women into urban areas which prohibited them from joining Black men who were employed and living in the city. This somewhat permanent separation of Black men and women impacted gender relations, challenged traditional gender roles, reduced the possibility of marriage among Black people and negatively impacted the Black family structure (Posel and Rudwick, 2013; Swartz, 2010).

De Haas (1987) provides evidence of the impact of the apartheid policies on the Black family structure. Importantly, her research found no correlation between *ilobolo* and marriage rates during the apartheid era but rather emphasised the negative effects of the apartheid separation policies on marriage. De Haas (1987:41) observed that the "single most important factor in delaying marriage, repeatedly stressed by informants, was the critical lack of accommodation in towns". The circular migrant labour system and the geographic location of Black communities also led to Black men and women forging separate support networks as a coping mechanism thus further compromising the integrity and value of the institution of marriage among Black people (Chimere-Dan, 1997; Moore and Govender, 2013; Posel at al., 2011; Swarts, 2010).

In post-apartheid South Africa, the sustained decline of Black marriage rates is associated with an increase in the share of educated and career-driven women. These women opt to postpone marriage while resources are focused on gaining financial stability (Naidoo, 2010; Posel and Rudwick, 2013). Recent research found that education negatively influences marriage, where women with higher levels of education are less likely to marry (Amoateng and Heaton, 2015; Posel and Rudwick, 2013). In most cases, marriage remains an ideal but is ascribed a lower value compared to education, employment and financial stability. Valuing career development and financial stability over marriage suggests that in general, there has been attitudinal changes

toward marriage and childbearing in South Africa[30] (Moore and Govender, 2013). In the context of women's increased access to education and labour market opportunities, the dependency on financial stability and access to male income, which was traditionally made available through marriage has been reduced. Remaining single offers women greater control over their fertility and earnings, which is viewed as a positive choice in contemporary South Africa (Moore and Govender, 2013; Posel and Rudwick, 2012).

Additionally, in contexts where marriage is no longer required for childbearing, women prefer to remain single to avoid physical abuse, alcoholism and husbands who inadequately provide emotional and financial stability. These factors seem to be common characteristics of patriarchy which are associated with marriage in South Africa (Naidoo, 2010). As a result, women refuse to become dependent on a spouse and subject themselves and their children to the harsh behaviour of men in these particular patriarchal societies (Moore, 2013; Moore and Govender, 2013; Naidoo, 2010). In these situations, Black 'middle class' women express that remaining unmarried and raising a child grants them greater financial freedoms in post-apartheid South Africa. For these women, the burden of having a spouse who is unwilling to acknowledge the changing traditional gendered roles and adapt accordingly is not worth marriage and in some cases, women have instead considered serial partnership as an alternative to marriage (James, 2017; Naidoo, 2010).

Contributing to the decrease in marriage rates is the lack of marriageable men in South Africa. This lack of marriageable men is the result of a mismatch between the education levels and skills of men and women (Gustafsson and Worku, 2006). In particular, the migrant labour system intentionally kept Black men semi to unskilled while the current employment policies (like affirmative action) tend to provide women with greater educational and employment opportunities (Gustafsson and Worku, 2006). As a result, relative to Black men, there is a larger share of Black women who are educated, employed and financially stable who look for partners of a similar social and financial standing. This imbalance in the skills and education levels between Black men and women has made it difficult for men and women to find suitable

[30] This is different from the findings which detailed that specifically for Black women, the decline in marriage rates are not associated with changes in marriage aspirations (Posel and Rudwick, 2012).

partners[31] (Gustafsson and Worku, 2006). The findings of a poor South African marriage market are in line with similar findings of a lack of 'economically attractive Black males' in the United States which is highlighted as a contributing factor to delayed marriage or non-marriage among Black women in the United States (Lichter et al., 1992).

The concept of a lack of marriageable men is also associated with characteristics other than education and employment. Naidoo (2010) found that Black women living in a rural part of the North West province (in South Africa) postpone marriage in search of an 'ideal partner' who has not been previously married, treats her as an equal and is supportive and serious about the relationship. The need for these sought-after characteristics of a spouse have been influenced by the sexual abuse that many of the women in the study endured when they were young girls (Naidoo, 2010). Overall, the lack of marriageable men in South Africa is compared to the marriage markets in other middle- to low-income countries where partners are selected based on the intention to strengthen social ties and the need for continued parental control over the newly formed household (amongst other factors). Importantly, in these countries, parents are often instrumental in selecting a spouse for their child (Anukriti and Dasgupta, 2017).

2.4.3 A brief overview of the African marriage practice of ilobolo

Ilobolo, which refers to the payment of bridewealth, is a marriage custom that is central to Black marriage. The custom continues to be a valued part of Black marriage in contemporary South Africa and influences the levels of non-marital childbearing in the country (Rudwick and Posel, 2011). *Ilobolo* also serves as a point of differentiation between Black and White weddings and within the Black community, *ilobolo* practices differ based on ethnicity (Rudwick and Posel, 2014; Sennott et al., 2016). Over time, the cultural nuances of the practice have been influenced by changes in social environments and economies; however, the original meaning behind the practice has remained the same (Rudwick and Posel, 2011). It is important to note that *ilobolo* is a marriage practice that is unique to Black South Africans and is not necessarily practised by African people from other countries. This section presents an outline of the *ilobolo* custom and its various functions between the families of prospective brides and

[31] In contrast to the argument of a poor marriage market in South Africa (Gustafsson and Worku, 2006) South African women in general, continue to earn less and have higher rates of poverty compared to South African men.

grooms. Attention is focused on how South Africa's various political dispensations have influenced the practice of *ilobolo* in contemporary South Africa.

The fluidity of cultural practices makes it difficult to identify a salient function of *ilobolo* in Black marriage, especially since variations of the custom are practised by Black people of different ethnicity. Broadly, the functions of *ilobolo* discussed below are representative of isiZulu speaking Black people in South Africa. In pre-capitalist isiZulu society, *ilobolo* payment was a direct reference to a wife's reproductive duties (Hunter, 2006). She was expected to bear three or more children before her death which released her family from repaying a portion of the *ilobolo* value (to her husband's family) in the event of her early death. If she was barren, the *ilobolo* payment entitled her husband to bear children with her sister or the payment had to be returned (Rudwick and Posel, 2014).

The economic transaction between the bride and the groom's families and its symbolic meanings offers parents a material and symbolic compensation for the loss of their daughter. The money and cattle that is transferred between families is seen as a form of direct and indirect reimbursement for the financial and tacit costs that are associated with raising a daughter and is a symbol of appreciation from the groom's family for the nurturing of their son's future wife. The financial costs include any money that was spent on education and basic necessities like clothing and food (Rudwick and Posel, 2014). One school of thought argues that *ilobolo* payment represents the sale of a woman and is therefore repressive in nature. Effectively, the economic transaction transfers 'ownership' of a woman from her father to her prospective husband and his family (Rudwick and Posel, 2014). Alternatively, Sennott and colleagues (2016) describe *ilobolo* payment as a 'women-cattle-labour power circle' used to compensate the bride's family for the transfer of productive and reproductive value to the groom and his family.

The *ilobolo* payment also represents the forging of deeper and long-lasting relations between the two families. These relations are based on an understanding of reciprocal rights and duties which are expected to continue even after the death of either or both marriage partners (Kalule-Sabiti et al., 2007). According to Black tradition, marriages are legitimised when *ilobolo* is

paid as it creates a legal bond between the husband and wife. In this regard, the payment of *ilobolo* also represents marital stability as it implies that marriage is serious and that the partners are committed to each other which is assumed to lower the risk of multiple partners (Derose et al., 2010).

In some cases, a higher *ilobolo* value could imply that the husband has more 'rights' over his wife. This could be used to keep a woman from leaving an abusive marriage out of fear that her parents will have to return the *ilobolo* payment (Derose et al., 2010). In these situations, women's reproductive rights are compromised, especially when the childbearing preferences differ between the husband and wife. Women in these contexts do not have the freedom to freely practise family planning as male reproductive preferences take preference (Derose et al., 2010). The payment of *ilobolo* also guarantees that all children born to the couple are assumed into the father's lineage as taking on his surname provides a sense of identity (Rudwick and Posel, 2014). Lastly, *ilobolo* payment is underpinned by a spiritual symbolism as cattle that is paid towards *ilobolo* is used in communication with the ancestors (Derose et al., 2010).

Over time, the financial value of *ilobolo* has changed, ranging from nothing more than five heads of cattle in the first half of the 1800s to 10 heads of cattle in the mid-1800s. In the late 1860s, the cost of *ilobolo* increased to about 50 head of cattle for a commoner's daughter and 100 head of cattle for the daughter of royal blood (Dlamini, 1983). There was no fixed *ilobolo* value until 1869 when the value was formalised to 11 heads of cattle for commoners and would increase based on the importance of the bride's family. In 1878, the *ilobolo* processes were regulated by the Natal Code, which stipulated that *ilobolo* payment must be made before or at the start of marriage (Posel and Rudwick, 2011). In an attempt to regulate the cost of *ilobolo* and 'put marriage back on the table', Theophilus Shepstone[32] limited the cost of *ilobolo* to 10 heads of cattle for a commoner's daughter and 30 heads of cattle for a daughter of royal blood (Dlamini, 1983; Hunter, 2016; Posel et al., 2011). Since 1932, *ilobolo* is no longer a legal

[32] Theophilus Shepstone assumed the positions of diplomatic agent to the Native Tribes of Natal and the secretary of Native Affairs in Natal. He was instrumental in writing down the Native Laws of Natal which included limiting the ilobolo cost which made marriage a viable option once again.

requirement for Black marriage however it continues to be practiced and, at times, in conjunction with a traditional Christian wedding (Rudwick and Rudwick, 2011).

Apartheid era policies like the Hut tax[33], the migrant labour system and land dispossession reduced the number of cattle and land owned by Black families which compromised their ability to pay *ilobolo*. These policies influenced a change in the *ilobolo* payment from cattle to cash as Black men owned fewer cattle and were paid in cash as migrant labourers (Posel et al., 2011). To mitigate for the change in the payment method and the high cost of *ilobolo*, various cultural practices were introduced aimed at reducing the value of *ilobolo*. An example would be the *imvuamlomo* (mouth-opener) *ilobolo* custom during which the groom would present his prospective father-in-law with gifts in motivation for a lower *ilobolo* value (Posel and Rudwick 2011). Currently, the *ilobolo* payment is split between cash and cattle or only cash and is based on the bride's family's preference. With regards to the *ilobolo* payment, James (2017) describes that in post-apartheid South Africa, Black 'middle class' South African men have to pay up to R50 000 for an educated bride (at post-graduate level) while shortly after the *ilobolo* payment, he has to pay for the 'White wedding' (Christian wedding) which could cost up to R250 000. Contentiously, a research participant in the study mentioned that the request for a higher *ilobolo* value for an educated daughter is not part of the customary marriage tradition but rather an act of capitalism (James, 2017).

Another change in the *ilobolo* practice was a move from a communal responsibility to an individual responsibility of payment in the 1960s (Posel et al., 2011). This means that instead of taking cattle from the family herd or a communal pooling of money from the family for the *ilobolo* payment, the prospective groom is now solely responsible for the payment. This

[33] The Hut Tax introduced in 1899 by British colonialist in South Africa forced Black South Africans into paying a monetary tax per hut or household. The main intention behind the tax was to increase the state revenue for colonial administration however it also created a steady supply of cheap migrant labour. Black men, whose households had survived on subsistence cattle and agricultural farming were forced into employment to pay the tax. South African mines and farms benefitted from the availability of cheap labour while the collection of taxes was imposed by tribal chiefs who received a 10 per cent share of their collection. The tax was imposed at different times across the different South African provinces and invariably transformed a large portion of the Black South African population into an easily exploitable migrant labour force (Massey, 1978).

individualisation of payment pushed and continues to push the prospect of marriage further out of reach as currently, the unemployment rates among Black men continues to increase (Amoateng and Heaton, 2015; Posel et al., 2011). Traditionally, if the groom's family could not afford to pay the *ilobolo* cost, stones were presented as a symbolic gesture and marriage would be requested based on the arrangement that the *ilobolo* cattle that is received for the couple's first daughter would be handed to the father-in-law. Additionally, only one head of cattle would be slaughtered as an offering to the ancestors for the acceptance of the newlywed (Posel at al., 2011).

This difference in the practice of *ilobolo* suggests that historically, the practice of *ilobolo* was driven by cultural meaning. This differ from current practises which seem to be centred on the financial transaction as couples cannot marry if the *ilobolo* value is not paid. In an attempt to satisfy the high *ilobolo* cost, James (2017) explains that in post-apartheid South Africa, some 'middle class' Black couples take out loans to pay towards the *ilobolo* value which they would then repay together as they might do towards a house bond. This pre-marital financial burden is often crippling and seen as an unfair and unnecessary expense. Additionally, the expectation of remittances which redistributes money away from the marital household contributes to Black people's financial burdens (James, 2017).

In contemporary South Africa, *ilobolo* continues to be valued and practised despite its financial implications and impediment to marriage as it is associated with identity and a sense of self-worth (among women). Women perceive that *ilobolo* payment that is made on their behalf is as an act of pride, love and commitment which has motivated them to become involved in the *ilobolo* negotiations (Posel et al., 2011). Challenging their parents' required *ilobolo* cost and actively participating in the negotiations is a feature of the *ilobolo* process which traditionally would not have been acceptable as women were not privy to the negotiation and were not made aware of the agreed upon *ilobolo* cost. Black men also continue to value and practice *ilobolo* as it is seen as their 'cultural duty' (Posel et al., 2011).

In a context of economic difficulty, *ilobolo* is associated with declining marriage rates in South Africa (Hunter, 2016). Providing evidence in support of this notion, Casale and Posel (2010)

found a positive relationship between the probability of marriage and an increase in Black male earnings[34] suggesting that *ilobolo* is a barrier to marriage for Black people. In post-apartheid South African, *ilobolo* has become commercialised and is used as a means to gain financial and material wealth. This makes it difficult for Black men to satisfy the *ilobolo* value, especially as male unemployment increases (Amoateng and Heaton, 2015; Hunter, 2016; Posel and Rudwick, 2011). Additionally, the individualisation of the *ilobolo* payment places an additional strain on Black men which contributes to their inability to pay the *ilobolo* value (cf: Gustafsson and Worku, 2006; Kalule-Sabiti et al., 2007; Posel et al., 2011; Posel and Rudwick, 2012, 2013). In the absence of marriage (and *ilobolo* payment), men have to pay 'damages'(*inhlawulo*) for children that they have fathered out of wedlock (Hunter, 2006; Moore and Himonga, 2018). Although accepting paternity is a positive endeavour, the payment of 'damages' can be seen as a cultural pacifier that is aimed at validating childbearing outside of a marriage (Chimere-Dan, 1997; Madhavan et al., 2013).

2.5 Global insights into family formation and household structure

2.5.1 Family formation and household structure within a European context

Changes to social and economic norms have altered the traditional approaches to family life and personal relationships in the United Kingdom. The 2000s have seen the renegotiation of the traditional boundaries of the normative family, which consisted of a heterosexual couple and their biological children who conformed to traditional gendered roles (Williams, 2004). This type of family is being replaced by a more fluid notion of the family, which takes into consideration the changing gendered roles and responsibilities of family members. Additionally, this revised notion of the family is formed through various family formation options and is not limited to blood or marital relations.

Within a European context, the reimaging of the family assumes a more fluid, negotiated and socially constructed shape where 'making-meaning' of social connectedness plays a large role in how families are formed. The changes to the traditional notion of a normative family present

[34] This relationship can also be explained by earnings being a signal of being more 'marriageable'.

a more flexible approach to presenting the lived realities of families in the United Kingdom as a function rather than a definition of 'family' (Murray and Barnes, 2010). In this sense, families are viewed as "agents of self-reflexivity, actively engaging with the wider environment" (Silva and Smart, 1999:2). Within these adapted boundaries of a normative family, family relations are less dependent on blood or marriage ties and could easily extend across a number of households through divorce, remarriage, non-resident partners or transnational kin (Williams, 2004).

As a result, families in the United Kingdom are formed in a multitude of ways, some of which include marriage, same-sex unions, lone parents, partnerships, remarriage, stepfamilies and children being brought up by grandparents. This is by no means an exhaustive list of the different ways in which families are formed however, the main idea is that families in the United Kingdom no longer represent a neat nuclear structure. Rather, attention is focused on the various routes to partnership which have created a platform for the renegotiation and recreation of gendered norms based on the changing responsibilities of men and women (Murray and Barnes, 2010; Williams, 2004).

Adding to the notion of a flexible family formation, Murray and Barnes (2010) explain that, in the United Kingdom, the concept of a 'whole family'[35] encompasses the importance of different family members for the effective functioning of the social unit[36] and emphasises that these members do not necessarily have to be kin. For example, this concept views the role of children, young adults and older people not only as receivers of care but as integral family members who contribute different dynamics to the wider concept of care and the family (Murray and Barnes, 2010). In adopting this approach, social policies should be designed to support the family as a whole and not individual family members and in doing so, the family is positioned as the basic unit to receive assistance from social policies (Hughes, 2010).

[35] For an alternative perspective on the 'whole family' approach see Tsekoura (2015).

[36] Families as the basic building blocks of society.

Within a European context, specifically in the United Kingdom, Williams (2004) outlines four main changes which are key to addressing the broader social change and the reimaging of the family in societies. The first and most notable change is a move from the traditional 'male breadwinner' notion of a family to an 'adult worker' structure (Williams, 2004). This new structure assumes that men and women are successfully attached to and dependent on the labour market. This means that women should be completely reliant on the labour market to provide for their needs and should not seek assistance from a partner/spouse or the state. In this model, employed women (who are reliant on the labour market for economic stability) should be able to meet their own needs, that of their children and any future pensions, and in doing so, the financial burden shifts from the state to the individual. The idea that women should be self-reliant and self-sufficient underpins the 'adult worker' family structure (Williams, 2004).

Directly related to women and men spending equal amounts of time in the labour market is the development of a care deficit surrounding child and eldercare (Williams, 2004). Countries like France and Finland have addressed this deficit by providing incentives (cash benefits and tax credits) for carers to stay at home, to employ 'inhouse' care for children and the elderly and for other care provisions. Spain and Italy have looked to immigrants for low-cost childcare while the Netherlands have altered labour policy to equate the value of fulltime employment and part-time employment. This allows men and women the flexibility to engage in part-time employment and to use the time off to share the domestic responsibilities. On the other hand, in Sweden, the State has adopted the care responsibilities by providing high quality publicly subsidised child and elder care, paid parental leave and shorter working days for parents (Williams, 2004).

The second change focuses on family formation and transitions between the marital statuses. Moreover, within a European context, there is also a separation between marriage and parenthood where women may find the father of their child/ren unsuitable for marriage (Williams, 2004). The third change that contributes to the reimaging of the family (into the new 'normative family') places parenthood and parenting in the public domain. This means that childcare is regulated by policies which ensure that parents meet their responsibilities for childcare and well-being (Williams, 2004). Tying up the focus on family formation is the last change that focuses on the inclusion of same sex partnering and parenthood. Same sex partners

and parents were not recognised as a 'legitimate family formation' in the traditional 'normative family' perspective (Williams, 2004). Together, these four broad changes, which are experienced differently in various high-income countries, have reimaged the notion of a normative family to closely represents peoples lived realities.

2.5.2. Family formation and household structure within a middle- to low-income country context

In many African countries, there has been an increase in female-headed households and the share of the population living in these households. Aggregate statistics based on the most recent DHS from various the African countries[37] shows that across Africa, 26% of households are female headed which comprises 21% of Africa's population (Milazzo and van de Walle, 2017). Additionally, the share of female-headed households varies based on region and the urban rural divide. Countries in Southern Africa have the largest share of female-headed households (43%) which comprise 43% of the population. Unique to the Southern African countries is that the larger share of female-headed households (48%) are found in rural areas which comprises 48% of the population in rural areas. This is compared to countries in West Africa (20% of households are female-headed, comprising of 15% of the population; 24% of these households are found in urban areas, comprising of 20% of the urban population), central Africa (22% of households are female-headed, comprising of 18% of the urban population; 24% are located in urban areas, comprising of 21% of the urban population) and east Africa (28% of households are female-headed, comprising of 23% of the population; 30% of these households are located in urban areas, comprising of 27% of the urban population)[38] (Milazzo and van de Walle, 2017). Associated with the growth in female headship in rural areas (within African countries) are decreased levels of marriage, separation, divorce, widowhood and migration while female headship in urban areas is commonly associated with separation, divorce and non-marriage (Chant, 2016).

[37] Refer to Milazzo and van de Walle (2017) for an outline of each African country that is included in the study and the year of the most recent DHS used for the analysis.

[38] Refer to Milazzo and van de Walle (2017) for a list of countries that are categorised into each region and the year of the most recent DHS used for analysis.

Interestingly, the growth in female headship across Africa has coincided with a decrease in poverty on the continent between 1991 and 2012[39]. In Namibia (between 2004 and 2010), South Africa (between 2005 and 2010) and Nigeria (2003 and 2010), female-headed households were responsible for the majority of poverty reduction (Milazzo and van de Walle, 2017). Milazzo and van de Walle (2017) provides conflicting evidence to Rogan's (2014) study which showed that female-headed households in South Africa are at a greater risk of poverty compared to male-headed households. The characteristics of female-headed households differ across countries on the African continent and particularly, in relation to the levels of female education and age at first marriage (which are correlated with female headship). As a result, the types of female-headed households that are instrumental in poverty reduction in the different African countries vary (Milazzo and van de Walle, 2017). Montoya and Teixeira (2017) report that similar to African countries, female-headed households in middle- to low-income countries in South America are found to be at a lower risk of multidimensional poverty compared to male-headed households. However, in general, female-headed households in South America remain poorer compared to male-headed households (Montoya and Teixeira, 2017).

Challenging the notion that female headship is associated with poverty, Chant (2016) argues that women in middle- to low-income countries find living without a partner to be a positive experience. This is the case as female headship offers women increased control over household finances, enhanced mobility and freedom, greater occupational choice, peace and well-being, less exploitation and insecurity and more power and independence. In her essay which positions female headship as an asset, Chant (2016) explains that the increase in female-headed households could lay the foundation for more gender-equitable cities. Overall, there are a number of positive aspects of female headship which influences a woman's decision to live without a man (Chant, 2016).

[39] The period during which poverty declined differs by country. Refer to Milazzo and van de Walle (2017) for a complete list of countries and the periods during which poverty declined in that country disaggregated by male- and female-headed households.

2.5.3 Family formation and household structure within a South African context

Post-1994, the 2013 White Paper on Families in South Africa (Department of Social Development, 2012) is a policy landmark for the country as it is the first time (in the democratic dispensation) that the diversity of families and the family structure in South Africa is discussed. Prior to this White Paper, very little attention was focused on the needs of families in South Africa and how family structures differ from each other (Amoateng et al., 2004; Rabe and Naidoo, 2015). Although the White Paper addresses the various functions and needs of the different types of families, it has been criticised for its recommendations which are primarily based on the concept of a heteronormative middle-class nuclear family (Morison et al., 2016; Rabe and Naidoo, 2015). Basing the recommendations on the nuclear family structure implies that diverse family types are not seen as ideal. This exclusion has the potential to marginalise and stigmatise groups of people who do not and cannot live up to the ideal of a nuclear family structure (Morison et al., 2016).

The terms family and household are often used interchangeably to represent loosely, a set of parents and their children (either biological or adoptive), forming the nuclear family (Department of Social Development, 2012). In the current South African context, similar inferences are made about the population, regardless of the impact of race, culture and ethnicity on the family structure (Amoateng and Heaton, 2015; Budlender and Lund, 2011; Morison et al., 2016; Sevenhuijsen et al., 2003). In 2005, 34.5% of households were nuclear and 20.5% of households had a minimum of three generations of people living in them, making them extended families/households (Budlender and Lund, 2011).

Cultural nuances are overlooked when Black and White South Africans are blindly categorised into family or household groups without considering descent groups and cultural family formation processes. These factors play an important role in defining a Black South African family (Russel, 2003). White families are centred around the married couple, are more likely to be based on the nuclear family structure and value privacy and independence (Amoateng and Heaton, 2015). This is compared to Black family structures which are concerned with the linking of two descent-based groups, community and culture and are based on kinship systems which are a source of support for families. For Black people, the married couple is seen as somewhat ‘absent’ as kinship networks are valued more highly than the couple (Russel, 2003).

Given that the contemporary South African family structure is influenced by culture and the various changes to social and economic norms, Hall and Mokomane (2018) indicate that households can be categorised into one of six broad categories. As it is aptly called, a one-person household structure contains only one household member and interestingly, 22% of households in 2016 were one-person households (Hall and Mokomane, 2018). One-person households were the second most popular household structure in 2016 and could possibly represent the growing share of individuals who remain unmarried and (if female) have delayed fertility. Two household members who are either spouses or partners are referred to as a couple (10% of households in 2016) while a childed couple refers to a couple and their child/children. The childed couple household structure, traditionally referred to as a nuclear family structure constituted 19% of households in 2016 compared to 11% of households which were lone parent households (Hall and Mokomane, 2018). A lone parent household structure includes only one parent and his/her child/ren and could represent, for example, a female-headed household with only a mother and her child/ren (Hall and Mokomane, 2018).

On the other hand, an extended household structure, the modal type of household (36% of households in 2016) contains a mix of family members in any type of household structure (Hall and Mokomane, 2018). The main feature of this structure is that all of the household members are related. For example, extended households could be representative of multigenerational households or even female-headed households consisting of a woman, her children and possibly an aunt or grandmother. The prevalence of this household structure in South Africa could be related to the extended family networks and support structures which are a common feature of Black family formation. Lastly, a composite household structure is characterised by any household type where at least one member is not a relative, only 2% of households in 2016 were composite households (Hall and Mokomane, 2018). Providing additional evidence of changes in household structure, Makiwane et al. (2017) found a decrease in couple families between 1996 (54.7%) and 2014 (37.8%) and a 35.7% decrease in nuclear families during the same period. These decreases have coincided with increases in single parent families (45.3% to 62.2%) and extended families (28.4% to 64.8%) (during the same period, 1996-2014) (Makiwane et al., 2017).

Female-headed households are not a new family formation structure in South Africa as in 1980, 50% of Black households in the rural homelands were headed by women (Hall and Mokomane, 2018). During the same time, 20-25% of households in small towns, farms and metropolitan areas were head by women while in 2016, 41% of all households in South Africa were headed by women (Hall and Mokomane, 2018). Similarly, in 1962, 14% of households were female headed in the Witwatersrand area of the Gauteng province. This increased to 29% in 1985 while in the same year (1985), 25% of all children and 20% of adults were living in female-headed households (Budlender, 2003). In 1993, 12% of Black families were female-headed, and in 1996, over 50% of households in urban townships in South Africa were headed by women. This increased from 36% in 1975 (Budlender, 2003). Additionally, Madhavan and Schatz (2007) found significant increases in the percentage of female-headed households in a rural surveillance site in Johannesburg between 1992 and 2003.

Identifying a single individual who is responsible for the household may be misleading as it is most likely that household members are responsible for various household tasks (Budlender and Lund, 2011; Hall and Mokomane, 2018). Nevertheless, female headship[40] in South Africa is associated with a higher risk of poverty (Rogan, 2013, 2014, 2016) and female-headed households are more likely to have poor access to household resources (electricity, pipped water and other basic amenities) compared to male-headed households (Dungumaro, 2008). These poverty differentials by household headship in South Africa are a concern because they have persisted despite the social grant system expansion and the growth in female labour force participation (Casale, 2004; Casale and Posel, 2002; Ntuli, 2007).

A possible reason for the widening of poverty risks between male- and female-headed households could be that male income is being replaced by social grants and low-paying female employment in female-headed households (Rogan, 2012). Additionally, *de jure* female-headed households[41], which are the most prevalent type of female-headed households in the country,

[40] Female headed households are headed by an unpartnered woman and/or usually lives in a household without a senior male member (Chant, 2016).

[41] Refer to Rogan (2013) for a detailed discussion on the different types of female-headed households found in post-apartheid South Africa.

remain poorer than male-headed households because of the changes in household composition. *De jure* female-headed households (relative to male-headed households) are reliant on the earnings of working-age women which are distributed across a growing proportion of child dependants (Rogan, 2012). Overall, female-headed households tend to be at a greater risk of poverty compared to male-headed households because primarily, they are dependent on the earnings of women and fewer income-earners (Posel, 2001). As a result, there are clear gendered poverty risks associated with a household structure which is becoming more prevalent and which has links with the decrease in marriage rates described earlier in the chapter.

Nationally, racial differences are noted among female-headed households as Makiwane and colleagues (2017) show that in 2009, 60.9% of Coloured households were headed by a female compared to 40.6% of Black, 20.5% of Indian and 11.8% of White households. These findings suggest that female headship is less common among Indian and White households compared to Black and Coloured households. Female-headed households are also likely to be larger than male-headed households (Dungumaro, 2008). In 2002, female-headed households consisted of 4.1 members compared to 3.8 members in male-headed households (Dungumaro, 2008). Of particular interest is that a larger percentage of female-headed households in South African in 2016 had between 6 to 10 household members which suggest that in general, female-headed households tend to be larger than male-headed households (Dungumaro, 2008).

2.6 The migrant labour system and its effect on the family

During the apartheid era (1948-1994), the migrant labour system was designed to make available a steady stream of dispensable and cheap labour to be used in mines across South Africa. The easy access to this type of labour was essential for the development of the apartheid economy and enabled poorly paid Black men to live in cities, towns and on commercial farms, to work for White-owned interests (Budlender and Lund, 2011). This meant that Black men were away from their families for long periods of time and were only allowed to visit their homesteads and families for a maximum of four weeks a year (Budlender and Lund, 2011; Gustafsson and Worku, 2006; Hunter, 2006). Apartheid policies like the Group Areas Act and the Influx Control Law prohibited Black families from relocating to cities where employed

Black men were housed, which placed a strain on the family unit (Amoateng and Heaton, 2015). These policies isolated men from their families, disrupted family formation structures and had a negative social impact as children grew up without fathers, lacked positive male role models and wives had to provide for themselves and the family (Hunter, 2006). As a result of being away from their families, it was not uncommon for migrant males to establish new families and social networks in cities which negatively impacted the amount and frequency of remittances sent home- in some cases eventually stopping altogether (Gustafsson and Worku, 2006).

Being away from wives and girlfriends unintentionally created an environment for men and women to engage with multiple sexual partners, this increased their risk of contracting STIs and HIV (Moore, 2013). The prolonged absence of fathers and husbands also had a notable and long-lasting effect on family dynamics and household structure. As a result, women, who grew up with fathers who were migrant labourers tend to consciously choose to remain unmarried while continuing to have children (Moore, 2013). Additionally, the increase in female-headed households are associated with men's role as migrant labourers (Kalule-Sabiti et al., 2007; Moore, 2013).

Although the apartheid laws have long been abolished, apartheid-like conditions continue to persist in South Africa. Once such condition is labour migration which remains a common feature of labour in the country. Women, who usually shoulder economic and domestic responsibilities, have joined the streams of men who migrate to find employment, resulting in children being left behind (Hall and Posel, 2019). In as early as 1999, a third of people who were away from their households for more than four nights, in search of or for employment were women, of which 83% were from rural areas (Budlender and Lund, 2011). The increase in female migrant workers has resulted in an increase in the extent of childcare offered by older women (Budlender and Lund, 2011). As a result, migrant labour continues to underpin familial disruptions but also suggests that such disruption is not only associated with politics and policies (as was the case with apartheid laws) (Hall and Posel, 2019).

2.7 Education and the feminised labour force in South Africa

As outlined earlier in the chapter, a large body of South African literature on non-marital fertility is focused on the social and public health concerns of adolescent childbearing. This has resulted in a minimum amount of research that explores the educational and labour market dynamics among never-married mothers. Of the studies that are available, Ntshongwana (2010b) shows that the educational levels of lone mothers [42] differ by race however, overall, the study reveals that lone mothers are poorly educated. In 2007, 62.1% of Black lone mothers and 72.7% of Coloured lone mothers had some secondary schooling compared to 14.8% of Indian and 23.2% of White lone mothers (Ntshongwana, 2010b). The share of lone mothers who have a secondary school certificate (matric) also vary by race as 84.1% of Indian and 58.2% of White lone mothers have a secondary school certificate compared to 26.6% of Black and 15.6% of Coloured lone mothers (Ntshongwana, 2010b).

South African women have always been a part of the labour market however, between 1995 and 2005, there was an increase in female labour force participation. This increase was characterised by growing levels of female unemployment, and of those females who did find employment, a large share of the employment was in the informal sector (Budlender and Lund, 2011). The percentage of women in the South African labour force increased to 48.8% in 2005 from 41.8% in 1995 (Budlender and Lund, 2011). At this point, the labour market was unable to accommodate for the sudden increase in labour force participants and the increased demand for jobs, which contributed to a rise in the number of unemployed females (Casale, 2004; Casale and Posel, 2002; Floro and Komatsu, 2011; Ntuli, 2007).

Between 1995 and 2003 the increase in female employment was two-fold. Firstly, there was an increase in educated women into specifically designated highly paid posts which satisfied gender equality legislation (Casale, 2004; Casale and Posel, 2005). These women (who formed a minority of employed females during the time) were employed as legislators, management,

[42] Lone mothers refer to women who are single parents and primary caregivers of children younger than 18. Lone mothers can be widows, women who have been divorced or those who are not cohabiting (Ntshongwana et al., 2015).

senior officials and professionals as they satisfied affirmative action and equal opportunity initiatives that called for the employment of previously disadvantaged or designated groups (Casale, 2004; Casale and Posel, 2005; Gama and Willemse, 2015). On the other hand, the majority of employed women, especially Black women were absorbed into low-paying and semi-skilled employment (Floro and Komatsu, 2011; Gama and Willemse, 2015). Much of this employment was available in the informal economy where women became self-employed while many others took up employment as domestic workers in private households (Budlender and Lund, 2011; Gama and Willemse, 2015). The evidence shows that in 2001, 34% of women were employed in the informal sector compared to 25% of men. Additionally, 8% of women were employed as domestic workers (Budlender and Lund, 2011). These women, who accounted for over half of the growth in female employment between 1995 and 2001 were subject to unstable employment, insecure working conditions and lower, irregular earnings (Casale, 2004; Casale and Posel, 2005).

Overall, in post-apartheid South Africa, women's labour force participation is associated with various push and pull factors. Women who have some form of tertiary education are pulled into the labour market by the availability of attractive employment opportunities (as mentioned above). In contrast, women who are poorly educated are pushed into the labour market by the need for income (Casale and Posel, 2002). Broadly, women's growing need for monetary income is associated with a lack of access to male income. In 1999, 1.1 million more men were broadly unemployed than in 1995, and between the same period, the percentage of women living with at least one employed male dropped from 53% to 44% (Casale and Posel, 2002).

The changes in women's access to male income are linked to the HIV/AIDS epidemic (women need to find alternate sources of income when male earnings are no longer available due to poor health) (Budlender and Lund, 2011), an increase in male unemployment (Budlender and Lund, 2011; Casale and Posel, 2002; Ntuli, 2007; Patel et al., 2006) and an increase in female-headed households which often do not contain working-age males (Budlender and Lund, 2011; Casale and Posel, 2002). Additionally, the end of apartheid and the establishment of the Employment Equity Act (which promotes equal employment opportunities for males and females) further encouraged female participation in the labour market (Budlender and Lund, 2011; Floro and Komatsu, 2011).

Female labour force participation is also influenced by the number of child dependents that are being cared for by women. Using data from South Africa and other middle- to low-income countries, Bongaarts and colleagues (2019) found a negative relationship between female employment and the number of children living in a household. Additionally, having resident children under the age of six has a strong negative influence on female employment as these children require special care and attention which impacts a woman's decision to find employment. Interestingly, the negative relationship between the number of resident children and female employment does not exist among extremely economically disadvantaged women as for these women, work is required for survival (Bongaarts et al., 2019).

Lastly, low social barriers to women's employment in South Africa means that household structures (such as an increased household income or the presence of an educated male household head) have less of an influence on female labour force participation compared to personal characteristics such as women's educational level, declining fertility levels and career goals and aspirations (Klasen et al., 2018). The economics literature in South African is yet to focus specifically on the educational levels and labour market participation of NMOMs. Nevertheless, the literature reviewed in this section discussed changes to the South African labour force as female education and employment are highlighted as factors which are likely to be associated with fertility (discussed in section 2.3.3) and non-marital fertility (discussed in section 2.9.5) in South Africa.

2.8 Women's dual responsibilities in contemporary South Africa

In South Africa, the work-family dichotomy has become a characteristic of most employed women (Budlender and Lund, 2011) where women expel most of their energy and resources at work as their employment is essential to the survival of their family. This dichotomy is exacerbated by the work-based notion of citizenship, where social protection is largely provided through employment (Barchiesi, 2011). As a result, it is challenging for employed women to negotiate between the independent roles of being a domestic caregiver and a worker as South African labour policy is yet to address the needs of employed women, especially in semi-skilled to low-skilled jobs. This is evident in the lack of affordable and safe childcare services that are available for women employed in, for example, the informal sector or even in

established formal sector institutions (Patel et al., 2006). Employed mothers in other middle- to low-income countries face similar constraints of being responsible for the bulk of unpaid domestic care and dividing their time between the labour market and their domestic responsibilities (Budlender, 2010; Montoya and Teixeira, 2017).

In post-apartheid South Africa, the gendered roles of care continue to persist even in light of the increase in female labour force participation (Budlender, 2010; Floro and Komatsu, 2011). Within South Africa's current economic climate, men provide minimal financial and domestic care while women face the double burden of financial and domestic responsibilities (Budlender, 2010; Budlender and Lund, 2011; Morison et al., 2016; Sevenhuijsen et al., 2003). A research finding from 2001 shows that irrespective of the employment status of men and women, South African men spend fewer hours on domestic care compared to women. On average, men spend between 136 to 200 minutes a day on domestic childcare while women spend an average of 245 to 406 minutes a day (Floro and Komatsu, 2011). The additional time that women spend on domestic care has been linked to the difficulty that women experience when looking for employment (Floro and Komatsu, 2011).

Lastly, men's minimal involvement in unpaid domestic care is a concern as some households are solely dependent on a women's income (Patel et al., 2006). Focusing on the unpaid domestic care that is primarily done by women in South Africa, a recent qualitative study found that societal attitudes on the distribution of unpaid domestic work are changing (Ngomane, 2016). The study, based on interviews with men and women in the Mpumalanga province, described that although opinions on the division of domestic care are changing, women continue to be burdened with the primary role of unpaid domestic care, even those women who are successfully attached to the labour market (Ngomane, 2016).

2.9 Non-marital fertility

2.9.1 Non-marital fertility in the United States

Non-marital fertility has been a demographic feature in high-income countries since the 1970s and over time has become a common reproductive behaviour amongst older women. Using

national statistics from the United States (Natality dataset, National Vital Statistics System), Ventura (2009) reveals a 26% increase in the number of births to unmarried women between 2002 and 2007. There was also a 21% increase in the birth rate for unmarried women aged 15-44 between 2002 (43.7 births per 1000 unmarried women) and 2007 (52.9 births per 1000 unmarried women). Ventura (2009) outlined further an increase in the percentage of all births to unmarried women in the United States, from 18.4% in 1980 to 34% in 2002 and 39.7% in 2007.

A change in the age profile of unmarried mothers is also noted as Ventura (2009) reports a general decrease in adolescent fertility with a corresponding increase in births to unmarried women aged 20 and older between 1995 and 2006. In particular, the data shows a 13% and 34% increase in births to unmarried women aged 20-24 and 30-34 years, respectively between 2002 and 2006. Furthermore, in 1970, 8% of non-marital births in the United States were to women aged 30 and older compared to 17% in 2007 (Ventura, 2009). Varying levels of non-marital childbearing are also noted among women of different race groups. In the United States, Black women have the largest share of unmarried mothers (compared to women of other race groups). However, between 2002 and 2006, there was a 14% increase in non-marital births to White women compared to a 9% increase in non-marital births to Black women (Ventura, 2009).

Using national vital statistics and data from longitudinal surveys, Wildsmith et al. (2011) provides additional evidence in support of a general increase in non-marital fertility and in particular among adult women in the United States. Overall, the data show an increase from 11% in 1970 to 41% in 2009 in the percentage of all births to unmarried women. Non-marital births to women aged 25-29 increased from 4% in 1970 to 34% in 2009 and similarly, increased from 4% in 1970 to 21% in 2009 for women aged 30-34 years. Smaller increases in non-marital births are noted for women aged 35-39 years (5% in 1970 to 19% in 2009) (Wildsmith et al., 2011). Similar to Ventura (2009), Wildsmith and colleagues (2011) also reveal racial differences in the births to unmarried women in the United States. Although the percentage of non-marital births to Black women remain the highest, the largest increase in non-marital births between 1990 and 2009 was to White and Hispanic women (Wildsmith et al., 2011). Interestingly, Wildsmith et al. (2011) reports that between 2001 and 2002, 65% of births to

women who were unmarried or cohabiting at the time of the birth were unintended[43] compared to 20% who were married.

Analysing the socioeconomic trends of single mothers in the United States, Mclanahan (2004) found that in 2000, 43% of mothers in the bottom quartile were single compared to 14% in 1960. During the same period, 7% (in 2000) of mothers in the top quartile were single compared to 4.5% (in 1960) (Mclanahan, 2004). This indicates that single mothers in the United States are more likely to be of low socioeconomic status. These findings are from the Fragile Families and Child Wellbeing Study which focuses on unmarried parents and their children (a cohort of nearly 5000 children) between 1998 and 2000 across the various cities in the United States. In general, Mclanahan (2004) suggests that an increase in single motherhood results in fewer resources for children. Additionally, these children experience less stable family unions and limited emotional and financial support from their biological father. This is an important finding that is supported by South (1999), which suggests that for women in the United States, non-marital childbearing may be an elective lifestyle, but it is primarily driven by lower-income women.

Given the increase in births to unmarried mothers in the United States, a substantial number of children are growing up in single parent households. Households headed by unmarried mothers are often poorer compared two-parent households and consequently, children living in a single parent household often have access to fewer resources which are integral to early development compared to children living in a two-parent household (Williams et al., 2013). Research has also identified that children who grow up in single-parent households pose a substantial risk of experiencing a wide range of negative psychosocial, educational and behavioural outcomes throughout their life course (Williams et al., 2013).

Focusing on early educational achievements, Crosnoe and Wildsmith (2011) found that the educational achievements of children born to unmarried mothers are influenced by family

[43] Births that were mistimed (the pregnancy was wanted but either later or earlier) or unwanted (the pregnancy was not wanted at the time or anytime in the future) at conception are referred to as unintended births (Wildsmith et al., 2011).

demographic trends. This means that the marital status and the household structure of the mother influences a child's educational performance. Put simply, the research showed that children born to unmarried mothers and children who live in cohabiting unions are more likely to perform poorly at school compared to children born to married mothers and those who live in two-parent households (Crosnoe and Wildsmith, 2011). Attention is also drawn to the negative effect that living without a father has on the educational achievements of a child. Overall, even though the adverse effects of socioeconomic differences on the educational development of children born to unmarried women remain, the research suggests that family demographics may have a stronger negative influence on child development (Crosnoe and Wildsmith, 2011).

Focusing on the negative self-assessed mental and physical health of adolescents born to unmarried mothers, Williams and colleagues (2013) present evidence which shows that the negative developmental effects on children born to unmarried mothers are also observed among adolescents born to unmarried mothers. In particular, the research found that adolescents who were born to unmarried mothers are more likely to experience negative self-assessed health scores compared to children who were born to a married couple. Furthermore, these negative self-assessed health scores remain unchanged as the mother transitions across various marital unions or if the biological parents cohabit. The physical health of adolescents born to unmarried mothers is noted to improve if the biological parents marry and remain in the marital union (Williams et al., 2013). Williams and colleagues (2015) investigate further the effects of being born to an unmarried mother on the long-term midlife self-assessed health of women. Interestingly, the research reveals that Black and White women who were born to unmarried mothers experience negative self-assessed health scores far into adulthood (Williams et al., 2015). Overall, within an American context, the body of literature that focuses on the negative health and developmental outcomes for children and adolescents (and adults) that are born to unmarried mothers is growing. This emphasises the need for interventions which reduce or at best, mitigate for the intergenerational disadvantage and poverty that is passed on from unmarried mothers to their children.

2.9.2 Non-marital fertility within a European context

Within a European setting, the literature suggests that non-marital fertility is associated with spatial differences. Northern European countries (Nordic countries) led the transition to high levels of non-marital fertility in the 1960s with Western (the United Kingdom, Ireland, the Netherlands, Belgium and France) and Central-Western (German-speaking countries) countries following suit in the late 1970s (Klusener, 2015; Klusener and Goldstein, 2016; Mack, 2017). The non-marital fertility ratio[44] in the Northern European countries increased from about 10% in 1970 to 50% in 2010 while in the Western European countries, the non-marital fertility ratio increased from 10% in 1980 to 50% in 2010 (Klusener, 2015). Between 1970 and 1990, the levels of non-marital fertility decreased in the Central-Western European countries and changed very slightly in the Central-Eastern and Eastern European (former communist countries) countries. In comparison, the Southern European countries (Mediterranean countries like Greece, Malta and Croatia) had the lowest levels of non-marital fertility (Klusener, 2015; Klusener and Goldstein, 2016).

Mack (2017) explains that during this period (1970-1990), Europe experienced unusually high levels of marriage that is often referred to as the 'golden age of marriage'. This 'golden age of marriage' ended with a rapid increase in the levels of non-marital fertility in all European countries between the mid- to late-1990s and the early 2000s (Klusener and Goldstein, 2016). This increase in the levels of childbearing outside of a marriage was short-lived as the levels of non-marital fertility in Eastern European countries like Russian, Moldova and Belarus entered a downward trajectory in 2003 (decreasing from just below 30% in 2003) while countries in Northern Europe have noted smaller increases in the levels of non-marital fertility (Klusener, 2015). Irrespective of the different levels of non-marital fertility across Europe, in 2012, 40% of all births in the European Union were to unmarried mothers (Mack, 2017).

[44] The non-marital fertility ratio is calculated by dividing the number of non-marital live births by the total number of live births (Klusener and Goldstein, 2012; Klusener, 2015).

Focusing on Germany, Klusener and Goldstein (2016) present evidence of non-marital fertility from as early as the 17th century, albeit low levels in both West and East Germany[45]. Although the collection of demographic data around this time was imperfect, the evidence suggests that the non-marital fertility ratio in west and east Germany before 1700 was not higher than 3%. In 1700, the non-marital fertility ratio exceeded 10% as various German cities experienced a rapid increase in the levels of non-marital fertility. For example, the percentage of non-marital births in Leipzig (eastern Germany) increased from 3% in the period of 1696-1700 to 14% in 1731-1735. During this time, these increases in the levels of non-marital fertility had varied across the different German cities, creating an East-West gradient. These differences in the levels of non-marital births had persisted after the unification of the different German territories in 1871 (Klusener and Goldstein, 2016). In the late 1920s, 18% of births occurred outside of a marriage in eastern Germany (which formed the German Democratic Republic) compared to 9% in western Germany. The Nazi family policies had negatively influenced the levels of non-marital fertility however, the East-West gradient remained. In 2010, between 55-60% of all births in eastern Germany were outside of a marriage compared to between 25-30% in western Germany (Klusener and Goldstein, 2016).

The socioeconomic status of single mothers is a useful indicator of familial stability and labour market involvement as these factors predict women's (and thus children's) access to opportunities and resources (Jalovaara and Andersson, 2018). The recent research on the education levels of single mothers in Finland shows that firstly, women with low levels of education are more likely to be single mothers and secondly, that access to socioeconomic resources and opportunities differ based on family formation, even in countries with state welfare systems which are aimed at promoting equality (like Finland)[46] (Jalovaara and Andersson, 2018). Klusener and Goldstein (2016) add that in most European countries, women of a lower social status are more likely to have a non-marital birth compared to women of a higher social status (Jalovaara and Andersson, 2018; Mack, 2017; Stipkova, 2015). These findings which have been noted in various European countries (Klusener, 2015; Klusener and

[45] As referred to before the unification of different German territories in 1871.

[46] Refer to Jalovaara and Andersson (2018) for details on the state welfare system of Finland.

Goldstein, 2016; Mack, 2017; Surkyn and Lesthaeghe, 2004) are a point of concern as single mothers with a low level of education are restricted by their limited education and by the additional responsibility of combining employment with childcare (Jalovaara and Andersson, 2018).

2.9.3 Explanations for the increase in non-marital fertility in high-income countries

There are various reasons that explain the increase in non-marital fertility among older women in the United States. Some of these include delayed marriage, changes in the sexual behavioural norms, changes in the societal perceptions of non-marital sexuality and childbearing and the effective use of contraception and abortion (Ventura, 1999). An increase in the levels of educated and employed women and changes in the perceptions of and attitudes towards marriage and childbearing has also positively influenced the levels of non-marital fertility in the United States (Martinez et al., 2012; Upchurch et al., 2002; Wildsmith et al., 2011). The literature suggests that educated women have greater control over their sexual and reproductive behaviour in terms of the timing of childbearing, contraception use and parity which has contributed to the growing share of non-marital births in the United States (Martinez et al., 2012; Wu and Mcneill, 2002).

Klusener (2015) explains that in European countries (except for Germany), the individual-level attributes of women and their broader contextual conditions may lead to an increase in non-marital births. Economic crises[47] have been noted to led to an increase in childbearing outside of marriage as couples have had to postpone getting married until they become financially stable (Klusener, 2015; Surkyn and Lesthaeghe, 2004). In the 1990s, the rise in secularisation (a feature of postmodernity) had reduced the influence of religious institutions in dictating or limiting non-traditional family formation structures. Thus, the increased levels of non-marital fertility are linked to religious institutions losing their relevance in European countries (Klusener, 2015; Klusener and Goldstein, 2016; Lesthaeghe, 2010; Surkyn and Lesthaeghe, 2004). A country's legal system may also influence the levels of non-marital fertility. This is seen in Russia, where the regulation of family formation, in particular, non-traditional family formation such as childbearing outside of a marriage is legally limited (Klusener, 2015). Lastly,

[47] In particular, the economic collapse of the Eastern Bloc in the late 1980s. See Klusener (2015) for more details.

Stipkova (2015) highlights that according to the pattern-of-disadvantage theory, the spread of non-marital fertility in Europe was a reaction to economic uncertainty (which gained momentum in the 1980s and resulted from the various globalisation processes) instead of freely selecting a type of lifestyle.

The differences in state-welfare systems may also increase the levels of non-marital fertility in European countries. For example, state support systems in Scandinavian countries target the individual and encourage female employment. Furthermore, the economic development of women may have catalysed the number of births which take place outside of a marriage as Scandinavian countries boast high levels of non-marital fertility (Klusener, 2015; Surkyn and Lesthaeghe, 2004). In contrast, state support systems that target the family unit and are broadly based on the male breadwinner model negatively influences the levels of non-marital fertility (Klusener, 2015; Surkyn and Lesthaeghe, 2004).

The Czech Republic provides a third example of how changes in a country's welfare system reduced the need for marriage and indirectly encouraged mothers to remain unmarried. During the socialist regime, the welfare systems in the Czech Republic encouraged marriage by proving newly-weds and parents with state-subsidised loans and allowances (Stipkova, 2015). After going through various changes, state support in the Czech Republic was based on means/income testing where the legal relationship (for example, married) between couples and parents was not considered (Stipkova, 2015). For example, up until 2010, single mothers were entitled to higher state financial benefits compared to married mothers because their household income was lower than the income of a two-parent household. Single mothers also qualified for longer paid maternity leave compared to married mothers (this was changed in 2010). Although these policies[48] have since changed, they played a significant role in increasing the levels of non-marital fertility in the Czech Republic (Stipkova, 2015).

Klusener and Goldstein (2016) detail that the differences in the levels of secularisation, economic organisation and agricultural structures, and legislation and population policies

[48] Refer to Stipkova (2015) for a detailed account of the various social policies in the Czech Republic.

which had existed since the 17th century (and remained until the late 1990s) between eastern and western Germany are instrumental in creating this East-West gradient in the levels of non-marital fertility. For example, eastern Germany introduced a parental leave scheme in 1976, which offered a year of paid leave to unmarried mothers for their first birth. This contributed to an increase in the number of first births that occurred outside of a marriage; the policy was only extended to married mothers in 1986 (Klusener and Goldstein, 2016). The East-West gradient did not diminish after the unification of Germany in 1945 but rather widened. This suggests that the spatial differences in the levels of non-marital fertility across Germany cannot be explained by variations in the contextual- and individual-level socioeconomic characteristics of women (Klusener and Goldstein, 2016).

In evaluating whether the determinants of non-marital childbearing change over time and vary based on the different stages of a woman's life, South (1999) has found that family background, race, ethnicity and geographic location remain significant predictors of non-marital childbearing in the United States. The effects of growing up in a single mother household, and the mother's education and childbearing and marriage perceptions remain significant predictors of adolescent and adult non-marital childbearing (South, 1999). Conversely, compared to adolescent fertility, family income has a lower effect on non-marital births among older women (South, 1999). Interestingly, race is not a determinant of non-marital childbearing among women in the United States (although it remains a predictor of adolescent fertility). This is mostly due to the increase in non-marital births among White women which have converged with the levels of non-marital fertility among Black women (South, 1999; Wu et al., 2000).

Changing gender roles have also led to increases in non-marital fertility in European countries. (Mack, 2017; Stipkova, 2015). In the former socialist countries like the Czech Republic, increases in non-marital fertility are related to the widespread adoption of Western European values[49]. The percentages of births to unmarried women in the Czech Republic increased from 9% in 1990 to 40% in 2010 and continue to follow an upward trajectory (Stipkova, 2015). Women in these countries are described as seeking self-fulfilment and autonomy and are

[49] These values are the underpinnings of the second demographic transition explained earlier in the chapter.

cautious about long-term commitments like marriage and parenthood. These characteristics are seen as a shift towards individualism, a feature of postmodernity (Stipkova, 2015).

Within a high-income country context, an increase in non-marital births has been linked to changes in family formation. Wu and colleagues (2000) describe how, in the United States, increases in cohabitation have influenced changes in the patterns of non-marital births. In these cases, non-marital births are increasingly occurring between cohabiting partners instead of within informal unions (for example, casual sexual relationships). The findings show that in the early 1990s, around 40% of births to single mothers in the United States occurred within cohabiting unions (Wu et al., 2000). Non-marital births within cohabiting unions are characterised by racial differences. Specifically, the increase in non-marital births to White women during the 1970s and 1980s occurred within cohabiting unions. This is not the case for Black women who are found to experience low levels of non-marital births within cohabiting unions (Wu et al., 2000). In general, the literature indicates that White women in the United States cohabit as a precursor to marriage while for Black women, cohabitation is a substitute for marriage (Brien et al., 1999; Martinez et al., 2012; Raley, 2001; Ventura, 2009; Wu et al., 2000).

The increases in non-marital births within cohabiting unions have transformed family formation structures and has introduced a level of instability due to its transitional nature. Children who are born within this type of family structure face increased familial instability, poor access to resources and are at an increased risk of being economically disadvantaged (Raley, 2001; Wu et al., 2000). The literature suggests that cohabitation serves as a ‘trial marriage’ and has a limited lifespan. As a result, cohabitation creates a platform for couples to explore their compatibility and engage in sexual relations without the commitments associated with marriage (Raley, 2001; Rutigliano and Esping-Andersen, 2018; Stipkova, 2015). Women in cohabiting unions usually experience greater sexual and reproductive decision-making power compared to married women who need to consider their husband’s family planning ideals (Raley, 2001).

The recent European fertility literature also documents an increase in births to women in cohabiting unions and an increase in never-married mothers who enter into cohabiting unions (Jalovaara and Andersson, 2018; Klusener, 2015; Klusener and Goldstein, 2016; Rutigliano and Esping-Andersen, 2018; Stipkova, 2015; Surkyn and Lesthaeghe, 2004). These increases in cohabiting unions are linked to the broader economic changes as marriage has become costly for many young couples (Mack, 2017; Stipkova, 2015; Surkyn and Lesthaeghe, 2004). Cohabitation is also used as a solution in cases where women become pregnant outside of wedlock as cohabitation replaces marriage (Mack, 2017; Stipkova, 2015). Lastly, the changing social norms and values have created a platform for cohabitation to transition from being a prelude to marriage to a socially and legally accepted family formation structure (Mack, 2017; Rutigliano and Esping-Andersen, 2018; Stipkova, 2015).

2.9.4 Non-marital fertility within an African context

Non-marital births have also been documented on the African continent and similar to European countries (Klusener, 2015; Klusener and Goldstein, 2016), spatial differences are noted in the levels of non-marital fertility across the continent (Clark et al., 2017; Smith-Greenaway and Clark, 2018). On the African continent, the levels of non-marital fertility vary across the different West African countries. For example, between 2010 and 2015, 3.5% of women aged 10-25 gave birth outside of wedlock in Niger and 10% in Mali (Clark et al., 2017)[50]. In Guinea and Togo, less than 15% of women had non-marital births between 2010 and 2015 while higher levels of non-marital fertility are noted in Liberia (40%), Sierra Leone (24.1%) and Cote d'Ivoire (30.4%) for the same period (Clark et al., 2017; Smith-Greenaway and Clark, 2018). Data from the central African countries are sparse because of civil unrest however the levels of non-marital fertility vary from 12.4% in the Democratic Republic of Congo to 45% in Gabon between 2010 and 2015 (Clark et al., 2017). Ethiopia (below 5%) maintained the lowest level of non-marital fertility in northeast Africa (between 2010 and 2015) while countries like Rwanda experienced a rapid increase in the levels of births outside of a marriage from 5% to 13.8% over 25 years (1990-2015). Kenya, on the other hand, experienced

[50] Using the Demographic and Health Surveys, this study focused on premarital births to women aged 10-25 years across the various countries in sub-Saharan Africa (Clark et al., 2017). Therefore, the statistics that are provided in this paragraph and the next provide the percentages of women aged 10-25 years who had a child outside of a marriage.

a rapid decline of 7.1 percentage points in levels of non-marital fertility between 1990 to 2015 (Clark et al., 2017).

Differing trajectories of non-marital fertility are noted among countries in the same region. For example, Tanzania, which initially had a similar profile of non-marital fertility to Uganda experienced a decrease in the levels of non-marital fertility while the levels of non-marital fertility in Uganda increased between 1990 and 2015. Differences in the levels of non-marital fertility are also documented in the southeastern African countries with levels in Malawi fluctuating around 10% between 1990 and 2015. This differs from the 25% noted in Mozambique and Zambia during the same 25-year period (Clark et al., 2017). Lastly, nearly 60% of women in Namibia (southern Africa) gave birth out of wedlock between 1990 and 2015 suggesting that non-marital fertility is a common feature of the country (Clark et al., 2017; Smith-Greenaway and Clark, 2018). A growing prevalence of non-marital births is also documented in Ghana (Fledderjohann, 2017).

The drivers of non-marital fertility on the African continent include the increasing age at first marriage (Fledderjohann, 2017; Smith-Greenaway, 2016) however factors such as premarital sexual activity and contraceptive use have a greater effect on levels of non-marital fertility compared to the age at first marriage (Clark et al., 2017). Similar to the spatial differences in the levels of non-marital fertility, the social acceptance of having a child outside of a marriage differs by country. For example, in some African countries where having a non-marital birth remains stigmatised and discouraged, unmarried mothers face greater risks of being socially ostracised. These women are perceived as having dishonoured their family and as a result, receive limited (if any) support from family and extended social networks (Clark et al., 2017; Smith-Greenaway and Clark, 2018).

Unmarried mothers in African countries are also found to spend between 2 to 13 years as a single parent before entering into a marriage (if at all). These women also tend to marry at an older age and have difficulty finding a suitable spouse compared to childless, unmarried women (Clark et al., 2017; Smith-Greenaway and Clark, 2018). Non-marital births are also associated with negative health outcomes for the mother (increased risk of contracting sexually

transmitted infections (STIs)) and the child (increased risk of under 5 mortality) (Smith-Greenaway, 2016). However, recent research has found that the adverse health outcomes for children who are born to unmarried mothers can be mitigated if the mother can at least read and write (Smith-Greenaway, 2016). Interestingly, it is often the case that pregnancies experienced by unmarried African[51] women are unplanned (Smith-Greenaway and Clark, 2018).

2.9.5 Non-marital fertility in South Africa

Thus far, a gap in the South African literature has been identified as there are no national estimates of non-marital fertility. The data from several demographic surveillance sites suggest an increase in non-marital fertility however, evidence of this increase is still required at a national level. This underscores the importance of this study as it sets out to identify whether there has been an increase in non-martial fertility in South Africa and in particular, among older mothers. The empirical evidence of non-marital fertility in South Africa is limited for three main reasons; firstly, vital statistics were not collected from all South Africans during the apartheid era (Moultrie and Timaeus, 2002; Palamuleni et al., 2007; Udjo, 2014); secondly, to date, the South African literature on non-marital fertility has been primarily focused on adolescent fertility (Grant and Hallman, 2008; Hallman, 2005; Kara and Maharaj, 2015; Kaufman et al., 2001; Kaufman and Stavrou, 2004; Makiwane and Udjo, 2006; Panday et al., 2009). Lastly, contemporary research tends to focus on South African fertility (Burger et al., 2012; Chimere-Dan, 1997; Moultrie and Timaeus, 2002; Moultrie et al., 2012) and marriage (Channon et al., 2016; Garenne, 2016; Palamuleni, 2010; Posel et al., 2011; Rudwick and Posel, 2012, 2013, 2014; Udjo, 2001; Zwang and Garenne, 2008) as two separate social issues. This gap in the literature highlights the need for research and empirical data on non-marital fertility in South Africa. Additionally, the anthropological research conducted during the 1970s and 1980s, which focused on understanding the cultural reactions to marriage and births outside of a marriage, lacked a numeric description of non-marital fertility (Moeno, 1977; Preston-Whyte, 1988; Preston-Whyte and Zondo, 1989).

[51] In this case, African women refer to women from African countries and not particularly Black women.

The factors enabling changes in the fertility behaviour in contemporary South Africa are similar to those found in high-income countries and include a growing share of educated and employed women, the feminisation of the labour force (which does not necessarily guarantee female employment) (Casale, 2004; Casale and Posel, 2002; Hall and Mokomane, 2018; Ntuli, 2007; Patel et al., 2006) and urbanisation (Chimere-Dan, 1997; Palamuleni et al., 2007; Rossouw et al., 2012). Changes in the attitudes and behaviours towards marriage (Garenne et al., 2001; Palamuleni, 2010; Posel et al., 2011; Sennott et al., 2016; Udjo, 2001), sexual activity and gendered roles (Gustafson and Worku, 2006; Moore, 2013; Moore and Govender, 2013; Posel and Rudwick, 2011, 2013) within domestic settings have also contributed to the increase in births to unmarried women and a general postponement of fertility. Lastly, the cultural marriage practice of *ilobolo* has influenced the levels of marriage in the country and have indirectly contributed to non-marital fertility in South Africa (Garenne et al., 2000; Garenne et al., 2001; Madhavan et al., 2013; Palamuleni, 2010; Posel and Rudwick, 2011, 2013, 2014).

The social realities of South Africans continue to be influenced by the lasting effects of apartheid policy (Budlender and Lund, 2011; Palamuleni et al., 2007) and as a result, non-marital fertility is characterised by racial differences. For example, in 2008, 92% of White mothers aged 20-50 were ever married[52] compared to 39% of Black mothers of the same age (Posel and Rudwick, 2012). In particular, non-martial fertility among Black women is associated with changes in the sociocultural frameworks which govern and regulate marriage and fertility (Zwang and Garenne, 2008). Before the 1980s, fertility and non-marital sexual behaviours were predominantly influenced by Black tradition during which time, non-marital births were not a common occurrence (Preston-Whyte, 1988; Preston-Whyte and Zondo, 1989).

Fertility, marriage and sexual behaviours have since changed in South Africa, due to the influence of discriminatory policies on the family during the apartheid era (Budlender and Lund, 2011) and the allures of post-apartheid freedoms such as urbanisation, a cash economy and the access to education and employment (Zwang and Garenne, 2008). Given these sociocultural changes in contemporary South Africa, the fertility and marriage patterns that

[52] Ever married includes married, widowed and divorced mothers (Posel and Rudwick, 2012).

were established in the apartheid era continue to influence the amount of time men spend engaging with their children (Budlender and Lund, 2011). Lastly, non-marital fertility, as a demographic factor, has the potential to limit fertility (Burger et al., 2012; Palamuleni et al., 2007). This is the case as unmarried mothers are not subject to spousal and/or familial pressures and therefore have more freedom to plan the size of their family and the timing of their births. These women are at liberty to start and build a family when they are ready to be a parent and are financially stable (Burger et al., 2012; Palamuleni et al., 2007).

2.10 Concluding remarks

The literature reviewed in this chapter has outlined an increase in non-marital fertility within a high-income country context. The drivers of non-marital fertility within these countries include an increase in female education and employment. These factors have resulted in women having more control over their fertility which includes the widespread and effective use of contraception. Within these countries, having sex before marriage and having a child outside of a marriage has become a norm which has created a platform for the growth in levels of non-marital fertility. Specific to European countries, the literature detailed that the economic crisis has resulted in delayed marriage as couples experience difficulties in paying for a wedding. Against this backdrop, the levels of non-marital fertility have increased in relation to an increase in cohabitation.

A change in the attitudes and behaviours towards marriage are also noted as drivers of non-marital fertility in high-income countries. Women in these countries place more value on the self and as a result, are selecting to remain unmarried while continuing to have children. In contrast, the increasing age at first marriage is identified as a driver of non-marital fertility within a middle- to low-income country context. Additionally, the increased use of modern contraceptive methods and changing sexual behaviours and childbearing norms are contributing to the growth in the levels of non-marital fertility within an African context. Overall, the literature underscores the notion that the increase in non-marital fertility is associated with female development.

There is limited literature that provides a national perspective of non-marital fertility in South Africa. Nevertheless, the decreasing marriage rates in the country, coupled with changing household structures, have created a platform for non-marital fertility in the country. Contributing to this context is the changing gendered roles, increased female education and employment and a change in attitudes and behaviours towards marriage. Specific to contemporary South Africa is the relationship between the cost of *ilobolo* and marriage and its subsequent effect on non-marital fertility in the country. In comparison, South Africa has similar drivers of non-marital fertility as high-income and other middle- to low-income countries; however, for South Africa, the concept of having children outside of a marriage is not new. The apartheid population control policies, culture and the restriction of the free movement of Black people are associated with non-marital fertility in the country.

Within this context, this thesis aims to address the lack of empirical data on non-marital fertility at a national level. In doing so, this thesis will identify whether there is an increase in the levels of non-marital fertility in South African and among older women. Furthermore, any changes in the socioeconomic and/or demographic profile of never-married mothers will be identified together with the drivers of non-marital fertility in the country. This thesis further investigates the concept of non-marital fertility by exploring South Africans' views on topics related to premarital sex and childbearing outside of a marriage. Lastly, the empirical findings that are presented in this thesis are compared with the narratives of the life histories of South African NMOMs to ascertain whether the lived realities are similar to or at odds with the reported survey data.

The next chapter is focused on the data and methodologies that are used in this thesis. The chapter begins with an overview of South African survey data and highlights the surveys which are most suitable for use in a study that requires the analysis of socioeconomic and demographic variables. The remainder of the chapter details the methods used to identify NMOMs in the GHS and the NIDS and presents an overview of the key explanatory variables which will be explored in the various analysis chapters. The value of and purpose for analysing attitudinal data (the SASAS) in this thesis is then discussed which is followed by an outline of the qualitative research design employed. The latter part of the chapter focuses specifically on

the different qualitative and quantitative analysis techniques used in the empirical chapters in this thesis.

Chapter Three: Data and Methodology

3.1 Introduction

This study employs a mixed methods approach to the investigation of non-marital fertility in post-apartheid South Africa. A mixed methods approach is of particular value to a study on fertility and nuptiality behaviour as the qualitative methods that are employed, paint a picture of the different paths which lead to an individual becoming a NMOM. While the statistical power that is provided by the quantitative methods makes results generalizable and reproducible, an important characteristic for policy and program intervention. The quantitative and qualitative research methodologies that are used in this study are designed to supplement each other as the findings from the survey data influence the sampling frame and the strategies that are used to select the qualitative sample. In turn, the findings from the thematic analysis that are used to identify the potential explanatory variables in the regression analysis chapter. In addition, the inclusion of the SASAS data provides a unique perspective on the opinions and beliefs related to non-marital fertility in South Africa, at a national level.

The chapter begins with a review of South African survey data, presenting an account of the various surveys and their limitations in a study on non-marital fertility among older women. This is followed by a detailed discussion of the suitability of the GHS and NIDS data for inclusion in this thesis. The chapter goes on to describe the study sample, the different methods that are used to identify the dependant variable in the GHS and the NIDS data and provides a summary of the key explanatory variables that are used in the characteristics, trends and regression analysis chapters. A discussion of the uniqueness of the SASAS data and its value to this thesis is presented which precedes an overview of the qualitative research design. The chapter ends with a description of the specific qualitative and quantitative methods of analysis that are used in each empirical chapter of this thesis.

3.2 Review of South African survey data

The process of identifying datasets for analysis is difficult as nationally collected surveys often do not contain detailed birth histories and socioeconomic and labour market information, all in one survey. This is one of the main challenges experienced when identifying datasets which assist in answering the key questions of the study. At the very least, the selected surveys should contain detailed birth histories of all women who are enumerated as this fertility information is essential in calculating the mother's age at birth. In particular, the birth histories must include the mother's year of birth (or age at enumeration), her marital status, socioeconomic and labour market characteristics, and the year of birth (or age at enumeration) of each of her children (irrespective if they are no longer alive or live elsewhere). These pieces of information are integral to firstly, identifying a sample of never-married mothers, aged 30-49 at the time of enumeration who had at least one birth after the age of 29. And secondly, this information allows for various types of analysis of the socioeconomic and demographic characteristics of NMOMs.

Table 1: Key information required to identify a never-married older mother

	Demographic information required			
	Has the respondent ever given birth?	**Mother's age or year of birth**	**Age or year of birth for all children ever born to a woman**	**Marital status of mother**
Datasets				
Project for Statistics on Living Standards and Development	*	*		
South African Population Census	*	*		*
Community Survey	*	*		*
South African Demographic and Health Study	*	*	*	*
Labour Force Survey		*		*
Quarterly Labour Force Survey		*		*
Income and Expenditure Survey		*		*
Living Conditions Survey		*		*
October Household Survey	*	*	*	*
General Household Survey	*	*	*	*
National Income Dynamics Study	*	*	*	*
National Vital Statistics	*	*	*	

Source: Various South African Surveys

Table 1 presents a summary of the different types of information that is required in a survey for it to be included in this thesis. The table also includes the various nationally collected South African surveys and whether these surveys satisfy the requirements for inclusion in this thesis. Ideally the study would have begun with the analysis of the 1993 Project for Statistics on Living Standards and Development (PSLSD) which was developed and collected in the nine months prior to South Africa's first democratic election. The survey collected data on the living conditions of the population and was used to inform the reconstruction and development policies and programs that were established under the newly elected demographic government. However, the fertility information collected in this survey primarily focuses on the birth of the youngest child and not on any prior births (in cases with older children). The respondents are also not asked directly for their marital status as the question in the survey asks: *"if the spouse of .... lives here, write the spouse code"* – thus, commonly used marital status options such as married, living together, never married, divorced and widowed are not available as response options. Due to the lack of these crucial pieces of information (birth and demographic information on marital status), the 1993 PSLSD is not suitable for use in this thesis.

The South African Census (1996, 2001 and 2011) and the Community Survey (CS) (2007 and 2016) also do not meet the inclusion criteria as they only collect information on the last birth a woman has experienced. The CS is conducted in between census rounds to produce a 'half-time' picture of the population. Aside from the population census, the CS is the largest survey with approximately 1.3 million households sampled in 2016 and aims to provide information on key population and household indicators that are used to inform policy, program intervention and decision-making strategies between census years.

The South Africa Demographic and Health Surveys (SADHS) contain information on a myriad of demographic and health related themes. Specifically, the information collected on women's employment are designed to understand the gender relations (within relationships) that surround female labour force participation and how earnings are spent. Although the SADHS collects in-depth fertility data, it is excluded from the study as it lacks relevant socioeconomic indicators. In a similar manner, all rounds of the Labour Force Survey (LFS) and the subsequent Quarterly Labour Force Survey (QLFS) contain a wealth of demographic, economic and labour market indicators but lack information on women's birth histories. The Income and

Expenditure Survey (IES) which focuses on changes in the income distribution and consumption patterns of South Africans do not contain any fertility data. This is also the case with the Living Conditions Survey (LCS) (except for one question on whether anyone is pregnant in the household) which focuses on understanding the living conditions of South Africans and monitoring the changes in subjective poverty over time. The lack of birth histories in these datasets restrict the classification of NMOMs and are therefore, not included in this thesis.

The October Household Survey (OHS), collected between 1993 and 1999 is South Africa's first nationally representative household survey. This annual survey was developed in response to the suspended Current Population Survey (CPS) which enumerated Blacks in 1990 and Indians and Coloureds in 1991. As a result, the OHS was the first household survey to gather information on all South Africans as the country transitioned from apartheid to a democratic political dispensation. The main aim of the survey was to provide information on labour market indicators, the informal sector, fertility, mortality, migration and households. The GHS replaced the OHS after 1999. The fertility data that is collected in the OHS satisfy the requirements for inclusion in this study, however, the discrepancies (between the OHS and the GHS/ NIDS surveys) in the sampling universe and the variable categories make the survey less suitable for inclusion. In particular, the 1993 OHS cannot be used in this study as the sampling universe does not include individuals from the previously identified TBVC states[53]. Additionally, this round of the OHS does not include a unique person identifier that is required to merge the different data files[54]. The birth data file in the 1996 OHS was not released for public use because of multiple errors with the data (Statistics South Africa, 1996) and the birth data in the 1999 OHS survey only asks about births in the last twelve months therefore, these rounds of the OHS cannot be included in this thesis.

[53] The TBVC states were a part of the Bantustan areas demarcated for residence by Black South Africans during apartheid. These areas include the states of Transkei, Bophuthatswana, Venda and Ciskei.

[54] I have contacted Stats SA on many occasions requesting advice on how the different files should be merged however, the representatives I spoke with were unable to assist indicating that the survey is old and there are no OHS subject specialists that are available.

The remainder of the rounds of the OHS (1994, 1995, 1997 and 1998) contain variable categories which do not match with those that are used in the GHS and the NIDS. For example, the geographic location variable in the GHS and NIDS make use of the following categories: tribal authority, formal urban, informal urban and formal rural areas[55] while in the OHS, the geographic locations are identified as urban and rural areas. In a similar manner, the person file[56] in the OHS only presents one tertiary education category: degree and higher[57] while the NIDS and the GHS present multiple options of post-school education. Additionally, identifying mothers in these rounds of the OHS is difficult as there is no way to link a child with the person in the household that is the mother[58]. As a result, the OHS series is not included in this thesis. Lastly, birth data from the national vital statistics cannot be used as the mother's marital status is not collected. Additionally, the data do not collect any information on the mother's socioeconomic and/or demographic characteristics. Stemming from this analysis of the South African survey data that is available for use, the General Household Survey (GHS) and South Africa's first panel study - the National Income Dynamics Study (NIDS) emerge as the most suitable datasets for a study on non-marital fertility among older women.

The summary in Table 2 provides a closer look at the different data sources used in the international studies on non-marital fertility. The information shows that panel studies, national vital statistics and national surveys which focus on the family are the main sources of data used in these studies on motherhood. Similarly, this thesis uses a nationally representative panel study (used as cross-sectional data), the NIDS and household survey data, the GHS for analysis. However, it is important to note that South Africa lacks data sources which primarily are focused on the household, family dynamics, household formation structures and family

[55] This is except for the 2017 GHS which presents the geographic location data as farms, tribal and urban areas.

[56] The worker files in the OHS (which only collects data from employed individuals) contains information on educational levels however, this file cannot be matched and merged with information in the person file.

[57] The formal schooling categories that are used in the OHS are the same as those that are used in the GHS and the NIDS.

[58] For example, there is no 'person identifier' in the child data which identifies the mother in the household.

wellbeing. An outline of the suitability of the GHS and the NIDS is presented in the next section.

Table 2: Sources of data used in studies on single motherhood among adult women in the Unites States and various European countries

Data source	Country	Study reference
National Vital Statistics System	The United States	Ventura, 2009
Births data from National Centre for Health Statistics Early Childhood Longitudinal Study, Birth Cohort from National Centre for Education Statistics within the US Department of English	The United States	Wildsmith, Steward-Streng and Manlove, 2011
Fragile Families and Child Wellbeing Study	The United States	Mclanahan, 2004
Current Population Survey by Bureau of Census National Survey of Family Growth by National Centre for health Statistics	The United States	Wu, Bumpass and Musick, 2000
National Survey of Families and Households and National Survey of Family Growth	The United States	Raley, 2001
National Longitudinal Survey of Youth	The United States	Upchurch, Lillard and Panis, 2002
Panel Study of Income Dynamics	The United States	South, 1999
National vital statistics of different European countries ifo Prussian Economic History Database Eurostat -Statistical Atlas	Europe	Klusener, 2015
National birth registration data	Germany	Klusener and Goldstein, 2016
National birth registers of various European countries European Union Statistics on Income and Living Conditions European Values study European Social Survey International Social Survey Program World Values Survey Association	Europe	Mack, 2017[59]
National vital statistics registers	Finland	Jalovaara and Andersson, 2018
National birth register	The Czech Republic	Stipkova, 2015

Source: The various studies referenced in the table.

[59] This article is focused on non-marital fertility within cohabiting unions and is therefore not reviewed in detail in the literature review.

3.2.1 The General Household Survey

The General Household Survey (GHS)[60] is designed to collect data at a household and individual level and aims to measure the development and performance of government-initiated programs and projects. At a household level, information on access to services, water and sanitation facilities, transport, dwelling type, agricultural production and home ownership is collected. Information on fertility, mortality, education, employment, income, health, disability and access to social services is collected at an individual level. Additionally, the national coverage of the GHS enables the measurement of the living circumstances of South Africans. After the OHS was discontinued in 1999, the GHS was introduced in response to the lack of key national indicators on living conditions (such as education, health and access to services and facilities) and continues to be collected annually with the first edition collected in July/August 2002. The GHS survey, which is representative of non-institutionalised and non-military persons and households in South Africa, includes *de jure* household members from all nine provinces and residents who live in worker hostels. The individuals who live in collective living quarters such as old-age homes, hospitals, student hostels, prisons and military barracks are not included in the survey's designated target population.

A multistage stratified sample was drawn using the probability-proportional-to-size (PPS) sampling principles in the 2002 to 2006 rounds of the GHS. These samples were drawn from the 1999 master sample produced by Statistics South Africa (Stats SA) which was informed by the enumeration areas that were established in the demarcation phase of the 1996 Census. The master sample for the 2008 to 2014 rounds of the GHS changed to the 2007 master sample which was produced by Stats SA for the QLFS. During these years, the survey used a two-stage stratified design and PPS sampling was used to identify the primary sampling units (PSUs) within each strata and systematic sampling was used to identify dwelling units from within the PSUs.

Using the same sampling methods, the master sample for the 2017 round of the GHS was changed to the 2013 master sample released by Stats SA which is informed by the 2011 census. In most cases, the master sample is used by other household surveys like the QLFS, the LCS,

[60] The various reports that have been published for the different rounds of the GHS can be downloaded from the Stats SA (http://www.statssa.gov.za/) and DataFirst (https://www.datafirst.uct.ac.za/) websites.

the Domestic Tourism Survey (DTS) and the IES. In order to avoid respondent fatigue, the master sample is divided into five clusters and samples for each survey are drawn from different clusters. The sample used in the GHS is designed to be representative at a provincial level and at a metro/non-metro level within the different provinces. A total of 3000 PSUs was identified using the 1999 master sample, 3080 with the 2007 master sample and 3324 using the 2013 master sample.

When the 2002 GHS data was initially released for public use, one of the main limitations was that the results could not be compared with earlier surveys like the OHS or the LFS. The main reason for this lack of comparability was because the GHS population estimates were calibrated to the 2001 Census population totals whilst the population estimates from the earlier surveys such as the OHS and the LFS were calibrated to the 1996 Census population totals. This limitation has since been addressed as the weights from the earlier surveys have been recalculated using the population totals from the 2001 Census. This change in the calculation of the weights enables the comparability of the 2002 GHS data.

Whilst the 2002 GHS and the 2001 Census are comparable at an individual level, their lack of comparability at a household level proves to be a further limitation. Given the inherent difference in the structure of the datasets (one being a census and the other a sample household survey), the incomparability at a household level stems from the use of different methodologies. For example, the difference in the way the GHS and the Census deals with hostels in the data collection phase impact their comparability at a household level. Similarly, the labour market indicators cannot be compared between the 2002 GHS and the 2001 Census as the GHS has the capacity to ask more probing questions to elicit detailed responses which cannot be done when conducting a population census (due to the large nature of the survey and budget and time constraints). These incomparability issues have been addressed by Stats SA in subsequent data conceptualisation and collection processes to encourage and ensure the comparability of the existing and future datasets.

The 2002 GHS is particularly well suited for a study on fertility as the survey collected a specialised birth roster which contains a detailed birth history of all children born to women[61] in the household. The information that is included in these birth histories outline the child's date of birth, name, place of residence, place of birth and whether the birth was registered (and if not, why). Data are also collected on children who have passed away since birth and those who no longer live in the same household as their mother. The survey only collects information on children who were born alive and therefore, information on children who were adopted, fostered or still born are not included in the dataset. The availability of these detailed birth histories coupled with the information on employment, education, and the various socio-demographic factors make the 2002 GHS a useful starting point to understand fertility trends among middle-aged South African women. The subsequent rounds of the GHS do not contain these detailed birth histories (as done in the 2002 GHS) therefore, in the 2004 to 2017 rounds of the GHS, information on whether child/ren live in the same household as their mother are used to identify women's birth histories. In these cases, the information on the child's date of birth assists in identifying whether the mother satisfies the criteria of a NMOM. Ideally, birth histories (as collected in the 2002 GHS) that are collected each year would have been a better source of fertility data however, in the absence of other household survey data, the alternate rounds of the GHS from 2004 until 2017 (including 2002) are used for analysis.

The GHS data are freely downloadable from the DataFirst website. There are five files of the 2002 GHS data that are available for download and these are: the birth roster, person, child, worker and household data files. For years 2004 to 2008, four data files are available; household, person, tourism and worker files and from 2010 and onwards, only the household and person data files are available for download. The household, worker, person and birth files (where applicable) are merged to form a master dataset which is used for the analysis in this thesis. Each observation in the dataset[62] is assigned a household number that is used to identify the household an individual belongs to and a person number which is used to identify individuals who belong to the same household. The household identifier and the person number

[61] The 2002 GHS collected birth histories for women aged 12-50 years.

[62] All observations with the same household identifier, irrespective of the data files they are in, belong to the same household.

combine to form a unique individual identifier which is used for merging the different data files.

The GHS household weights are developed in two stages and are used to create individual weights. The first stage in the calculation of household weights identifies the probability of the PSU being selected (taking into consideration the urban/rural strata) while the second stage calculates the probability of selecting dwelling units from within identified PSUs. These household weights are then further adjusted to match the age, race, sex and provincial estimates (as reported in the annual midyear population estimates released by Stats SA) to create individual weights (Statistics South Africa, 2003). Stemming from this process, the post-stratified person and worker weights are present in all rounds of the GHS. The original weights which were created for the 2002 to 2008 rounds of the GHS have been recalculated to reflect the revisions in the population estimates from the 2007 CS, the readjusted provincial boundaries and the new information on the impact of HIV/AIDS on the demographic characteristics of the South African population.

3.2.2 National Income Dynamics Study

NIDS[63] is South Africa's first (and only) nationally representative household panel survey. Information gained from the first wave of the study in 2008 serves as a benchmark to measure the country's progress and the effectiveness of policies and programs in promoting positive social mobility (measured in subsequent waves). One of the main benefits of a panel study is being able to identify individuals who have managed to transcend the cycle of poverty and those who have not, those who are progressing in society and those who are falling behind. Panel studies also compare younger generations with older generations to ascertain whether children are faring better than their parents. Another key use is to identify whether government-initiated programs and policies are driving societal change. This is possible because the panel

[63] The NIDS is funded by the Office of the Presidency. The survey is conducted by the Southern Africa Labour and Development Research Unit (SALDRU) based at the University of Cape Town (UCT). The various reports that have been published for the different waves of NIDS can be found on the NIDS (http://www.nids.uct.ac.za/) and DataFirst (https://www.datafirst.uct.ac.za/) websites.

enables researchers to monitor the impact of programs on individuals and households once they become eligible for those specific programs.

Wave 1 of NIDS was collected in 2008 with subsequent waves collected every two years. The target population includes private households and residents in monasteries, convents and workers' hostels in all nine provinces. In situations where more than one household is found on the same property and they do not share resources and food 'from the same pot', then they are treated as separate households. Lodgers and live-in domestic workers are also treated as independent households while individuals living in military barracks, old age homes, prisons and student hostels are excluded from the target population. Four questionnaires have been designed to collect information at a household and individual level[64]. At the household level, one survey per household is collected (usually from the oldest woman in the household) using the household questionnaire[65]. An adult questionnaire is administered to each household member who is aged 15 and older whilst data in the child questionnaire is collected from the child's caregiver (for each child aged between 0 to14 years in the household). Lastly, a proxy questionnaire is completed for adult household members who are unable to be interviewed in person. This questionnaire is a scaled down version of the adult questionnaire and is collected using information provided by a third party (other household members)[66] [67]. At the time of

[64] In addition to the questionnaires, fieldworkers also took height and weight measurements from all household members and weight and blood pressure readings from all adult household members. A short numeracy tests was administered to household members aged 12-59 years.

[65] The NIDS defines household members as individuals who have spent more than 15 days in the last 12 months at the household, sharing common resources and eating from the same pot.

[66] The individual derived, adult, household derived, household roster and household data files are merged to form a master dataset for each wave. These files are merged within waves forming a cross-sectional dataset and not across waves, as done with panel data. The merging is done using the 'pid' and '*Wi* hhid' variables and the individual data file is used as the master file.

[67] The suffix w1, w2, w3, w4 or w5 before variables is used to identify the different waves of NIDS.

enumeration, resident and non-resident[68] household members are surveyed. Resident household members constitute the base sample and continue to remain a part of the sample across the various waves of NIDS whilst information obtained from non-resident household members aid in highlighting links to household and familial support systems.

To date there have been five waves of the NIDS data that are released for public use[69]. Outlined in Table 3 are the sample sizes and the year/s of enumeration for each wave of the NIDS. The sample breakdown shows that with each subsequent wave there are additional individuals and households that are enumerated. These individuals take the form of new continuous survey members (CSM) or temporary survey members (TSM) who are in the household at the time of enumeration. For example, a child that is born to a CSM will become a new CSM which increases the total number of CSMs who are enumerated. Similarly, if a CSM from an existing household establishes their own household, the CSM will be tracked, and the household will be enumerated. This means that the newly established household will contribute to and inevitably increase the total number households that are surveyed. The data collection for wave 2 and 4 ran over two years and were conducted in two phases. This means that minor changes were made to the questionnaire (mostly in the education module) to allow for comparative data collection over the two years. The second phase of data collection (in both waves - 2 and 4) was a final attempt at tracking households and movers who were unable to be tracked in phase one and to interview households which were unavailable to be interviewed in the previous phase.

[68] Non-resident household members are individuals who do not stay in the particular household that is being enumerated but are present in the household at the time of data collection.

[69] Personal information which can be used to identify individuals or households are not included in the public release dataset. The SALDRU also develops an internal dataset consisting of the full geo-coding of the household, PSU information and employment coding. Use of this dataset is only possible on the premises of the DataFirst's Secure Research Data Centre, University of Cape Town and an application needs to be made to access this data.

Table 3: Individual and household sample sizes of each wave of the NIDS

Wave	Period of data collection		Individuals enumerated [70]	Households surveyed
	Start	End		
One	February 2008	December 2008	28 226	7296
Two	May 2010	September 2011	34 291	9014
Three	May 2012	December 2012	37 553	10 114
Four	September 2014	August 2015	42 372	11 726
Five	February 2017	December 2017	47 055	13 543

Source: Brophy et al., 2018

The NIDS questionnaires are designed to gather information on wealth creation, social heritage, demographic dynamics and access to social services and cash transfers. There were changes that were made to the questionnaires based on the feedback received from a pre-test phase. The final questionnaires were translated into South Africa's eleven official languages. The NIDS sampling method includes a stratified, two-stage sample design which is used to systematically select households (to be a part of the study) from the 2003 master sample provided by Stats SA. From wave 2 and onwards, the data collection process makes use of a Computer Assisted Personal Interviewing (CAPI) software. This electronic method of data collection replaced traditional paper surveys (used in wave 1) and allows for a range of quality and data assurance checks to take place. In addition, NIDS employs various rigorous data quality assurance processes to ensure that the correct information has been collected and captured. For example, an in-house call centre deals with the various data inconsistencies and tracks individuals for the next wave of data collection[71]. The data are collected using face-to-face interviews, for both the paper surveys (used in wave one) and the CAPI system. Lastly, the disaggregation of data at a provincial level is not encouraged as the NIDS sample is not designed to be representative at that level.

An attrition rate is referred to as the percentage of successful interviews in the current survey (for example, wave 4) compared to the percentage of successful interviews in a previous survey (for example, wave 3). The possible reasons for attrition include refusal, non-contact and

[70] Individuals enumerated = adult + proxy + child data

[71] Refer to the NIDS User Manual of each wave for a detailed explanation of the monitoring and evaluation procedures which were followed.

deceased. Refusal refers to individuals or households who refuse to be interviewed while non-contacted individuals are those who were unable to be located, tracked or have relocated outside of South Africa. A summary of the reasons for and percentage of each type of attrition, across all waves of the NIDS is presented in Table 4. The findings outline non-contact with individuals as the leading reason for attrition across all waves of the NIDS whilst attrition from respondents who have deceased between waves range between 11% to 16%. The table also shows that there are high percentages of individuals who have refused to be interviewed, especially in wave 5 (48%). A further analysis of attrition by race groups in the NIDS surveys indicates that non-contact is the main reason for attrition amongst Black respondents while refusals are more common among White respondents (Chinhema et al., 2016).

Table 4: Reasons for attrition by each wave of NIDS (%)

	Refusal	Non-contact	Deceased	Total attrition
Wave 2	39	47	14	100
Wave 3	45	42	13	100
Wave 4	41	43	16	100
Wave 5	48	42	11	100

Source: Brophy et al., 2018
Note: Row percentage

There are three sets of weights[72] that are released with the NIDS data: post-stratified, design and panel weights. The post-stratified and design weights are released with wave 1 and an additional panel weight is released with subsequent waves of the NIDS data. The design weights have been specifically developed to deal with the fluidity of the inclusion and exclusion of new CSM (through birth, death, non-response or refusal) and TSM (those who were resident in a CSM's household at the time of enumeration, at any wave) and adjust for household non-response. The panel weights are designed to represent individuals who have appeared in subsequent waves of the NIDS and assumes that these individuals are no longer a random sample. In essence, the panel weights are a combination of two weights: the first weight is based on the probability of being interviewed in wave 1 and the second weight is an attrition

[72] For a detailed understanding of how the weights are calculated for wave 1 (design and post-stratified weights), see: Wittenberg (2009). These methods of creating weights are used across all waves of the NIDS with the most recent midyear estimates used in the calculation of post-stratified weights. More information on the development of panel weights can be found in: Chinhema et al. (2016).

weight that is based on the probability of being re-interviewed (in a later wave). Therefore, panel weights are sensitive to whether wave 1 and 2, wave 1 and 3, wave 1 and 4 or wave 1 and 5 are being used as a panel. In its design, panel weights are developed to correct for attrition and are recommended for use when the data are being used in its panel form.

The last type of weight is the post-stratification weight which has been adjusted to match the annual age-sex-race mid-year population estimates that are released by Stats SA. An example of a sampling inconsistency that is corrected through the use of post-stratified weights is the underrepresentation of young Blacks and the overrepresentation of elderly Black people across all waves of the NIDS panel. When the post-stratified weights are applied to the data, the estimates of elderly Blacks are scaled down and the estimates of young Black people are adjusted upwards to match the mid-year population estimates. In essence, the post-stratified weights are modified design weights (that correct for non-response) that are calibrated to match the population totals, thus making them post-stratified weights. Although the sample size between each wave may change because of attrition and the addition of new CSMs and TSMs, post-stratified weights treat each of the NIDS waves as an independent dataset where the weighted sample totals are correlated with the population totals.

Caution should be used if the post-stratified weights are applied to the individual analysis of an Indian sub sample as small sample sizes among older Indian people have resulted in large standard errors. Calibrating the NIDS estimates to the mid-year population totals is an important feature of post-stratified weights as it allows for a comparison of the NIDS data with other nationally representative data - in this case, the 2002 to 2017 rounds of the GHS. Finally, the use of post-stratified weights is encouraged when the data are being used in a cross-sectional form (instead of a panel form) and when the analysis is disaggregated by age-sex-

race demographics, as done in this thesis[73]. As a result, the post-stratified weights are used in the analysis of the data in all five waves of the NIDS[74].

NIDS is well suited for use in this thesis as it collects a detailed birth roster at each wave and contains information on women's socioeconomic and demographic characteristics. In the adult questionnaire, 'Section C1: Children ever born' gathers information on the total number of births experienced by women aged 15 and older, the survival outcome of all births, the living arrangements of all children born and whether the respondent is currently pregnant. 'Section C2: Birth history' focuses on each child born to women aged 15 and older and includes information on the child's name, date of birth, survival status and living arrangements. This birth information is only collected for biological children and therefore, the data are not representative of children who have been adopted or those who are being fostered.

The questions that are asked in wave 1 of NIDS differ from those asked in the subsequent waves. This is the case as wave 1 collects detailed information from respondents which forms the baseline of the study while the questions that are asked in the subsequent waves of NIDS confirm details like the date of birth, gender, the living arrangements, employment status and whether children are still alive in each subsequent wave. Although there are different questions that are asked in each wave, the data released for public use contains the same variables which allows for the comparison of data across all waves of the NIDS. Collecting information in this manner is in keeping with the panel design of the study.

[73] The difference in the 2014 NIDS estimates using post-stratified and panel weights are as follows (standard errors in parentheses): Post-stratified weights – Gender: male 48.91% (0.47), female 51.09% (0.47). Marital status: married 27.50% (0.57), cohabiting 6.62% (0.25), widow 7.42% (0.33), divorced 3.05% (0.26) and never married 55.42% (0.60). Panel weights – Gender: male 48.20% (0.51), female 51.80% (0.51). Marital status: married 26.87% (0.55), cohabiting 6.14% (0.28), widow 7.53% (0.28), divorced 3.08% (0.22) and never married 56.38% (0.58).

[74] All waves of the NIDS have been freely downloaded from the DataFirst website.

3.3 The study sample

The group with which the study is concerned are never-married women who had at least one child after the age of 29 and are aged between 30-49 at the time of enumeration. Using a minimum age of 30 sheds light on women who have delayed their fertility. Similar age criteria are used by Wu and MacNeill (2002), Liu and colleagues (2011) and Ventura (2009) in their studies on births to unmarried women in the United States. Additionally, the milestones which usually represent adulthood[75] are increasingly being met closer to the age of 30 as women spend more time in the education system, live with parents for longer and take additional time to develop themselves financially and socially (Wu and MacNeill, 2002). Given that South African women have an older average age at first marriage (Statistics South Africa, 2019) compared to women in other African countries, limiting the survey sample to women who are the age of 30 (as the lower limit) includes those women who may marry for the first time (Moore and Govender, 2013). Restricting the survey sample to women who were aged 30-49 at the time of enumeration provides an element of consistency to the study as women of the same ages are being focused on over the period of analysis. The exclusion of women older than age 49 could potentially improve the quality of the data as older mothers are more likely to provide incorrect or missing date of birth information for their children (Rossouw et al., 2012).

It is plausible that the economic challenges experienced by never-married mothers aged 30-49 are also experienced by younger, never-married mothers (Senior and Chenhall, 2008). Recent research explains that younger, never-married mothers often live in their parental households which provides a support structure for these young mothers and their children (Malindi, 2018). Conversely, the increase in female-headed households (Hall and Mokomane, 2018) suggests that older mothers are often female household heads or live in female-headed households which are vulnerable to economic difficulties (Dungumaro, 2008; Rogan, 2013, 2014, 2016). As a result, focusing on women aged 30-49 will provide much need insights into the characteristics of these mothers. As mentioned elsewhere, the primary focus of current literature on non-marital fertility is focused on adolescents (Ardington et al., 2014; Odimegu et al., 2018; Rosenberg et al., 2015) and women younger than the age of 30 (Garenne et al., 2000; Posel and

[75] Milestones such as the establishment of a household, job stability, and marriage (Wu and MacNeill, 2002).

Rudwick, 2012; Sennott et al., 2016), this further underscores the need to focus on women who are aged 30 and older.

Women need to satisfy three criteria to gain inclusion into the survey sample; the first criteria require women to have had at least one birth after the age of 29 which could happen by being classified into one of two groups of women. The first group are women who had a birth before the age of 30 (this includes women who gave birth as teenagers) and had subsequent births after the age of 29. The second group focuses on women who experienced their first birth and subsequent births after the age of 29. In both of these instances, the main restriction is that women should have had at least one birth after the age of 29. The second criteria for inclusion in the survey sample is that these mothers should be aged between 30-49 years at the time of enumeration while the final criteria require these mothers to have never been married.

Table 5 presents a summary of the percentage of NMOMs, as a share of all mothers aged 30-49 and all mothers aged 15-49 between 2002-2017. The table also presents the percentage of never-married mothers as a share of all mothers aged 15-49. Of all mothers aged 30-49, the largest share of NMOMs are noted in 2006 (GHS - 31.49%) and 2012 (NIDS – 46.90%). Similarly, of all mothers aged 15-49, the larger share of NMOMs are noted in 2008 (GHS - 12.59%) and 2012 (NIDS – 22.24%). These findings reveal minimal changes in the share of NMOMs over time suggesting that there has been no significant increase in the percentage of NMOMs between 2002 and 2017.

Looking at the analysis of non-marital fertility among all mothers (Table 5), the results highlight an increase in the percentage of never-married mothers as a share of all mothers who are aged 15-49. The analysis of the GHS data reveals a statistically significant increase of 18.43% in the percentage of never-married mothers (as a share of all mothers who are aged 15-49) between 2002 and 2017. In a similar manner, the analysis of the NIDS data reveals a statistically significant increase of 28.94% in the percentage of never-married mothers (as a share of all mothers who are aged 15-49) between 2008 and 2017. Overall, the analysis in Table 5 shows that there has been a significant increase in non-marital fertility among all mothers aged 15-49 in South Africa and that this increase is not driven by an increase in the share of

NMOMs. Although there is no evidence that shows an increase in NMOMs, the results show that NMOMs consistently make up between 30-40% of mothers in their age group, over time.

Table 5: The percentage of never-married older mothers, 2002-2017

	2002	2004	2006	2008	2010	2012	2014	2017
As a percentage of mothers aged 30-49								
GHS	30.54 (1.285)	27.49 (1.254)	31.49 (1.231)	30.76 (1.085)	27.42 (1.068)	27.76 (1.032)	28.81 (1.060)	27.52 (0.951)
NIDS	--	--	--	43.25 (2.297)	39.35 (2.088)	46.90 (2.046)	38.70 (1.763)	39.72 (1.757)
As a percentage of mothers aged 15-49								
GHS	10.19 (0.490)	9.93 (0.504)	11.59 (0.517)	12.59 (0.493)	10.43 (0.440)	11.11 (0.452)	11.55 (0.459)	11.87 (0.449)
NIDS	--	--	--	18.28 (1.117)	17.80 (1.070)	22.24 (1.118)	17.91 (0.908)	20.65 (0.999)
Never-married mothers as a percentage of all mothers aged 15-49								
GHS	35.26 (0.461)	35.92 (0.474)	38.44 (0.510)	40.00 (0.469)	38.74 (0.457)	41.72 (0.480)	42.58 (0.512)	41.76 (0.468)
NIDS	--	--	--	43.06 (1.066)	49.07 (1.144)	52.76 (1.114)	53.09 (1.039)	55.52 (0.938)

Source: Own calculations from the 2002-2017 GHS and the 2008-2017 NIDS
Notes: The data are weighted
Standard errors in parentheses

The difference in the estimates between the GHS and the NIDS[76] (as shown in Table 5) suggests that the GHS surveys understate the prevalence of motherhood across all years of analysis. One of the main reasons for this difference is that the GHS surveys only capture the births of children that were in the same household as their mother at the time of enumeration while the NIDS surveys capture all the births a woman has had, irrespective of the child's living arrangements at the time of enumeration. This is an important point to note as it informs the interpretation of results in the subsequent analysis chapters.

[76] Refer to Chapter Four for a detailed outline of the differences between the NIDS and the GHS.

3.4 Identifying never-married older mothers

NMOMs make up the dependant variable as the study is primarily aimed at identifying trends in never-married older motherhood between 2002 and 2017 and identifying the characteristics of women who are most likely to be NMOMs. The section above detailed the operational definition of a NMOM as a mother who has had at least one birth after the age of 29, has never married and is aged between 30-49 at the time of enumeration. Based on this definition, this section details the methods used to identify these women in the GHS and the NIDS datasets.

In both datasets the sample is restricted to women aged 30-49 at the time of enumeration. The next requirement is to identify women who reported that they have never been married. Across all waves of the NIDS, never-married individuals are captured through the 'never married' response category of the marital status variable. Within the GHSs, years 2002 until 2008 capture never married individuals under the 'never married' response category. However, from 2010 and onwards, the following response categories captured never married individuals; 'single but have been living together with someone as husband/wife before' and 'single and have never been married/never lived together as husband/wife before'. For the analysis, these response options are collapsed to form a 'never married' category.

The term 'never married' instead of 'single' is used because being never married implies that the individual has never entered into an established marital union (which is the focus of the thesis). During the enumeration process, in communities where being divorced continues to carry a social stigma, respondents may refer to themselves as being single instead of divorced. Thus, being classified as never married very directly and deliberately indicates that the respondent has never been married. This distinction is important because the study aims to draw attention to mothers who are postponing marriage or have decided not to marry.

Lastly, the methods used to identify mothers[77] (women who had at least one birth) and their age at birth differ in the GHS and the NIDS. In the NIDS study, the question *'have you ever given birth'* is used to identify mothers. Deriving the mother's age at birth requires a few steps and it is important to bear in mind that because each birth is recorded as a separate variable, the method that is used to calculate the mother's age at birth is done for each variable (17 child variables = 17 separate calculations = 17 ageatb*i* variables) within each wave of the NIDS (wave 1 to 5). For the first step, the child's age at the time of enumeration is calculated. This is done by subtracting the child's year of birth (w*i*_a_bhdob_y*i*[78]) from the year of enumeration[79] to create a childage*i* variable where *i* represents each child ranging from 1 to 17. This 'childage*i*' variable is created 17 times to capture up to 17 births per woman which was is included in all waves of the NIDS (last variable: *childage17*). Thereafter, the child's age (variable name: childage*i*) is subtracted from the mother's age using the 'w*i*_best_age_yrs'[80] variable to produce an ageatb*i* variable where *i* represents each birth that the mother has experienced. This forms step two and is also created 17 times to represent the mother's age at birth up to her 17th child (for those women who reported up to 17 births).

The final step of this process is creating a dummy variable which includes women who had a birth after the age of 29 (represented by 1) and those who did not (represented by 0). This

[77] Information on children who have been fostered or adopted is not used to identify mothers in the NIDS data as the survey specifically asks about biological children. The indirect method of identifying mothers in the GHS series (using information of children who are present in the household as women's birth histories) makes it difficult to ascertain whether a child is a biological child, adopted child or is being fostered.

[78] For this variable (year of birth) *i* represents the birth order which ranges from 1 to 17 children. Across all five waves, respondents who were coded as missing, refused to answer or did not know their child's year of birth were set to system missing for this variable.

[79] The year of enumeration for the calculation of the child's age variable refers to 2008 for wave 1, 2011 for wave 2, 2012 for wave 3, 2015 for wave 4 and 2017 for wave 5. Data collection for waves 2 and 4 ran over 2 years therefore, the latter year is used for the calculation so that respondents who were enumerated in 2011 and 2015 are not left out of the sample.

[80] NIDS makes available a range of derived variables in each dataset. In this case, the 'w*i*_best_age_yrs' variable is derived from the year of birth information that is reported by each respondent. The respondents (across all waves of the NIDS) who indicated that they do not know their age were set to system missing.

'aged_mom' derived variable is used across all waves of the NIDS to identify mothers who had at least one birth after age 29. In a similar manner, the GHS data identifies mothers based on whether their child/ren live in the same household as them (the mother). Mothers are identified in this way as the survey does not directly ask women if they have ever given birth. Therefore, children's information identifies their mother in the household, where the unique identifier is used to extrapolate a mother's birth history[81] [82]. The same logic that is used in the NIDS data (where the mother's age at birth is calculated using the child's age) is also used in the GHS series to calculate the mother's age at birth.

One final caveat here is that the age variable that is used to produce the estimates of non-marital fertility in both of the datasets (the GHS and the NIDS) uses self-reported information that is not verified against a birth certificate or identity document. When using self-reported data of this nature it is important to be cautious of errors that may result from incorrect memory recall. For example, women who have had multiple births may experience difficulty recollecting the date of birth and the age of each of their children, especially if a child had died at a young age or if the woman gave birth when she was very young. The recalling of a child's date of birth or age can also prove difficult if the child no longer lives in the same household as the mother or if the mother has aged[83], therefore, the age of the sample group is capped at age 49.

[81] An important difference in the surveys which impact the way in which mothers are identified is that the NIDS captures information on all live births to a woman while the GHS only includes information on children who are living in the household.

[82] A limitation of identifying mothers in this manner is that children who do not live in the same household as their mother are not included in these birth histories. However, considering the limited availability of surveys which collect socioeconomic, demographic and fertility data, the GHS series is the best option for inclusion in this thesis.

[83] Older people often have difficulty with recollecting dates and events which had occurred when they were younger (Rossouw et al., 2012).

3.5 An overview of the key explanatory variables

3.5.1 Marital status

The main focus of the thesis is on NMOMs however, by providing an analysis of motherhood across the different marital categories aids in understanding the trends in non-marital fertility in comparison to the fertility trends among married, divorced and widowed women. When interpreting the fertility estimates that are disaggregated by marital status it is important to take note of the following differences between the GHS and the NIDS data. The GHS series is collected at a household level where the household head provides information on household members' marital status while in the NIDS, the respondents report on their own marital status. In some communities, divorced individuals continue to be socially stigmatised (Clark and Brauner-Otto, 2015; Kalule-Sabiti et al., 2007; Udjo, 2001, 2014) and therefore (in some cases) a household head may not willingly report that a household member is divorced. This may be the case in the GHS. A similar caution may be exercised by respondents in the NIDSs who are being interviewed around household members or if they perceive that the interviewer may regard being divorced negatively.

The second difference between the variables is the way in which the response options are categorised (see Table 6). The 2002 and 2004 rounds of the GHS capture the marital status information according to the following four categories: 1 – married or living together as husband and wife, 2 – widow/widower, 3 – divorced/separated and 4 – never married. The 2006 and 2008 rounds split the married and living together like husband and wife options into two categories, creating five response options while the 2010 to 2017 rounds classify marital status into seven different response options; 1 – legally married, 2- living together like husband and wife/partner, 3 – divorced, 4 – separated, but still legally married, 5 – widowed, 6 – single, but have been living together with someone as husband/wife before and 7 – single and have never been married/never lived together as husband/wife before.

The legally married response option includes traditional/customary marriages and civil/religious marriages. Situations where married couples obtain a court or a written agreement outlining the terms of their separation during which they live apart but remain

married are categorised as separated but still legally married. Being legally separated may lead to divorce but allows for the possibility of the couple reuniting. The difference between response options six and seven is that individuals who are single at the time of enumeration but have cohabited at some point int the past, would select response option six while individuals who have never cohabited before and are single at the time of enumeration will select response option seven. In comparison to these response options, all waves of the NIDS capture marital status into the four categories used in the 2006 and 2008 rounds of the GHS[84].

Table 6: Deconstruction of the marital status variable used in the 2010-2017 GHS

Marital status categories	Response codes in the 2010 to 2017 GHS data
1 - Married	1 - Legally married 2 - Living together like husband and wife/partner
2 - Widowed	5 - Widowed/ widow
3 - Divorced	3 - Divorced 4 - Separated, but still legally married[85]
4 - Never married	6 - Single, but have been living together with someone as husband/wife before[86] 7 - Single and have never been married/never lived together as husband/wife before

Source: The 2010-2017 GHS questionnaires

The analysis by marital status is presented according to the response categories used in the 2002 and 2004 rounds of the GHS[87] to ensure the comparability of estimates from the different surveys. The married and living together like husband and wife response options from the 2006 and 2008 rounds of the GHSs and all waves of the NIDSs are collapsed to form a married category. Lastly, Table 6 deconstructs the marital status variable that is available in the 2010 to 2017 rounds of the GHS.

[84] These categories are: 1 – married, 2 – living with partner, 3 – widow/widower, 4 – divorced or separated and 5 – never married.

[85] The individuals who reported that they are separated but legally married are categorised as being divorced because the legality of the marital union is not the focus of this thesis. The main aim is to understand whether older mothers were cohabiting/married or divorced (living separately) at the time of enumeration

[86] This response option is included in the never married category because the aim of the analysis is to estimate the percentage of never married mothers at the time of enumeration and therefore, their past living arrangements do not matter.

[87] These are: 1 – married/cohabiting, 2 – widowed, 3 – divorced and 4 – never married (as shown in Table 6).

3.5.2 Highest educational level

Economists typically draw attention to the positive effects of education on earnings in a wide range of contexts (Finn and Leibbrandt, 2018; Lam et al., 2015). As a result, an individual's highest educational level is often used as a measure of human capital and as a proxy measure of socioeconomic status (Desjardins, 2001; Jalovaara and Andersson, 2018; Oketch, 2006; Sylwester, 2002). As a proxy measure of socioeconomic status, education level is a predictor of labour market participation, earnings and wealth and is reflective of the opportunities and resources available to (in this case) woman (Jalovaara and Andersson, 2018).

Across the period of analysis (2002-2017) and between the NIDS and the GHS, there have been various response categories that are used to capture an individual's highest educational level. This is done in an attempt to represent the different post-school education and training options that are available in South Africa[88]. The various categories (outlined in Appendix A) have been consolidated into nine broad educational categories which enable the analysis and the comparison of estimates across the NIDS and the GHS datasets. A breakdown of these broad educational categories and the associated qualifications are presented in Table 7.

When interpreting the estimates of non-marital fertility which are disaggregated by the highest educational qualification, it is important to bear in mind that 'some primary schooling' refers to individuals who reported that they have completed either grade from grade R to grade 7, as their highest level of schooling. Completed primary schooling only includes individuals who have passed grade 7 and similarly completed secondary schooling only includes those individuals who have passed grade 12/matric. Respondents who completed grade 8 as their highest level of schooling, or grade 9, 10 or 11 are captured in the 'some secondary schooling' category. Post-school training and education are captured as either NTC and NCV – all levels or certificates and/or diplomas categories while individuals who obtained either an undergraduate or postgraduate degree or diploma are represented by the last two response options. These broad educational categories are used as a categorical variable in the analysis of non-marital fertility among older mothers, in both the NIDS and GHS surveys.

[88] See Appendix A for a detailed summary of the different educational levels that have been used across the GHS and the NIDS, over the years.

Table 7: Outline of the broad educational categories used in this thesis and its associated qualifications

Broad educational category	Qualification
No schooling	No formal education
Some primary schooling	Grade R to grade 6
Completed primary schooling	Grade 7
Some secondary schooling	Grade 8 to grade 11
Completed secondary schooling	Grade 12 / matric
NTC and NCV – all levels	National Certificate Vocational, and National Training Certificates – all levels
Certificates	Certificates with/without matric certificate
Undergraduate degree or diploma	All undergraduate degrees and diplomas including Honours degrees
Postgraduate degree or diploma	All Master's and Doctorate degrees and diplomas

Source: Own classifications derived from the 2002-2017 GHS questionnaires and the 2008-2017 NIDS questionnaires

3.5.3 Employment status

The analysis and presentation of South African labour market statistics are in keeping with the International Labour Organisation's standards (Brown et al., 2012). Following suit, this thesis presents the labour market statistics according to the following categories: employed, economically inactive and broadly unemployed. Economically inactive individuals are those who are younger than fifteen and older than sixty-five and also includes individuals who are studying full-time, retired, homemakers or those who are not willing to accept work. The broadly unemployed category refers to two groups of people; the first group are individuals who are willing to accept work and are actively seeking employment (searching) while the second group include individuals who are willing to accept employment but are not actively seeking employment (non-searching).

The NIDS and GHS datasets are downloaded with derived employment status variables. In the case of the GHS data, the strict[89] and broad unemployment categories are presented as separate variables[90] while the NIDSs combines these categories into one categorical variable. For all waves of the NIDS, an employment status variable is created to represent individuals who are

[89] The strict definition of unemployment refers to individuals who are willing to accept employment and are actively seeking employment.

[90] Both of these variables also include employment and economically inactive categories.

categorised as broadly unemployed, employed and economically inactive. The analysis using all rounds of the GHS make use of the derived employment status variable which represents individuals who are broadly unemployed, employed and economically inactive[91].

3.5.4 Household income

As a measure of socioeconomic status, this study makes use of a real total monthly household income value presented in 2016 prices. This means that all values are reported in real 2016 prices that are adjusted for inflation by the Stats SA's consumer price index data. The income data that is used to calculate the total monthly household income estimates are usually collected when respondents or household heads are interviewed. In cases where the respondents indicate that they 'do not know' or refuse to provide information on income, the income information is imputed based on various individual and household characteristics. All waves of the NIDS data contain a monthly household income variable[92] while a similar variable is created using the GHS data as no derived monthly household income variable is made available in the GHS datasets.

An outline of the different sources of individual level income information that is used to construct a total monthly household income variable in both of the datasets is presented in Table 8. Based on this information, a higher household income value is expected for estimates generated using the NIDS data. This is because the NIDS variable includes a larger number of income sources compared to the GHS variable. The differences in the questions that are asked in the NIDS and the GHS questionnaires is the main reason for not including similar income sources when deriving the household income variable in both of the surveys. For example, when constructing the income variable using the GHS data, household expenditure is included as a proxy for income in zero income households (Posel and Rogan, 2009, 2012, 2014). As a

[91] A derived employment status variable was not made available with the 2010 and 2012 rounds of the GHS data. An attempt was made to recreate the variable which produced estimates with large unexplainable differences and therefore it was decided to not present these estimates.

[92] This variable contains imputations for missing data (where possible).

result of these differences, the estimates of the average real per capita total monthly household income must be interpreted with caution.

Table 8: Sources of income used to derive the household income variable in the GHS and the NIDS data

NIDS derived household level income variable	NIDS individual level income variables used to construct derived variable	GHS income sources used
Labour market income	Main and second job	Earnings from main employment (gross and midpoint monthly earnings)
	Casual wages	
	Self-employment income	
	13th cheque	
	Bonus payment	
	Profit share	
	'help friends' income	
	Extra piece-rate income	
Government (means tested) social grant income	State old age pension	State old age pension
	Disability grant	Disability grant
	Child support grant	Child support grant
	Foster care grant	Foster care grant
	Care dependency grant	Care dependency grant
Other income from government	Unemployment insurance fund	
	Workmen's compensation	
Investment income	Interest/dividend income	
	Rental income	
	Private pensions and annuities	
Remittance income	Remittances received	
Subsistence agricultural income	Income from subsistence agriculture	
	Value of own production consumed	
Imputed rental income	Value imputed from owner-occupied housing	
		Household expenditure

Source: Brophy, et al. (2018) for the NIDS information and the 2002-2017 GHS questionnaires

The household income variable that is used to determine whether NMOMs belong to a high- or low-income level is derived from the average real per capita total monthly household income variable. The variable classifies NMOMs into either a low or high household income using the median of the average real per capita total monthly household income. This means that NMOMs who belong to households where real per capita total monthly household income is

equal to or less than the median will be classified as low household income. Similarly, NMOMs who are classified as belonging to a high household income belong to households where real per capita total monthly household income falls above the median. This measure provides a broad estimation of the household income status of NMOMs and is calculated for each year of analysis.

3.5.5 Geographic location

Over the years, the boundary lines outlining the borders of the provinces have been redefined and consequently the rural/urban divide within provinces have been adjusted accordingly. The 2011 Census takes these changes into account by referring to the geographical areas which are different from those that are used in the 2001 Census. The different geographic areas that are used in the different censuses are briefly outlined in Table 9. The table shows that urban formal, informal and rural formal areas have been recategorized as urban areas and are described as areas which are continuously built-up and are established through township establishments. These areas include cities, towns, small towns, hamlets and townships. Farms, which are included in the 2011 Census refers to pieces of land which are designated and used for commercial farming and includes all infrastructure and structures on the land. Traditional areas, which are common to both censuses are communally owned land that is under the jurisdiction of traditional leaders.

The geographic location variable in the 2002 to 2014 GHSs use the 2001 census categories while the 2017 GHS only contains a variable with the 2011 Census classifications. All the NIDS datasets contain two geographic location variables: one with the 2001 Census classification and the other with 2011 Census classification. To maintain comparability across datasets, the analysis is done using the 2001 Census classification and therefore, no estimates using the 2017 GHS data are presented in the trend analysis.

Table 9: The different geographic areas that are used in the 2001 and 2011 Censuses

2001 Census	2011 Census
Urban formal areas	Farm areas
Urban informal areas	Urban areas
Rural formal areas	Traditional areas
Tribal authority areas	

Source: The 2001 and 2011 Census questionnaires

3.6 South African Social Attitudes Survey

The South African Social Attitudes Survey (SASAS) is South Africa's first nationally representative survey to measure opinions on political, social and economic issues that are facing the country. Focusing on public values and the social fabric of modern South Africa, the survey is aimed at providing long-term insights into the speed and direction of change of these perceptions. As a result, the SASAS serves as a tool for monitoring the continuously evolving social, economic and political values of South Africans and also provides evidence for use in decision and policy making processes. One of the key objectives of the SASAS is to map out changing attitudes towards moral issues relating to abortion, AIDS, gender issues, service delivery, crime and punishment and to highlight evolving opinions on the redistribution of power and wealth, democratic and constitutional issues, the nature of families and domestic violence.

The SASAS is designed to be an annual, repeated cross-sectional survey with the first round collected in 2003. The survey is set up to administer two questionnaires simultaneously to accommodate for the variety of topics on which information is collected. Besides a set of demographic questions, the first questionnaire (referred to as the core module)[93] contains a constant set of socioeconomic and socio-political questions that are used to monitor change and continuity over time. The second questionnaire covers two or more topic specific modules[94] which require additional examination at specific points in time. These questionnaires are asked on a rotational basis[95], include modules that are provided by the

[93] The core module which is asked annually contains questions on the following topics: trust in institutions, social trust, citizen involvement and democracy, political values and engagement, social identity and intergroup relations, personal and social wellbeing, moral and social values, perceptions of crime and personal safety, poverty, inequality and redress, education and occupation, socio-demographic characteristics and household circumstances.

[94] In addition to the ISSP modules, other themed modules are specifically developed for use in the different HSRC research projects or have been commissioned by external clients which include national and international researchers, government departments and private clients.

[95] The rotational modules are repeated every 3 to 5 years.

International Social Survey Programme (ISSP)[96] [97] and are used to inform academic debate and policy. The core questionnaire is asked of the entire sample while the second questionnaire is rotated on either half of the sample. To test the functioning of the questions and the sequencing of modules, the questionnaires are piloted each year. After being piloted, they are translated into the different official languages.

The survey is administered by the Human Science Research Council (HSRC). All questionnaire modules and the data that are produced are owned by the HSRC and are made freely available for public use. Using the HSRC's master sample, 500 enumeration areas which are stratified by the majority population group, province and geographical sub-type are selected for each round of the survey. Each round of the SASAS is designed to sample between 3500-7000 individuals who are aged 16 and over. This includes South African and non-South African citizens across the nine provinces. The individuals who reside in old-age homes, hospitals, military barracks, school and university hostels, industrial areas, recreational areas and empty EAs are not included in the survey as they were initially excluded from the HSRC's master sample. In contrast to the surveys that enumerate household heads or individual household member, the SASAS is designed to interview only one household member, who is selected using a Kish grid[98]. Before selecting this individual, interviewers visit each household to gather a list of household members who are aged 16 and older, from which the individual to be

[96] South Africa is a member of the International Social Survey Programme (ISSP) that was established in 1984. This program is run by researchers who have agreed to annually field a round of questions that are based on a decided upon theme. These modules are repeated at specific times and allow for a comparison between and within countries over time. Currently, the ISSP has 43 member countries and South Africa's inclusion into the programme has provided an international perspective to understanding changing South African values.

[97] Some of the ISSP modules include themes on family and changing gender roles, citizenship, national identity, work orientation, and the role of the government, among others.

[98] A Kish grid is a way of randomly selecting a household member to interview. The use of this method requires a grid with randomly placed numbers, a list of household members who meet the sample criteria, household size and the total number of households that need to be interviewed. See Kish (1949) for further details on this sampling method.

interviewed is selected. Through the use of face-to-face interviews, fieldworkers use paper-based instruments to interview the selected respondents.

The SASAS data are weighted to be representative of the South African population aged 16 and older. In particular, the Northern Cape and KwaZulu-Natal provinces are oversampled to compensate for small sample sizes in the Northern Cape and to gain a representative Indian sample in KwaZulu-Natal. The dataset is downloaded with two weight variables; a 'benchwgt' variable is used for the half samples and a 'combiwgt' variable is used for the full sample. This means that when questions from the core questionnaire are being analysed, the 'combiwgt' variable should be used while the 'benchwgt' variable should be used when analysing data from the rotating module.

Using data from the 2003 to 2016 rounds of the SASAS, a trend analysis is presented to identify whether there has been a change in South Africans' attitudes towards premarital sexual activity. In particular, the analysis is based on the following question: *Do you think it is wrong or not wrong if a man and a woman have sexual relations before marriage?* With the following response options: 1- not wrong all the time, 2 – wrong only sometimes, 3 – almost always wrong, 4 -always wrong and 5 – cannot choose[99].

Modules from the 2003 and 2005 SASAS rounds are also used to provide a snapshot of South African's attitudes towards topics related to non-marital childbearing and marriage. The analysis is disaggregated by key demographic characteristics (where possible) to identify any differences in opinions based on these characteristics. Table 10 outlines the different modules used in each round of the SASAS. The question on premarital sexual activity (detailed above) is found in the moral issues theme in each round of the SASAS. The analysis is done on

[99] The 'cannot choose' response option changed to 'do not know' from round 2005 and onwards.

weighted data[100] and presented for individuals aged 16 and older[101]. Overall, the analysis of the SASAS data will provide insights into the 'attitudinal drivers' of non-marital fertility in South Africa as the reviewed literature suggested that changes in women's attitudes towards marriage are associated never-married motherhood.

Table 10: Modules used from each round of the SASAS

Round/Year	Module/ Themes
2003	Moral issues Gender roles (childrearing in relation to single parenthood)
2004	Moral issues
2005	Family life (concepts of marriage) Moral issues
2006	Moral issues
2007	Moral issues[102]
2008	Moral issues
2009	Moral issues
2010	Moral issues
2011	Moral issues
2012	Moral issues
2013	Moral issues
2014	Moral issues
2015	Moral issues
2016	Moral issues

Source: The 2003-2016 SASAS questionnaires

3.7 Qualitative research component: life histories

A qualitative research component provides the analysis with a rich and in-depth understanding of the dynamics surrounding childbearing, marriage and being an older mother in South Africa. Fertility and marriage decision-making are unique and sensitive experiences which are influenced by the meanings attached to cultural practices and past experiences and these are

[100] The 'benchwgt' variable is used on rounds 2003 until 2006 while the 'combiwgt' variable is used on the 2007 until 2016 rounds of the SASAS.

[101] The survey target population are individuals aged 16 and older.

[102] A module on women, work and childcare was collected in 2007 however this module was collected for a client and therefore the data are not made available for public use.

concepts which are better understood by exploring people's life histories (Mack et al., 2005). As a result, in this study, women's experiences of and the decision-making processes surrounding childbearing and marriage are presented in the form of four in-depth life histories[103].

The qualitative research design employed a purposive sampling method where snowball sampling was used to identify the research participants (Mack et al., 2005). The research participants are four African women aged 30-49 who had at least one child after the age of 29[104]. These women have never been married and were not involved in *ilobolo* negotiations at the time of being interviewed. The research participants were employed in different economic sectors, have different levels of education and belong to middle to low income households. Face-to-face in-depth interviews which were audio recorded[105] were used to collect the data. The interviews were then transcribed and analysed thematically. Before each scheduled interview, the research participants were provided with information on the main aims of the study, the value of their contribution to the study and what their participation in the study would require (in terms of time and the possible questions which will be discussed). This was done to foster a relationship with the research participants which is important when discussing sensitive issues like childbearing and marriage. The interviews and initial introductions were conducted by the researcher (PhD candidate) which contributed to the dynamics of the interviewer-interviewee interaction.

[103] In-depth interviews explore a particular topic in detail while the life histories provide an account of the various life experiences which have shaped these women into becoming NMOMs. Therefore, the qualitative data are referred to as in-depth life histories.

[104] Ethical clearance to conduct the interviews was obtained from Rhodes University and was renewed on a yearly basis until the completion of the project. The ethical clearance tracking number is: ISER-ERC-2017-1.

[105] Permission to audio record the interviews was obtained verbally and through the signed informed consent form.

The interviews took place a few days after each introductory meeting. Three interviews were conducted at the respondent's place of employment[106] and one interview took place at a local coffee shop. The concept of informed consent was explained to each research participant and was obtained before the interview began and recording was started. The respondents were also provided with a copy of the consent form which contained the details of the study and the researcher's contact details if they required additional information once the interview was completed. On average, the duration of each interview was an hour and a half and although the interviews were audio recorded, notes were made of important dates, places and events. The audio recordings were transcribed and thematically analysed. Each research participant was interviewed twice; once for the introductory meeting and again for the main interview and they had consented to being contacted if clarity was needed on discussions in the interview. An in-depth interview structure was adopted as it is an effective method of encouraging the respondents to share their feelings, experiences and opinions, especially in this case where sensitive topics about family planning were being discussed (Mack et al., 2005). The in-depth semi-structured interviews were supplemented with an interview schedule which outlined broad questions used to guide the interview discussion.

The thematic analysis of these life histories adopted a social constructivist perspective. This theoretical lens assumes that culture and context influence the construction of social realities and that the meaning that is assigned to events is influenced by past experience, culture and people's interaction with the environment. As a result, meaning, knowledge and social realities are actively constructed and dynamic in nature as they are continuously evolving (Kim, 2001). Contributing to this notion of the social construction of realities, Spillman (2002) cautions against using race as a blanket representation of culture as among the Black race group, cultural practices differ based on ethnicity. Instead, culture should be viewed as a process of 'meaning-making' which is influenced by individual perceptions of historical events, traditional practices and beliefs, and the law. This definition of culture, which complements the perspective that realities are socially constructed creates a platform for identifying cultural differences based

[106] Permission to interview these employees at their place of work was obtained from the employer. Interviewing these respondents whilst they were at work helped in securing the research participants as they did not have to give up time to be interviewed on their days off. The familiarity of their workspace also made it easy for the respondents to relax and share sensitive information during the interview. It also provided a sense of security as they were being met on their terms.

on ethnicity. By adopting these perspectives, the differences in the lived realities of the research participants are explored and understood as being a function of their social environments. Drawing from this theoretical perspective, the findings from the thematic analysis were used as a basis for understanding the social context within which NMOMs negotiate events of childbearing and marriage.

3.8 Data analysis techniques

There are various data analysis techniques are used to answer the different research questions investigated in this study. The first analysis chapter begins with a comparison of the NIDS and GHS surveys and includes a comparison of basic individual and household level estimates of individuals aged 15 and older, presented as descriptive statistics. These estimates are derived from the weighted 2008 NIDS and GHS data as this is the first point of overlap for both of the surveys. The second part of the chapter presents the characteristics of all mothers aged 15-49 and NMOMs[107]. Using the 2017 NIDS and GHS weighted data, descriptive statistics, which are generated using the statistical package STATA, outline the demographic and socioeconomic characteristics of these two groups of mothers. In some cases, the analysis is also presented for all mothers aged 30-49 and women aged 15-49 which serve as comparison groups for NMOMs and mothers aged 15-49.

A trend analysis of the demographic and socioeconomic characteristics of NMOMs is presented in the second analysis chapter. The trend analysis spans a period of fifteen years from 2002 until 2017. Using weighted GHS and NIDS bivariate estimates, the percentage difference between the 2002/2008 and 2017 estimates for specific characteristics are provided. A confidence interval test is used to identify whether the difference between the 2002/2008 and 2017 estimate is statistically significant at a 95 percent level of confidence ($p<0.05$). In some cases, an absolute difference between the estimates is presented for variables like age and the average per capita total monthly household income. The trend analysis presented in this chapter is used to highlight changes in the socioeconomic and demographic characteristics of NMOMs

[107] NMOMs are aged between 30-49 at the time of enumeration and had at least one child after the age of 29.

between 2002 and 2017 and to identify whether non-marital fertility is more common among mothers of a low or high socioeconomic status.

Using multivariate logit models, the third empirical chapter estimates the log odds of being either a NMOM, an older mother or a never-married mother aged 15-49. The dichotomous nature of the dependant variables makes a modelled binary logistic regression in a multivariate context the most suitable analysis technique. All three regression estimates control for a specific set of demographic, spatial, socioeconomic, household and personal characteristics. These explanatory variables are selected from the reviewed literature, the key findings revealed during the thematic analysis of the life histories of NMOMs (Chapter Eight) and the significant characteristics of NMOMs as identified in Chapters Four and Five.

For all of the regression estimates, demographic characteristics are specified in the first model (I) which include age, marital status[108] and race. In particular, five-year age groups of ages 30-49 are used. The second model (II) controls for the spatial characteristics of geographic location and province. The geographic location categories that are based on the 2011 Census (tribal, urban and farm areas) are used. The socioeconomic characteristics that are introduced in the third model (III) and include the highest education level, employment status and the logarithm of per capita total monthly household income. The South African literature suggests that only a secondary school education and above has a positive effect on fertility reduction (Burger, Burger and Rossouw, 2012) and therefore in order to capture this effect, an education variable with the following categories is constructed; no schooling, some/completed primary, some/completed secondary and tertiary education. The fourth regression model (IV) estimates the effects of household characteristics on the log odds of being an older mother/NMOM. The characteristics that are specific to this model include the gender of the household head and the household size.

[108] Marital status is not used in the models that use 'never married older mother' as the dependant variable.

The last model[109] (V) introduces individual level characteristics such as mother's education, the importance of religious activities and the religious affiliation of the individual. The response categories that are used in the 'importance of religious activities' variable is collapsed into 1 – unimportant and 2 – important from 1 – not important at all, 2 – unimportant, 3 – important and 4 – very important. The findings from the regression models are presented as log odds which describe the direction and size of the relationship between the different predictor variables and the dependant variable.

The regression models are estimated on the weighted 2017 NIDS and GHS data. To avoid the repetition of results, the regression models which are estimated on the GHS data are included as an appendix[110]. Additionally, the GHS regression estimates are included as an appendix because the findings in Table 5 suggest that the share of NMOMs are understated in the GHSs. Lastly, the GHS does not collect information on an individual's religious affiliation and mother's education and therefore, only four regression models are estimated using the GHS data as opposed to the five models (as outlined above) which are estimated using the NIDS data.

To estimate the likelihood of a woman aged 30-49 being a NMOM, older mother or of a woman aged 15-49 being a never-married mother, the following binary logit regression is constructed:

$$Y_i = \ln\left(\frac{P_i}{1 - P_i}\right) = a_i X_i + b_i Z_i + u_i$$

Where Y_i is the likelihood of being a NMOM, older mother or a never-married older mother for each woman (i) in the sample; $\ln(\frac{P_i}{1-P_i})$ represents the log of Y_i; X_i represents the demographic explanatory variables; Z_i captures the socioeconomic explanatory variables and u_i is the error term.

[109] This model is not run on the GHS data due to the absence of the required individual level variables.

[110] Appendix D.

The fourth analysis chapter is focused on the findings from the SASAS. The chapter begins with a trend analysis, between 2003 and 2016 of South African's attitudes towards premarital sexual activity followed by a snapshot of South African's views on social issues related to non-marital fertility. These social issues which include education, employment, childbearing and the payment of *ilobolo* in relation to marriage are further investigated using multivariate logistic regression analysis. The regression estimations are aimed at predicting the characteristics of South Africans who are more likely to feel that *ilobolo* is a barrier to marriage[111], that childbearing should take place within a marriage and that marriage should be postponed in favour of education and career development. The weighted estimates which are presented using all rounds of the SASAS data are representative of individuals aged 16 and older.

Using thematic analysis, the last analysis chapter explores the life histories of four NMOMs. This chapter draws on the varied experiences and decision-making processes which have led to these women to becoming NMOM. In particular, the thematic analysis sheds light on the events which have shaped the participants into becoming NMOMs, how they felt about having their first and subsequent children outside of a marriage and how they have dealt with being single mothers. The chapter ends by linking the experiences of these NMOMs with the empirical findings that have been presented in Chapters Four, Five, Six and Seven. The section draws on examples of how the qualitative findings support or are at odds with the results from the survey data.

3.9 Concluding remarks

This chapter outlined the various research methodologies which are used in the qualitative and quantitative components of this mixed methods research design. The review of South African survey data underscored the suitability of the NIDS and the GHS as the main sources of data for this thesis as it is often difficult to find datasets that contain relevant socioeconomic, demographic, household and spatial characteristics which can be paired with detailed fertility data. Providing a unique perspective to a mixed methods research approach is the use of data

[111] This regression model is estimated for a sample of Black people only and for the South African population.

from the SASAS. This attitudinal survey quantifies respondent's opinions and beliefs which are common features of qualitative research methods. The next chapter presents the socioeconomic and demographic characteristics of NMOMs in South Africa however, preceding this analysis is a discussion which explores the comparability of the GHS and NIDS datasets.

Chapter Four: Characteristics of never-married older mothers

4.1 Introduction

Understanding the characteristics of NMOMs in contemporary South Africa is useful as it provides insights into a specific cohort of women who may be economically disadvantaged as observed in European countries (Jalovaara and Andersson, 2018; Klusener, 2015; Klusener and Goldstein, 2016; Mack, 2017; Surkyn and Lesthaeghe, 2004). If it is the case that the larger share of NMOMs (or never-married mothers in general) in South Africa are economically disadvantaged, then identifying the socioeconomic and demographic characteristics of these women is important for understanding how changes in family formation, household livelihood strategies and the interface between the labour market and social reproduction are changing in South African society. To this end, this chapter presents the characteristics of motherhood in South Africa focusing on all mothers aged 15-49, mothers aged 30-49[112] and NMOMs[113]. This section follows the same approach of comparing similar groups of mothers as done in various international studies (Wildsmith et al., 2011; Ventura, 2009). Ventura (2009) comments on the percentage of non-marital fertility among adolescents compared to women who are aged 20 and older. Particular emphasis is placed on births to unmarried mothers who are aged 30 and older. In a similar manner, Wildsmith and colleagues (2011) present the percentage of births to unmarried mothers of different age categories and draws attention to the percentage of non-marital fertility among women in cohabiting unions.

The main data sources that are used in this thesis are the NIDS and the GHS. To ensure the comparability of the estimates from these data sources, this chapter begins with an in-depth comparison of the similarities and differences between the GHS series and the NIDS panel study. The technical aspects of the surveys are focused on in the comparison and include a discussion on the how the differences in the structure and the design of the surveys and the different definitions of a household (that is used in the GHS and the NIDS) will influence the

[112] These women were either aged 15-49 or 30-49 at the time of enumeration and have had at least one child (at any age).

[113] NMOMs refer to women aged 30-49 at the time of enumeration who had at least one birth after the age of 29.

measurement of motherhood. Importantly, the discussion also includes a comparison of the techniques that are used to identify older mothers (as used in this study). A comparison of the estimates from the GHS and the NIDS also provides a basis from which to interpret and understand the findings that are presented in this chapter and the subsequent analysis chapters.

The chapter is split into two sections: the first section provides a comparison of the NIDS and the GHSs as they relate to the identification of NMOMs. It begins with a discussion of the structural differences between the surveys while the latter half of the section presents individual (such as gender, age, race, marital status and employment) and household level (household composition) analyses using the 2008 NIDS and GHS data. Here, the differences in the estimates are explored and discussions on the impact of these differences on the key indicators that are included in the analyses, are presented. Using the 2017 NIDS and GHS data, the second section outlines the key characteristics of NMOMs which includes an analysis of the demographic characteristics in the first part of the section and the analysis of the socioeconomic characteristics in the second part of the section. The NIDS and the GHS estimates are weighted using post-stratified weights[114] and the NIDS weights include the top-up sample[115].

4.2 Comparison of the NIDS and the GHS

4.2.1 Exploring the differences and similarities between the GHS series and the NIDS panel study in relation to the measurement of never-married older mothers

The first difference between the surveys concerns the collection of birth information and how this difference influences the techniques that are used to identify older mothers and the

[114] The main feature of post-stratified weights is that the sample age-sex-race ratios are scaled up to match the population totals. These population totals which made available annually by Stats SA, are often used by the various surveys to calculate weights. Thus, the nature of the methodology allows for the estimates, which are derived using post-stratified weights, to be comparable across the various studies.

[115] Wave 5 of the NIDS data contains two sets of each type of weight (panel, post-stratified and design weights). One set of weights are calculated to include the top-up sample while the second set of weights does not include the top-up sample (for example: design weight including top-up and design weight excluding top-up). The top-up post-stratification weights are used for the analysis of the wave 5 data.

interpretation of the results. Every wave of the NIDS collects a detailed birth history from each woman aged 15-49 in the household. These birth histories provide information on each child ever born to a household member and includes children who have died and those who no longer stay in the same household as the mother. In order to identify older mothers in the NIDS data, the child's age is subtracted from the mother's age which reveals the mother's age at birth for each of her children. This birth information for each child is presented at the individual level of the mother together with her demographic and socioeconomic characteristics.

The GHS series captures information on fertility differently since a specialised birth roster was only included in the 2002 GHS. In all other years (i.e. apart from 2002), the mother's birth history is identified by children who live in the same household as their mother[116]. In order to identify mothers, children's characteristics (their age and their mother's *pcode* in the household roster) are matched with their mother's characteristics. Once mothers and their children have been matched, the child's age is used to calculate the mother's age at birth for each (resident) child. Collecting birth information in this way means that the GHSs only report on children who are currently living in the same household as their mother and not on children ever born to a woman (as is done in the NIDS). This is an important difference between the surveys as it influences the identification of older mothers[117] and suggests that the GHS estimates of motherhood will be understated relative to the NIDS estimates.

Another essential difference between the surveys is the way in which households are defined. The GHS defines households as a group of people who live together and jointly provide food and other basic essentials in the household or a single person who lives alone. These people would need to have stayed in the household for an average of 4 nights per week in the 4 weeks prior to enumeration and have had shared resources as a unit. In comparison, the NIDS defines a household as consisting of individuals who have stayed within the same household (compound or homestead) for at least 15 days during the last 12 months. Individuals who began

[116] A mother is identified using the following questions: *(a) Is …'s mother still alive? (b) Is …'s mother part of the household? (c) Which person is …'s mother?* (the mother's person code (*pcode*) is required in response to question c).

[117] Older mothers are women who had at least one child after the age of 29.

living in the household in the 15 days prior to enumeration and intend on making the household their usual residence are also considered household members. Additionally, these individuals are expected to share food from a common pot and resources from a common resource pool. The main distinction between these definitions is the difference in the reference period of the amount of time an individual would need to live in the household before being considered a permanent household member. This is an important difference in the measurement of NMOMs who are considered household members.

Another important difference between the GHS and NIDS is the structure and design of the surveys. The GHS is designed as a nationally representative cross-sectional household survey where information is collected annually from different sampled households and the individuals within those households. The household head is enumerated[118] and is responsible for providing information at a household level and an individual level. This means that besides providing information on the household characteristics, the household head is also responsible for providing information on each household member. In comparison, the NIDS differs in its structure and in the enumeration strategy that is adopted as it is designed as a nationally representative panel study. This means that firstly, the individuals in the households that are sampled in the base wave of the NIDS (2008) become continuing/continuous sample members (CSM)[119] [120] and are enumerated every second year. The new additions to the household (in the form of births or children who are adopted by women in the household) become CSMs in the subsequent waves and are also enumerated every second year. On the other hand, the individuals who are not CSMs but are co-resident in an originally selected household[121] are also enumerated but are referred to as temporary sample members (TSM).

[118] In cases where the household head is not available for enumeration, the spouse of the household head is enumerated as a proxy head of the household.

[119] As opposed to the GHS data where *de jure* members of a household are surveyed, and new households are sampled for each round of the GHS.

[120] The CSMs are also referred to as Permanent Sample Members (PSMs) in some of the NIDS reports.

[121] Households which were selected as part of the base wave sample in 2008.

Different from the GHS enumeration strategy is that the NIDS interviews individual household members and not only the head of the household. This difference in the enumeration strategy is important to note as it could influence the reporting of birth information. Household heads may not know or be able to remember and report correctly on the births that each woman in the household has had. Additionally, the household head may not be able to provide accurate information on the birth details (for example, date of birth) of each child that has been born to each woman in the household. This reporting issue is minimised in the NIDS as each woman provides information on her child/ren. This difference in the enumeration strategies that are used in the GHS and the NIDS could also contribute to the underreporting of motherhood in the GHS.

Given these structural and methodological differences in the surveys, the overall conclusion is that the surveys are largely comparable. However, it is important to be cautious of the different methods that are used to identify mothers and its impact on estimating motherhood in the different surveys. Building on this discussion, the next section presents a comparison of the GHS and the NIDS analysis where the differences in the estimates are used to demonstrate the comparability of the data at an individual and a household level.

4.2.2 Comparing the individual and household level estimates between the GHS series and the NIDS panel study

This section explores the differences in the household and individual level estimates derived from the GHS and NIDS data. The analysis uses the 2008 NIDS and GHS data as this is the first data point at which the surveys overlap. Drawing from the above discussion, the differences in estimates could be a result of a difference in the structure of the surveys, the use of different sampling strategies or a difference in how and for whom birth information is collected. The following analysis is representative of all adults who are aged 15 and older in South Africa and the analysis is conducted on weighted data.

4.2.2a Individual level analysis

The analysis that is presented in Table 11 focuses on selected adult characteristics and the difference between the GHS and NIDS estimates are explored. The results show a difference

of 0.14 percentage points between the percentages of females in the different datasets. The estimates of the gender of the household head highlights a 4.63 percentage point difference between the estimates of household heads who are female. Information on the survivorship of parents is common to both datasets and is a good point of comparison on information that is reported about a family member. The results outline a 1.88 percentage point difference between the estimates of the father's survival status compared to a 0.41 percentage point difference in the estimates of the mother's survival status. In both cases, the GHS estimates are higher than the NIDS estimates. Thus far, the findings in Table 11 suggest that there is minimal variation in the estimates between both of the datasets.

Table 11: Selected adult characteristics, 2008

	2008 GHS	2008 NIDS	Absolute difference[122]
% of females in the sample	52.28 (0.251)	52.42 (0.569)	-0.14
% of household heads that are female	43.43 (0.199)	38.80 (0.889)	4.63
Parent's survival status			
Father alive	43.72 (0.251)	41.48 (0.619)	1.88
Mother alive	63.16 (0.238)	62.75 (0.591)	0.41
Motherhood			
% of women aged 15 and older who have ever given birth	73.94 (0.283)	77.62 (0.660)	-3.68
% of women aged 30-49 who have ever given birth	85.98 (0.359)	94.79 (0.706)	-8.81
% of women aged 15-49 who have ever given birth	66.80 (0.350)	71.72 (0.827)	-4.92

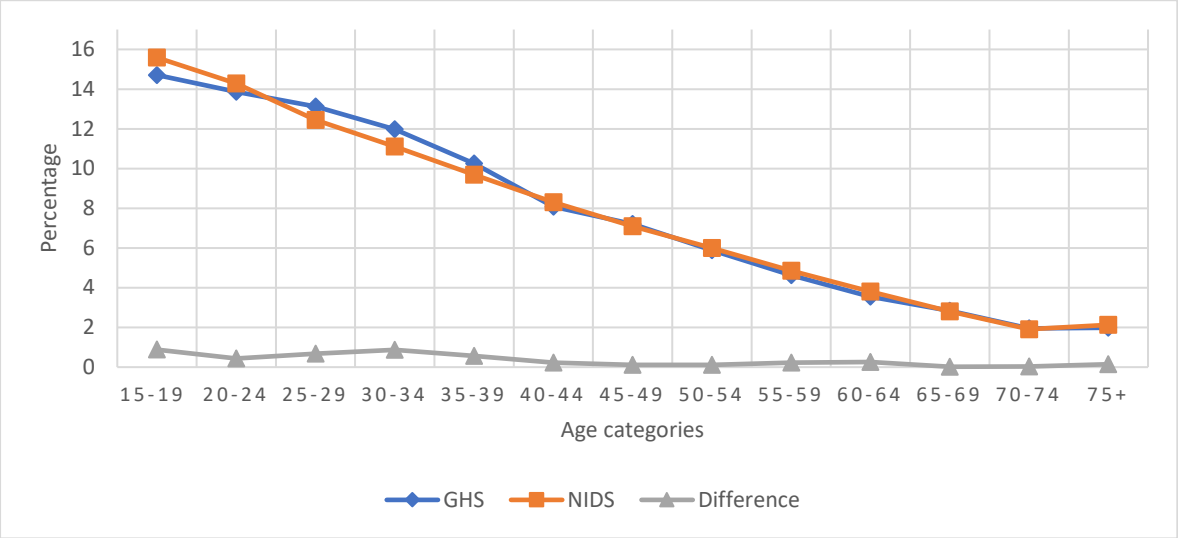
Source: Own calculations from the 2008 GHS and the 2008 NIDS
Notes: The data are weighted
Standard errors in parentheses
(-) Indicates that the NIDS estimate is higher than the GHS estimate
The sample includes individuals who are aged between 15 and 110 years old

The analysis of motherhood, which is also included in Table 11 shows that in general, the NIDS estimates are higher than the GHS estimates. The results show that the NIDS estimate of the percentage of women aged 15 and older who have ever given birth is 3.68 percentage points higher than the GHS estimate. Looking at the percentage of women aged 30-49 who have ever given birth, the results show an 8.81 percentage point difference between the GHS and the NIDS estimates. Lastly, there is a 4.92 percentage point difference in the estimates of women aged 15-49 who have ever given birth. These findings further substantiate that motherhood is

[122] Difference = 2008 GHS – 2008 NIDS

underestimates in the GHS and that a difference in the GHS and the NIDS estimates, in the remainder of the analysis chapters should be expected.

Figure 1: Age distribution, 2008



Source: Own calculations from the 2008 GHS and the 2008 NIDS
Note: The data are weighted
The sample includes individuals who are aged between 15 and 110 years old

A comparison of the age distribution between the NIDS and the GHS data reveals only a slight variation between the estimates. Figure 1 shows the percentage of adults (aged 15 and older) within each age category and the difference between the NIDS and the GHS estimates. The largest difference between the surveys is 0.88 percentage points which is observed amongst individuals who are aged between 15 to 19 years and the smallest difference (0.04 percentage points) between the NIDS and the GHS data is for the estimates of individuals who are aged between 70 to 74 years. Overall, the minimal differences in the age distribution suggest that an age-related trend analysis (in the next section) should be comparable across the NIDS and the GHS data.

Table 12: Selected demographic characteristics, 2008

	GHS 2008	NIDS 2008	Absolute difference
Race			
Black	76.70 (0.238)	76.47 (0.557)	0.23
Coloured	9.30 (0.131)	9.38 (0.322)	-0.08
Indian	2.80 (0.084)	2.83 (0.256)	-0.03
White	11.20 (0.213)	11.32 (0.474)	-0.12
Total	**100**	**100**	**--**
Marital Status[123]			
Married	31.25 (0.241)	31.46 (0.608)	-0.21
Cohabiting	8.89 (0.152)	9.27 (0.371)	-0.38
Widow	6.06 (0.108)	6.87 (0.277)	-0.81
Divorced	2.52 (0.079)	3.24 (0.248)	-0.72
Never married	51.28 (0.252)	49.17 (0.619)	2.11
Total	**100**	**100**	**--**

Source: Own calculations from the 2008 GHS and the 2008 NIDS
Notes: The data are weighted
Column percentage
Standard errors in parentheses
(-) Indicates that the NIDS estimate is higher than the GHS estimate
The sample includes individuals who are aged between 15 and 110 years old[124]

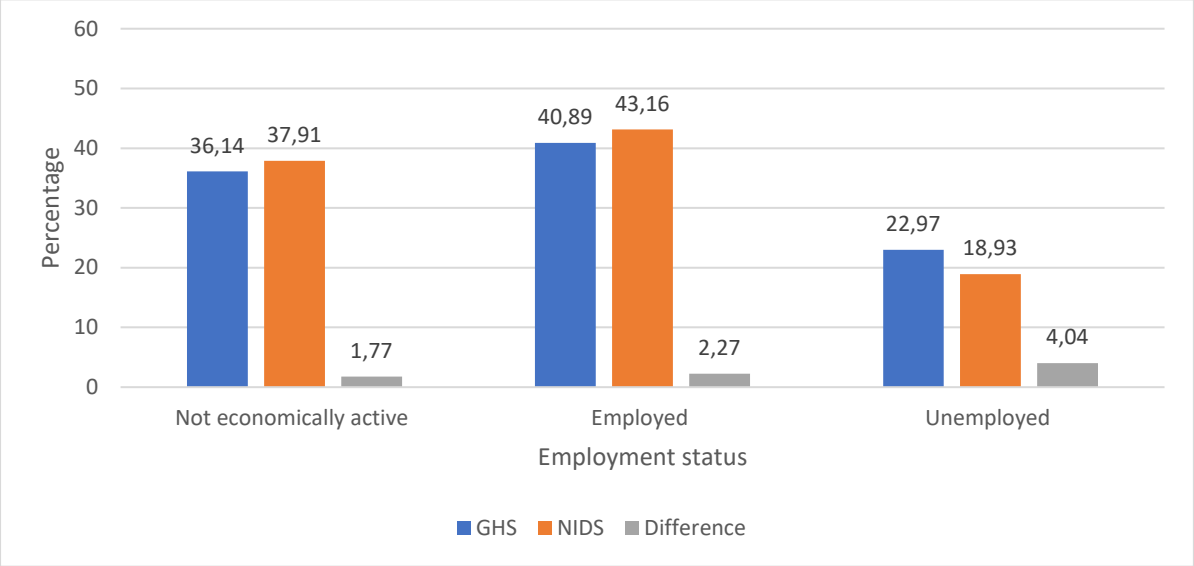
The analysis of the demographic characteristics of adults (Table 12) reveals further similarities between the surveys. Looking at race, there is a difference of only 0.12 percentage points between the estimates of White adults and only a 0.03 percentage point difference between the estimates of Indian adults. In both cases, the NIDS estimates are higher than the GHS estimates. The largest difference of 0.23 percentage points is observed for Black adults. Focusing on marital status, the findings continue to reveal similarities between the survey estimates with the smallest difference of 0.21 percentage points noted for married individuals. Looking at the percentages of never-married individuals, the GHS estimate of 51.28% is 2.11 percentage points higher than the NIDS estimate of 49.17%. In general, with regards to demographic factors, the surveys appear to be largely comparable with one another.

[123] The analysis of marital status is conducted on individuals who are aged 15 and older however, the legal marriageable age in South Africa is age 18. These results are primarily focused on the comparing of estimates between the 2008 GHS and the NIDS data and therefore the sample age restriction of 15 years and older has been maintained. The estimates are not used to make conclusions about the South African sample.

[124] Individuals who are aged 15 years and older are included in the analysis of employment status as the legal age of employment in South Africa is age 15. The analysis is not restricted to economically active individuals.

The analysis of employment status is presented in Figure 2 where the analysis highlights small differences between the GHS and the NIDS estimates. Looking at the percentages of economically inactive individuals, the results show a 1.77 percentage point difference between the estimates in both of the surveys. Similarly, there is a 2.27 and 4.04 percentage point difference between the estimates of employed and broadly unemployed individuals, respectively, across both surveys. In the case of economically inactive and employed individuals, the NIDS estimates are higher than the GHS estimates. These differences are likely to be the result of the use of different questionnaires and interviews with each household member in the NIDS compared to the GHS where only the household head is interviewed. Employment status is an important factor in understanding the labour market activities of older mothers therefore, the trends that are related to the employment status of NMOMs should be interpreted with caution.

Figure 2: Employment status showing the broad measure of unemployment, 2008

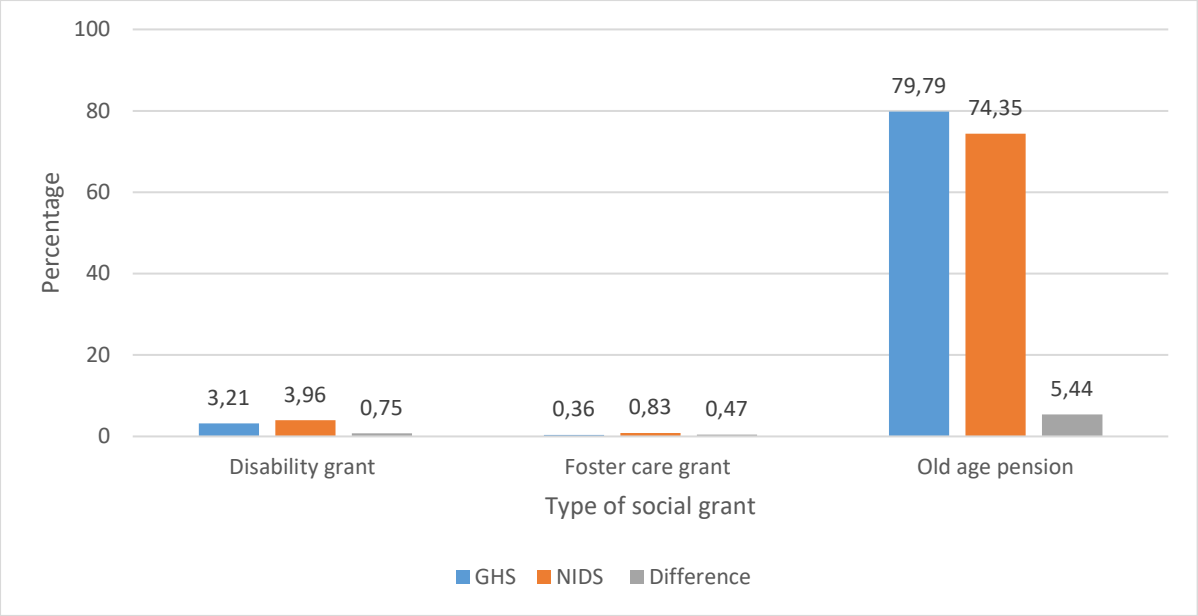


Source: Own calculations from the 2008 GHS and the 2008 NIDS
Note: The data are weighted
The sample includes individuals aged between 15 and 110 years old

The last set of individual level characteristics where the percentages of individuals who receive social grants and the differences between these estimates are presented in Figure 3. The results show that there are minimal differences in the estimates of individuals who receive a disability grant (0.75 percentage points) and/or foster care grant (0.47 percentage points). In these cases, the NIDS estimates are found to be higher than the GHS estimates. Figure 3 also includes the percentages of individuals aged 66 and older who receive the state old age pension. There is a

5.44 percentage point difference between the estimates in the GHS and the NIDS. Thus far, the analysis indicates that when analysing data on the recipients of social grants, the GHS and the NIDS remain comparable.

Figure 3: Social grants received, 2008



Source: Own calculations from the 2008 GHS and the 2008 NIDS
Note: The data are weighted
The sample includes individuals who are aged between 15 and 110 years old

The analysis of individuals who receive a child support grant reveals large differences between the GHS and NIDS estimates[125] which suggests that there are structural differences in the way the surveys collect information on the child support grant. The main difference in the collection of information on the child support grant between the surveys is that the GHS does not collect information on parents/caregivers who receive the grant on behalf of a child, as is done in the NIDS. In the NIDS, each household member who is aged 15 years and older is enumerated individually while a different set of questions are asked of children who are younger than 15 years. The question in the adult questionnaire (which is asked to individuals aged 15 and older) asks: *Did you receive income or assistance from … in the last month?* Receiving a child support

[125] The estimates of individuals (aged 15-110 years) who received a child support grant in 2008 are: GHS – 0.82% (SE = 0.038) and NIDS – 16.27% (SE = 0.422), with a difference of 15.45 percentage points between the estimates.

grant is one of 16 response options[126] which are provided to which the respondents can either respond yes or no. If the respondents respond 'yes' to the question, they are asked for a rand value of how much they receive. While the NIDS child questionnaire (asked about children who are younger than 15 years) asks questions on whether someone receives a child support grant for a child[127]. Additionally, this question does not directly ask if a child receives/qualifies for a child support grant as is done in the GHS questionnaire.

In comparison, the question that is asked in the GHS captures whether a child receives/qualifies for a child support grant. There are no questions which ask if an adult receives assistance from a child support grant that is collected on behalf of a child (as is done in the NIDS questionnaire). In the GHS, the household head is asked: *Does … receive any of the following Welfare grants?* Receiving a child support grant is one of seven response options[128] to which the household head can either respond yes, no or don't know. Very importantly, the household head is asked to respond for each person (in this case each child) who qualifies for the grant and not for the person who applied for the grant on behalf of a child or receives the money on behalf of the child (the adult).

Furthermore, children up to the age of 17 are eligible for the grant. The analysis of the GHS data is representative of individuals aged 15 and older and therefore, the GHS estimate of the

[126] The response options to the NIDS question on individual income from non-employment sources are: 1. State old age pension 2. Private of foreign pension 3. Private retirement annuity 4. Retirement gratuity or retirement package 5. Unemployment insurance 6. Workmen's compensation 7. Disability grant 8. Child support grant 9. Foster care grant 10. Care dependency grant 11. Interest earnings 12. Inheritances 13. War veterans' pension 14. Rental income 15. Retrenchment package 16. Lobola or bride wealth payment.

[127] These are the main questions about the child support grant which are asked in the NIDS Child Questionnaire: *(a) Does anyone currently receive a child support grant, foster care grant or care dependency grant for this child? (b) What type of grant is this?* The respondents need to indicate whether it is a child support, foster care or care dependency grant. *(c) Who is the person that is receiving the grant for this child? (d) Has anyone ever received a child support grant on behalf of this child? (e) Has anyone in this household ever applied for a child support grant on behalf of this child?*

[128] The response options to the GHS question on the welfare grants are: 1. Old age pension 2. Disability grant 3. Child support grant 4. Care dependency grant 5. Foster care grant 6. Grant in aid 7. Social relief.

recipients of the child support grant is only representative of individuals who are aged 15, 16 and 17 years. This difference also contributes to the variation in the estimates. In conclusion, the NIDS and the GHS collect information on the child support grant differently, which makes the estimates between the surveys incomparable. As a result, the child support grant variable is not included in any further analysis.

4.2.2b Household level analysis

In addition to the comparison of the individual level characteristics of adults, this section also analyses the differences in the GHS and the NIDS estimates at a household[129] level. Table 13 outlines the various household characteristics and presents the differences between the GHS and the NIDS estimates. In general, the results reveal only small differences between the various household composition estimates. The difference in the estimates range from a 0.20 percentage point difference between the GHS and the NIDS estimates of the average number of employed household members to a difference of 0.01 percentage points between the estimates of the average number of pensioners in a household. It is interesting to note that on average, there are 2.42 (GHS) and 2.27 (NIDS) working age adults in a household however, each household only contains 1.06 (GHS) and 0.86 (NIDS) employed household members (on average). The results also show that on average, there are slightly more female household members compared to male household members and that there is a minimal difference in the estimate of the average household size between the surveys.

Overall, these findings suggest that the analysis at the household level between the GHS and NIDS studies are comparable and that very small differences between the estimates should be expected. When interpreting the results from various sources of data, it is important to keep in mind that some of the differences in estimates could be related to the way in which the questions are understood by respondents and any possible influence the enumerators may have on responses. In addition, with regards to the NIDS, the individual level responses may be influenced if there were household members present when the respondent was being interviewed.

[129] Refer to section 4.2.1 for a description of the different definitions of a household that are used in the GHS and the NIDS.

Table 13: Household composition, 2008

	GHS 2008	NIDS 2008	Absolute Difference
Household factors			
Average number of males	1.82 (0.011)	1.73 (0.023)	0.09
Average number of females	1.93 (0.127)	1.82 (0.029)	0.11
Average number of children*	1.17 (0.011)	1.12 (0.025)	0.05
Average number of employed people**	1.06 (0.008)	0.86 (0.014)	0.20
Average number of working age people†	2.42 (0.012)	2.27 (0.026)	0.15
Average number of pensioners††	0.16 (0.003)	0.15 (0.007)	0.01
Average household size	5.14 (0.011)	5.31 (0.030)	-0.17

Source: Own calculations from the 2008 GHS and the 2008 NIDS
Notes: The data are weighted
Standard errors in parentheses
(-) Indicates that the NIDS estimate is higher than the GHS estimate
* Children refer to household members who are younger than the age of 15
** Employed refers to individuals who are aged 15 to 65
†Working age refers to individuals who are aged 15 to 65
††Pensioners refer to individuals who are aged 66 and older

4.3 The characteristics of never-married older mothers

4.3.1 Demographic characteristics

Having established that the two main data sources used in this thesis are closely matched in terms of their measurement of the demographic characteristics of the South African population (both at the household and individual levels), this section now presents an analysis of the key characteristics of NMOMs using recent (2017) survey data[130]. A preliminary analysis of the GHS data indicates that in 2017, 66.90% of women aged 15-49 were mothers while 17.48% of never-married women aged 30-49 had at least one birth after the age of 29 (NMOMs). The NIDS estimates for the same year vary as 72.72% of women aged 15-49 were mothers and 33.15% of never-married women aged 30-49 had at least one child after the age of 29 (NMOMs). The large difference between the NIDS and the GHS estimates clearly demonstrates that motherhood is understated in the GHS data. Additionally, the larger difference in the estimates of NMOMs between the two surveys alludes to older mothers being

[130] The NIDS is the preferred data source as it measures motherhood more accurately compared to the GHS. As a result, for some of the analysis, the NIDS estimates are presented in the chapter and the GHS estimates are included in Appendix A.

less likely to live in the same household as their children. It is possible that this is the case as older children may have established and live in households of their own.

Table 14: Selected demographic characteristics of all mothers aged 15-49 and never-married older mothers, 2017

	All mothers (15-49)	NMOMs
Average number of children	2.20 (0.024)	3.00 (0.068)
% of mothers living with biological children	82.75 (0.775)	88.69 (1.857)
Recipient of the child support grant[1]	59.45 (0.948)	77.30 (2.385)
% of mothers who are household heads	44.82 (0.949)	64.22 (2.475)
% of mothers living in a female-headed household	71.50 (0.852)	89.52 (1.601)
Age at last birth[1]		
15-19	11.79 (0.488)	--
20-24	22.06 (0.658)	--
25-29	23.14 (0.663)	--
30-34	21.76 (0.620)	58.51 (2.229)
35-39	14.48 (0.512)	32.80 (2.161)
40-44	5.65 (0.328)	7.33 (1.016)
45-49	1.11 (0.154)	1.35 (0.505)
Total	**100**	**100**

Source: Own calculations from the 2017 NIDS
Notes: The data are weighted
Column percentages are presented for age at last birth
Standard errors in parentheses
The sample includes all mothers aged 15-49 years and NMOMs

The analysis in Table 14 presents selected demographic characteristics of NMOMs and includes estimates for all mothers who are aged 15-49 years as a comparator group. Overall, the results show that on average, mothers have 2.20 children each[131], 82.75% of mothers live with at least one biological child and 59.45% of mothers are recipients of a child support grant. The single largest share of mothers was aged 25-29 years at their last birth[132] (23.14%) followed by those who were aged 20-24 years (22.06%) and 30-34 years (21.76%). The

[131] This information is calculated from the question which asks: *How many children have you given birth to in total?* and therefore is not a measure of the total fertility rate.

[132] The difference between the age category (presented in Table 16) and age category at last birth (presented in Table 15 above) variables is that the latter presents information on the mothers' age at their last birth while the former highlights the mother's age distribution at the time of enumeration.

characteristics of NMOMs[133] illustrate that on average, these mothers have 3 children each, 88.69% of NMOMs live with at least one biological child and 77.30% of NMOMs are recipients of a child support grant. The difference between the share of mothers (59.45%) and NMOMs (77.30%) who receive a child support grant is noteworthy and possibly suggests that NMOMs are more likely in need of the financial assistance (that is provided by the child support grant) or that NMOMs are more knowledgable on how to apply for the grant compared to mothers aged 15-49 years. Looking at the age distribution of NMOMs at their last birth reveals that the single largest share of these mothers was aged 30-34 years at their last birth (58.51%) followed by 32.80% of NMOMs who were aged 35-39 years.

In some cases, belonging to a female-headed household is associated with low socioeconomic status as the literature suggests that female-headed households are poorer than male-headed households (Rogan, 2013, 2014). The results in Table 14 also includes the percentage of mothers who are household heads and the percentage of mothers living in female-headed households. The findings suggest that NMOMs (64.22%) are far more likely to be household heads compared to mothers aged 15-49 (44.82%). In comparison to never-married mothers aged 15-49, NMOMs (89.52%) are also more likely to belong to female-headed households.

Using the 2017 GHS and NIDS data, Table 15 outlines the age distribution of mothers (at the time of enumeration) who are aged 15-49 years and NMOMs. The findings show that of all mothers, the largest share is aged 30-34 years (19.12% - GHS) while 17.41% are aged 25-29 years, the NIDS data reveals similar results. Adolescents who are aged 15-19 years constitute the smallest share of mothers, however, further investigation into adolescent fertility reveals that 16.61%[134] of women who are aged 15-19 years are mothers (they have at least one child). This is an increase from the 15.81% of adolescent mothers reported in Kara and Maharaj (2015)

[133] NMOMs refer to never married mothers who were aged 30-49 years at the time of enumeration and had at least one child after the age of 29.

[134] Additional investigation into motherhood amongst young people reveal that 16.61% (SE = 1.46) of women who are aged 15-19 are mothers. This analysis was done using the weighted 2017 NIDS data. The analysis of the 2017 GHS data shows that 36.09% (SE = 0.92) of women who are aged 15-19 are mothers (have at least one child).

using data from the 2008 wave of the NIDS. Although the increase is not statistically significant, these finding shed light on the continued challenge of reducing adolescent fertility in South Africa. The age distribution of NMOMs shows that the single largest share is aged between 35-39 years (31.89% - GHS and 32.31% – NIDS) followed by 24.30% (GHS, 30.19% - NIDS) of NMOMs who are aged between 40-44 years. Broadly, these findings reveal that the largest share of NMOMs were aged between 35-44 years at the time of enumeration while most of them had had their last birth between the ages of 30-39 years (as seen in Table 14).

Table 15: The age distribution of all mothers aged 15-49 and never-married older mothers, 2017

	2017 GHS		2017 NIDS	
	All mothers (15-49)	**NMOMs**	**All mothers (15-49)**	**NMOMs**
Age categories				
15-19	8.06 (0.244)	--	3.37 (0.324)	--
20-24	12.26 (0.314)	--	11.83 (0.535)	--
25-29	17.41 (0.375)	--	19.98 (0.761)	--
30-34	19.12 (0.385)	20.31 (1.717)	21.84 (0.798)	22.26 (2.371)
35-39	16.64 (0.362)	31.89 (1.902)	16.98 (0.772)	32.31 (2.536)
40-44	14.11 (0.324)	24.30 (1.656)	13.75 (0.639)	30.19 (2.400)
45-49	12.39 (0.297)	23.49 (1.612)	12.26 (0.587)	15.24 (1.773)
Total	**100**	**100**	**100**	**100**
Average age	32.80 (0.083)	39.68 (0.211)	33.43 (0.146)	38.98 (0.257)

Source: Own calculations from the 2017 NIDS and 2017 GHS
Notes: The data are weighted
Column percentages are presented for age category
Standard errors in parentheses
The sample includes all mothers aged 15-49 and NMOMs

The effects of the apartheid era spatial planning continue to influence post-apartheid society in South Africa and therefore race and geographic location remain critical factors in understanding the demographic dynamics of a population. During the apartheid era, the restriction of free movement and the unequal access to resources based on race meant that Black mothers had a very different experience of motherhood compared with White mothers. Post-apartheid, South Africa experienced large-scale urbanisation which has contributed to the widely accessible health care for pregnant women. However, motherhood continues to be experienced differently by mothers of different race groups and for mothers who live in different geographic locations (Moore and Govender, 2013).

In order to better understand the demographic characteristics of motherhood in South Africa, the racial distribution of women (15-49)[135], mothers (15-49) and NMOMs (30-49) are presented in Table 16. In general, the findings show that the largest share of all women, mothers and NMOMs are Black where for example, 93.59% of NMOMs are Black compared to 5.22% who are Coloured, 0.37% who are Indian and 0.82% who are White (NIDS estimates). These large differences in the estimates suggests that relative to their share of mothers, and the population as a whole, Black women are overrepresented among NMOMs while the other race groups are underrepresented.

Table 16: The racial distribution of all women aged 15-49, all mothers aged 15-49 and NMOMs, 2017

	All women (15-49)	All mothers (15-49)	NMOMs
2017 GHS			
Race groups			
Black	82.25 (0.323)	83.24 (0.386)	93.97 (0.931)
Coloured	8.60 (0.215)	7.57 (0.250)	5.76 (0.911)
Indian	2.39 (0.150)	2.41 (0.185)	0.00
White	6.75 (0.231)	6.77 (0.276)	0.26 (0.204)
Total	**100**	**100**	**100**
2017 NIDS			
Race groups			
Black	82.34 (0.597)	85.46 (0.661)	93.59 (1.177)
Coloured	8.61 (0.426)	8.54 (0.511)	5.22 (0.965)
Indian	2.38 (0.217)	1.78 (0.238)	0.37 (0.244)
White	6.68 (0.416)	4.22 (0.401)	0.82 (0.660)
Total	**100**	**100**	**100**

Source: Own calculations from the 2017 NIDS and the 2017 GHS
Notes: The data are weighted
Column percentage presented
Standard errors in parentheses
The sample includes all women aged 15-49, all mothers aged 15-49 and NMOMs

Further analysis into the racial dynamics of non-marital fertility is conducted where Table 17 presents the percentage of mothers and older mother as a share of never-married women aged 15-49 years within each race group. The results show that of all Black women aged 15-49 who have never married, 51.25% are mothers. Similarly, of all Indian and White women aged 15-

[135] All women who are aged 15-49 years, irrespective of whether they have a child or not.

49 who have never married, 21.27% and 22.80% are mothers, respectively. These differences in the percentages of mothers within each race group suggest that Black women (aged 15-49) who have never married are more likely to be mothers compared to unmarried women (aged 15-49) of other race groups. The results also suggest that Indian women who have never married are just as likely as White never married women to be mothers. As expected, the NIDS estimates are larger than the GHS estimates however overall, the findings show similar differences between the percentage of mothers within each race group.

Table 17: The percentage of mothers and older mothers within each race group, 2017

	2017 GHS		2017 NIDS	
	Mother	**Older mother**	**Mothers**	**Older mother**
Race groups				
Black	51.25 (0.527)	6.17 (0.248)	64.67 (1.017)	12.35 (0.651)
Coloured	31.52 (1.644)	4.31 (0.687)	50.56 (3.600)	8.83 (1.617)
Indian[136]	21.27 (4.589)	0.00	18.92 (5.856)	3.11 (2.050)
White	22.80 (2.578)	0.40 (0.310)	18.54 (5.753)	3.02 (2.382)

Source: Own calculations from the 2017 NIDS and 2017 GHS
Notes: The data are weighted
Row percentage presented[137]
Standard errors in parentheses
The sample includes all mothers aged 15-49 and NMOMs

Focusing on older mothers, the results show that of all African women aged 15-49 who have never married, 12.35% are older mothers[138]. The lower percentage of unmarried Indian (3.11%), White (3.02%) and Coloured (8.83%) women who are older mothers suggests that Black never-married women (aged 15-49) are more likely to be older mothers. Overall, the difference in the estimates between the NIDS and the GHS further supports the claim that motherhood is understated in the GHSs. In conclusion, the large differences between the estimates of Black never-married women (aged 15-49) who are mothers and older mothers and

[136] The estimates of Indian and White mothers and older mothers in both of the datasets have large standard errors and therefore, the results should be interpreted with caution. These high standard errors are most likely related to small sample sizes.

[137] The row total will not equal to a 100 percent because the estimates are drawn from different samples of never married mothers across two datasets.

[138] Older mothers had at least one child after the age of 29.

never-married women of the other race groups who are mothers and older mothers suggests that Black women are overrepresented as mothers and older mothers.

Table 18: The spatial characteristics of all mothers aged 15-49 and never-married older mothers, 2017

	2017 GHS		2017 NIDS	
	All mothers (15-49)	**NMOMs**	**All mothers (15-49)**	**NMOMs**
Geographic Location[139]				
Traditional areas	27.11 (0.407)	31.82 (1.845)	31.77 (0.793)	35.72 (2.353)
Urban areas	69.16 (0.427)	63.61 (1.917)	64.16 (0.837)	60.73 (2.442)
Farms areas	3.73 (0.180)	4.57 (0.871)	4.07 (0.337)	3.55 (0.763)
Total	**100**	**100**	**100**	**100**

Source: Own calculations from the 2017 NIDS and the 2017 GHS
Notes: The data are weighted
Column percentage presented
Standard errors in parentheses
The sample includes all women aged 15-49 and NMOMs

The geographic distribution of all mothers who are aged 15-49 years and NMOMs are presented in Table 18. The results show that across both datasets, the largest share of mothers and NMOMs live in urban areas, followed by those who live in traditional areas while the smallest share of NMOMs and mothers who are aged 15-49 years live in farm areas. A closer look at the results suggests that although the larger share of NMOMs live in urban areas, they are more likely to live in traditional areas (35.72% - NIDS) compared to all mothers who are aged 15-49 years (31.77% - NIDS). Conversely, NMOMs appear less likely to live in urban areas (63.61% - GHS) compared to mothers who are aged 15-49 years (69.16% - GHS). Overall, results in Table 18 seem to suggest that the spatial characteristics of NMOMs are not significantly different from the spatial characteristics of all mothers aged 15-49.

[139] Traditional areas are communally owed land which are under the jurisdiction of traditional leaders. An urban area refers to a continuously built-up area, established through township establishment. This would include cities, towns, 'townships', small towns and hamlets. Farms are pieces of land allocated and used for commercial farming and includes all infrastructure and structures on the land.

The next set of analyses focuses on the household characteristics of all mothers aged 15-49 and 30-49 and NMOMs[140]. Overall, the results in Table 19 reveal similarities in the household characteristics of mothers aged 15-49, 30-49 and NMOMs. For example, mothers aged 15-49 live in households with an average of 5 household members, 1.19 children and 2.13 female household members while mothers aged 30-49 live in households with an average of 4.67 household members, 1.07 children and 2 female household members. Similarly, the households that NMOMs live in consist of an average of 2.37 members of working age with only 1.11 employed people in the household while mothers aged 30-49 live in households with an average of 2.12 members of working age and 1.05 employed household members.

Table 19: Household characteristics of all mothers aged 15-49 and 30-49 and never-married older mothers, 2017

	All mothers (15-49)	All mothers (30-49)	NMOMs
Household composition			
Average number of household members	5.00 (0.059)	4.67 (0.070)	5.07 (0.086)
Average number of children*	1.19 (0.052)	1.07 (0.056)	1.55 (0.085)
Average number of working age people†	2.17 (0.052)	2.12 (0.056)	2.37 (0.090)
Average number of employed people††	1.04 (0.030)	1.05 (0.037)	1.11 (0.063)
Average number of pensioners**	0.08 (0.010)	0.07 (0.011)	0.09 (0.021)
Average number of females	2.13 (0.053)	2.00 (0.051)	2.29 (0.074)
Average number of adult males †††	0.70 (0.035)	0.73 (0.044)	0.92 (0.079)
Percentage of households with at least one employed member	54.86 (1.924)	54.85 (2.413)	46.78 (3.445)
Percentage of households without an adult male	50.97 (1.951)	48.55 (2.465)	39.58 (3.414)

Source: Own calculations from the 2017 NIDS
Notes: The data are weighted
Standard errors in parentheses
The sample includes mothers aged 15-49, 30-49 and never-married mothers aged 30-49
* Children refer to household members younger than the age of 15
†Working age refers to individuals who are aged 15 to 65
††Employed people refer to individuals who are aged 15 to 65
** Pensioners refer to household members who are aged 66 and older
†††Adult males are aged 15 and older

There are minimal differences that are noted in the average number of adult males in the households of NMOMs (0.92) and mothers aged 15-49 (0.70) and 30-49 (0.73). Lastly,

[140] The household characteristics of mothers aged 15-49, 30-49 and NMOMs using the 2017 GHS data are included in Appendix A. The findings differ slightly from the NIDS estimates as the GHS results show that NMOMs have a larger household size (5.06) compared to mothers aged 15-49 (4.53) and 30-49 (4.30) and an additional number of children in the household (2.23) compared to mothers aged 15-49 (1.34) and 30-49 (1.43). The reminder of the findings is similar to those that are presented using the NIDS data.

NMOMs (46.78%) appear to be living in households that are less likely to have at least one employment member compared to mothers aged 15-49 (54.86) and 30-49 (54.85%) and are more likely to have an adult male (39.58%) compared to mothers aged 15-49 (50.97%) and 30-49 (48.55%). One of the main findings from Table 19 is that NMOMs have more children on average which might suggest that the child(ren) that they had when they were older was not the first. Secondly, NMOMs appear to be more closely linked with adult males that other mothers.

Table 20: Marital distribution of all mothers aged 15-49 and 30-49 and older mothers, 2017

	All mothers (15-49)	**All mothers (30-49)**	**Older mothers[141] (30-49)**
Marital Status			
Married	29.44 (0.86)	37.95 (1.16)	45.53 (1.62)
Cohabiting	8.54 (0.50)	8.04 (0.62)	7.72 (0.87)
Widow	3.10 (0.30)	4.69 (0.45)	5.39 (0.64)
Divorced	3.40 (0.36)	4.77 (0.54)	4.75 (0.78)
Never Married	55.52 (0.94)	44.54 (1.20)	36.61 (1.57)
Total	**100**	**100**	**100**

Source: Own calculations from the 2017 NIDS
Notes: The data are weighted
Column percentage presented
Standard errors in parentheses
The sample includes all mothers aged 15-49 and 30-49

The analysis of the marital status of all mothers aged 15-49, older mothers aged 30-49 and all mothers aged 30-49 is presented in Table 20[142]. The findings highlight that older mothers are more likely to be married (45.53%) compared to all mothers aged 15-49 (29.44%) and 30-49 (37.95%). In contrast, older mothers are less likely to have never married (36.61%) compared to all mothers aged 15-49 (55.52%) and 30-49 (44.54%). The results also show that 8.54% of mothers aged 15-49 are cohabiting compared to 8.04% of mothers aged 30-49 and 7.72% of older mothers. Lastly, the percentages of divorced and widowed mothers are fairly similar between the different groups of mothers. The analysis that is presented in Table 20 suggests

[141] Older mothers are women who have had at least on child after the age of 29 and are aged 30-49 while all mothers aged 30-49 could have had a child at any point in time.

[142] The estimates of the marital status of mothers using the 2017 GHS data are presented as an appendix. The estimates of married, cohabiting and never married mothers are slightly higher than the NIDS estimates however the overall finding is the same – never marrying and cohabiting are more common among all mothers aged 15-49 and the least common among older mothers.

that remaining unmarried appears to be more common among all mothers aged 15-49 and those aged 30-49 and the least common among older mothers.

Overall, the analysis of the demographic characteristics has shown that compared to all mothers aged 15-49, NMOMs are more likely to be household heads and are more likely to live in female-headed households. There are racial differences that are noted between NMOMs and all mothers aged 15-49 where the results suggest that Black women are overrepresented among NMOMs. The geographic distribution has shown that compared to all mothers aged 15-49, NMOMs are more likely to live in traditional areas and less likely to live in urban areas while NMOMs and all mothers (aged 15-49) are least likely to live in farm areas. In general, the larger share of NMOMs and all mothers aged 15-49 live in urban areas. An analysis of the household characteristics has revealed that there are no significant differences in the household characteristics of NMOMs, all mothers aged 15-49 and those aged 30-49. The analysis of additional household indicators has shown that compared to all mothers aged 15-49 and 30-49, never-married older motherhood is closely linked to households that have at least one male household member. Furthermore, NMOMs (compared to all mothers aged 15-49 and 30-49) are found to be at a greater risk of poverty as they are more likely to belong to households that do not have at least one employed member. Lastly, compared to all mothers aged 15-49 and 30-49, older motherhood is closely associated with being married. In summary, the analysis in this section demonstrates that there are notable differences in the demographic characteristics of NMOMs and all mothers aged 15-49 and 30-49.

4.3.2 Socioeconomic characteristics

This section compares the socioeconomic characteristics of NMOMs with that of younger mothers and all mothers aged 15-49 and 30-49. The difference between NMOMs and never-married younger mothers is that the former group of mothers had at least one birth after the age of 29 while the latter group of mothers did not have any children after the age of 29, making these categories mutually exclusive. Presenting the analysis for never-married younger

mothers' sheds light on whether having children before the age of 30 influences the educational, employment and income characteristics of mothers[143].

The socioeconomic indicators that are used in this section include the highest educational level completed, employment status and the average per capita total monthly household income. The highest educational level serves as a measure of human capital and as a proxy for socioeconomic status as a positive relationship between education and earnings has been noted in the economic and education literatures (Desjardins, 2001; Jalovaara and Andersson, 2018; Oketch, 2006; Sylwester, 2002). Supplementing this measure of socioeconomic status is an estimate of the average per capita total monthly household income.

The analysis by the highest educational level presented in Table 21[144] includes estimates for NMOMs, never-married younger mothers and all mothers aged 15-49 and 30-49. Overall, the results do not highlight any significant differences in the educational qualifications of NMOMs compared to never-married younger mothers and all mothers aged 15-49 and 30-49. For example, 1.65% of mothers aged 15-49, 2.50% of mothers aged 30-49, 2.49% of NMOMs and 1.71% of never-married younger mothers have no formal schooling.

The single largest share of mothers in each group have completed some secondary schooling, meaning that these mothers have either grade 8, 9, 10 or 11 as their highest level of education (Table 21). It is interesting to note that NMOMs are least likely to have completed secondary school (15.03%) compared to mothers aged 15-49 (19.59%), those aged 30-49 (16.42%) and never-married younger mothers (19.11%). Cumulatively, only 25.61% of NMOMs have some form of post-school education compared to 27.91% of mothers aged 15-49, 31.76% of mothers aged 30-49 and 35.24% of never-married younger mothers. Noteworthy is the larger percentage

[143] The analysis of never married younger mothers is to specifically identify whether there are any differences in the socioeconomic characteristics of unmarried women who had children before the age of 29 compared to NMOMs therefore, there are no analyses of the demographic characteristics of never married younger mothers.

[144] The analysis by the highest educational level for NMOMs, never married younger mothers and al1 mothers aged 15-49 and 30-49 using the 2017 GHS data are included in Appendix A. In general, the findings are similar to those reported using the 2017 NIDS data.

of never-married younger mothers who have a certificate/diploma (30.27%) or an undergraduate degree/diploma (4.65%) compared to NMOMS (23.61% and 1.79%, respectively). Overall, the results presented in Table 21 show no significant difference in the educational profile of the different groups of mothers.

Table 21: The educational distribution of all mothers aged 15-49 and 30-49, never-married older mothers and never-married younger mothers, 2017

	All mothers (15-49)	All mothers (30-49)	NMOMs	Never-married younger mothers[145]
Educational levels completed				
No schooling	1.65 (0.214)	2.50 (0.328)	2.49 (0.505)	1.71 (0.447)
Some primary schooling	4.09 (0.310)	5.49 (0.449)	6.97 (1.239)	2.82 (0.485)
Completed primary schooling	3.06 (0.264)	3.57 (0.370)	5.78 (1.157)	2.23 (0.441)
Some secondary schooling	43.69 (0.938)	40.25 (1.179)	44.12 (2.680)	38.90 (2.418)
Completed secondary schooling	19.59 (0.742)	16.42 (0.868)	15.03 (1.875)	19.11 (1.883)
NTC and NCV – all levels[146]	0.36 (0.087)	0.17 (0.058)	0.09 (0.093)	0.21 (0.137)
Certificates and/or diplomas	22.81 (0.831)	25.39 (1.100)	23.61 (2.441)	30.27 (2.491)
Undergraduate degree or diploma	4.51 (0.448)	5.86 (0.652)	1.79 (0.593)	4.65 (1.386)
Postgraduate degree or diploma	0.23 (0.079)	0.34 (0.121)	0.12 (0.115)	0.11 (0.105)
Total	**100**	**100**	**100**	**100**

Source: Own calculations from the 2017 NIDS
Note: The data are weighted
Column percentage presented
Standard errors in parentheses
The sample includes all mothers aged 15-49 and 30-49, NMOMs and never-married younger mothers

[145] Younger mothers are women who are aged 30-49 years at the time of enumeration and did not have any children after the age of 29. The categories of younger mother and NMOMs are mutually exclusive.

[146] All levels of National training certificates (NTC) and national certificate vocational (NCV).

The next set of socioeconomic characteristics focuses on the employment distribution[147] of NMOMs. The results that are in Table 22 also includes an analysis of the employment distribution of all mothers aged 15-49, 30-49 and never-married younger mothers. In general, the findings show that the largest share of all groups of mothers are most likely to be employed followed by those who are economically inactive while the smallest share of mothers (in all groups) are broadly unemployed. Never-married younger mothers aged 30-49 appear more likely to be employed (63.19%) compared to mothers aged 15-49 (49.66%), 30-49 (57.70%) and NMOMs (55.98%). In comparison to never-married younger mothers and all mothers aged 15-49 and 30-49, the results suggest that NMOMs are more likely to be economically inactive and less likely to be employed.

Table 22: The employment distribution of all mothers aged 15-49 and 30-49, never-married older mothers and never-married younger mothers, 2017

	All mothers (15-49)	All mothers (30-49)	NMOMs	Never-married younger mothers (30-49)
2017 GHS				
Employment status				
Economically inactive	37.34 (0.459)	27.28 (0.534)	39.05 (4.741)	29.81 (2.679)
Employed	45.83 (0.477)	58.06 (0.593)	36.37 (4.609)	46.03 (2.886)
Broadly unemployed	16.83 (0.358)	14.67 (0.423)	24.57 (4.168)	24.16 (2.502)
Total	**100**	**100**	**100**	**100**
2017 NIDS				
Employment status				
Economically inactive	32.26 (0.849)	27.21 (1.037)	27.38 (2.21)	21.92 (2.040)
Employed	49.66 (0.947)	57.70 (1.171)	55.98 (2.61)	63.19 (2.350)
Unemployed	18.08 (0.695)	15.09 (0.812)	16.64 (1.95)	14.88 (1.542)
Total	**100**	**100**	**100**	**100**

Source: Own calculations from the 2017 NIDS and the 2017 GHS
Note: The data are weighted
Column percentage presented
Standard errors in parentheses
The sample includes all mothers aged 15-49 and 30-49, NMOMs and never-married younger mothers

[147] Broad unemployment refers to individuals who are not actively seeking employment but are willing to accept employment. This differs from the strict definition which represents individuals who are actively seeking employment and are willing to accept work. Economically inactive refers to individuals who are younger than 18 and older than 65 years, those who are studying full-time, retired, homemakers or individuals who are not in search of employment and are not willing to accept a job.

The analysis of the average per capita total monthly household income[148] of all mothers aged 15-49 and 30-49, NMOMs and never-married younger mothers is presented in Table 23. The NIDS estimates suggest that mothers aged 30-49 live in households with a slightly higher average per capita total monthly household income (R3428.76) compared to mothers aged 15-49 (R2917.63). Conversely, NMOMs live in households with the lowest average per capita total monthly household income (R1873.91) followed by never-married younger mothers (R2703.69). These findings suggest that relative to all mothers aged 15-49 and 30-49, NMOMs are more likely to live in households with a lower average per capita total monthly household income. Additionally, the analysis indicates that never-married motherhood seems to be closely linked to households with a low per capita total monthly household income. As expected, the NIDS estimates are much higher than the GHS estimates as the NIDS household income variable is created using additional data sources. A description of the different data sources that are used to create the household income variable in the GHS and the NIDS is included in the Data and Methodology Chapter. Given the difference in the estimates, the overall findings in the GHS and the NIDS data are similar.

Table 23: Average per capita total monthly household income of all mothers aged 15-49 and 30-49, never-married older mothers and never-married younger mothers, 2017

	All mothers (15-49)	All mothers (30-49)	NMOMs	Never-married younger mothers (30-49)
Average per capita total monthly household income				
2017 GHS	2145.63 (43.040)	2439.57 (60.137)	1137.99 (86.146)	1067.10 (62.102)
2017 NIDS	2917.63 (107.134)	3428.76 (154.928)	1873.91 (184.805)	2703.69 (277.045)

Source: Own calculations from the 2017 NIDS and the 2017 GHS
Note: The data are weighted
Estimates presented in Rand value for average per capita total monthly household income
Standard errors in parentheses
The sample includes all mothers aged 15-49 and 30-49, NMOMs and never-married younger mothers

[148] Refer to the Data and Methodology chapter for a detailed outline of how the total monthly household income variable is created.

The analysis of the industry in which NMOMs, never-married younger mothers and all mothers aged 15-49 and 30-49 are employed is presented in Table 24[149]. The results show that the larger share of all groups of employed mothers are employed in the community, social and personal services industry followed by those who are employed in the trade industry. These mothers who are employed in the trade industry are involved in some form of repair or wholesale/retail trade and compared to all mothers aged 15-49 (21.82%), NMOMs (21.59%) and never-married younger mothers (23.34%), mothers aged 30-49 are least likely to work in this sector (17.51%). Additionally, never-married younger mothers appear least likely to be employed in private households (i.e.: as domestic workers) (9.53%) compared to NMOMs (15.72%) and mothers aged 15-49 (12.11%) and 30-49 (14.03%). In general, the analysis shows that private households and the manufacturing, trade, finance and community industries are common employment industries for all groups of mothers and thus conversely, mothers are least likely to work in the agriculture, mining, utilities, construction and transport industries. Overall, the results presented in Table 24 suggest that there are no substantial differences in the sectors in which employed mothers work.

Table 24: Industry sector of employed mothers aged 15-49, 30-49 NMOMs and never-married younger mothers, 2017

	All mothers 15-49	All mothers (30-49)	NMOMs	Never-married younger mothers (30-49)
Industry sector				
Private households	12.11 (1.001)	14.03 (1.159)	15.72 (2.780)	9.53 (1.658)
Agriculture	5.56 (0.624)	5.65 (0.761)	6.82 (1.580)	6.22 (1.488)
Mining	0.95 (0.235)	1.16 (0.306)	0.51 (0.370)	0.38 (0.180)
Manufacturing	9.07 (0.916)	7.59 (0.954)	11.65 (3.50)	8.18 (1.567)
Utilities	0.98 (0.399)	1.09 (0.497)	0.30 (0.296)	0.14 (0.137)
Construction	1.41 (0.324)	1.45 (0.399)	0.41 (0.290)	1.05 (0.516)
Trade	21.82 (1.354)	17.51 (1.434)	21.59 (3.597)	23.34 (3.146)
Transport	1.67 (0.368)	1.60 (0.416)	2.30 (1.102)	1.51 (0.708)
Finance	12.15 (1.175)	12.49 (1.410)	8.87 (2.485)	14.61 (2.833)
Community	34.30 (1.511)	37.45 (1.799)	31.85 (4.036)	35.06 (3.632)
Total	**100**	**100**	**100**	**100**

Source: Own calculations from the 2017 NIDS
Note: The data are weighted
Standard errors in parentheses
Column percentage presented
The sample includes employed mothers aged 15-49 and 30-49, NMOMs and never-married younger mothers

[149] The analysis of the employment industry sector is presented using the NIDS data only as this type of sector breakdown is not included in the GHS data.

4.4 Concluding remarks

This chapter focused on highlighting the characteristics of NMOMs and in most cases, provided the characteristics of never-married younger mothers and all mothers aged 15-49 and 30-49 to ascertain whether particular findings are unique to NMOMs or are common to the different groups of mothers. To ensure that any deductions that are made from the findings are reflective of the population and not a function of the different structures of the surveys, a detailed comparison of the GHS and the NIDS was presented. The results from the comparative analysis suggests that the surveys are comparable at an individual and household level however it is worth keeping in mind that motherhood is understated in the GHS.

Overall, the findings in this chapter highlight that there are no real differences in the educational levels, employment status or industry sector of NMOMs, never-married younger mothers and all mothers aged 15-49 and 30-49. This indicates that the differences in the household income between these groups of mothers is possibly related to the household income that is contributed by other household members. As a result, compared to motherhood in general, never-married older motherhood is associated with low income households. This finding is unexpected as NMOMs and all mothers aged 15-49 and 30-49 are found to have similar household characteristics. NMOMs are also found to be closely associated with living in female-headed households while in general, NMOMs are more likely to be household heads compared to all mothers aged 15-49. Lastly, the racial differences that are noted between the different groups of mothers indicates that Black women are overrepresented among NMOMs. The next chapter identifies trends in the socioeconomic and demographic characteristics of NMOMs between 2002 and 2017. The findings from the trend analysis will provide insights into any significant changes in the socioeconomic and demographic profile of NMOMs in South Africa.

Chapter Five: Trend in the characteristics of never-married older mothers

5.1 Introduction

This chapter is focused on identifying whether here have been changes in the prevalence or profile of non-marital fertility over a recent 15-year period. In particular, the socioeconomic and demographic characteristics of NMOMs are explored while similar estimates for different groups of mothers are used as a comparison. This is done to determine whether the changes in the characteristics of NMOMs are identifiable among other groups of women and mothers, or whether they are specific to NMOMs. Additionally, the chapter investigates the characteristics of NMOMs, and never-married mothers aged 15-49 by their socioeconomic status (high vs low socioeconomic status). The main aim of this analysis is to determine whether these mothers are more likely to be of a high or low socioeconomic status and secondly to identify whether there are similarities/differences in the characteristics of mothers of high and low socioeconomic status. This analysis is also presented for never-married mothers aged 15-49 as a statistically significant increase that has been noted in the percentage of these women over time (section 5.2).

The first section in this chapter focuses on identifying whether there have been any significant changes in non-marital fertility between 2002 and 2017. The analysis looks at all women aged 15-49 and in particular older mothers aged 30-49 which will provide insights into whether any changes in the percentage of non-marital fertility is specific to older mothers or is a more general change among women aged 15-49. The second section identifies trends in the characteristics of NMOMs between 2002 and 2017. This section is split into two parts. The first part focuses on changes in the demographic characteristics of NMOMs where characteristics such as age, marital status, race, household composition and spatial arrangements are explored. The second part focuses on changes in the socioeconomic characteristics such as education levels, employment status and household income.

The last section in this chapter focuses on the characteristics (socioeconomic and demographic) of never-married mothers (aged 15-49) and NMOMs who are of a high and low socioeconomic status. In this regard, mothers have been categorised into either high or low socioeconomic status using information from the analysis of their average real per capita total monthly household income[150]. The analysis of the GHS data presents trends from 2002 until 2017 while the NIDS data provides analysis between 2008 and 2017. In order to identify the size of the change from 2002/2008 to 2017, the percentage difference or the absolute difference between the estimates are presented and statistically significant changes at a 95 percent confidence level ($p<0.05$) are identified. The weighted estimates are presented and where appropriate, additional analysis is included as an appendix (Appendix C).

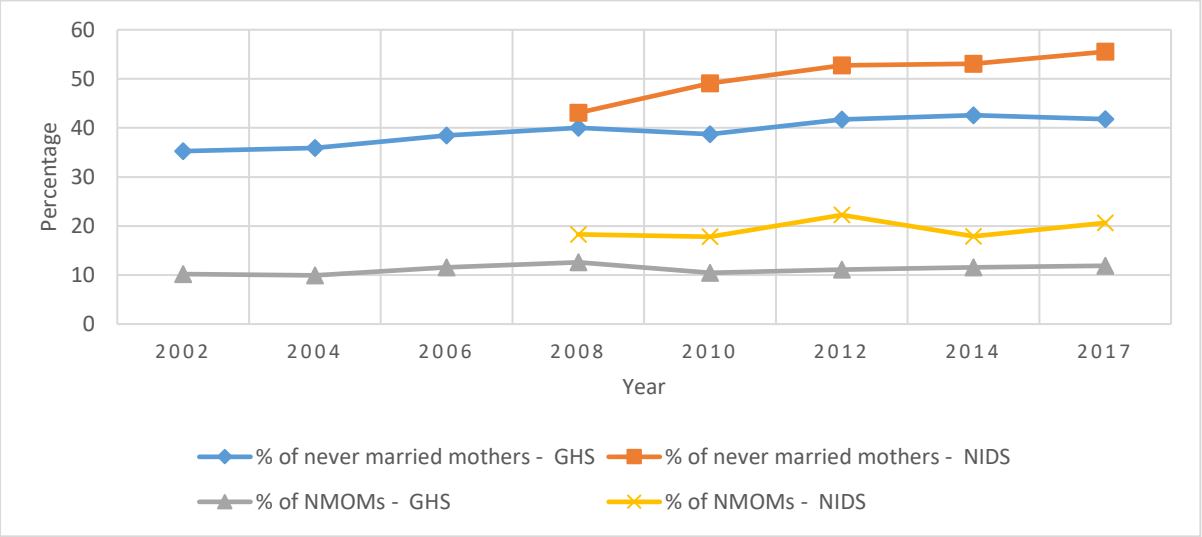
5.2 Trends in non-marital fertility in South Africa

One of the main aims of this thesis is to investigate whether there has been a significant increase in the percentage of NMOMs and in non-marital fertility (in general) between 2002 and 2017. To this end, Figure 4 outlines the prevalence of non-marital fertility among all mothers aged 15-49. The results show that there has been a statistically significant increase (by 18.43%, in relative terms) in the percentage of never-married mothers[151] aged 15-49 as a share of all mothers aged 15-49 between 2002 (35.26%) and 2017 (41.79%). The analysis of non-marital fertility between 2008 (43.06%) and 2017 (55.52%) also reveals a 28.9% statistically significant increase in the percentage of never-married mothers (aged 15-49) as a share of all mothers aged 15-49.

[150] Refer to the Data and Methodology Chapter for details on how mothers are classified as belonging to a high or low socioeconomic status.

[151] Never married mothers are never married women who have at least one child (the mother's age at birth does not matter).

Figure 4: The percentage of non-marital fertility among mothers aged 15-49, 2002-2017



Source: Own calculations from the 2002-2017 GHS and the 2008-2017 NIDS
Notes: The data are weighted
The sample are all mothers aged 15-49
The first wave of the NIDS was collected in 2008 therefore, there are no NIDS estimates presented between 2002 and 2006

The results in Figure 4[152] also investigate whether there has been an increase in the share of NMOMs[153] as a percentage of mothers aged 15-49. The analysis shows a 16.49% increase in the percentage of NMOMs as a share of mothers aged 15-49 between 2002 (10.19%) and 2017 (11.87%)[154]. An increase of 12.96% in the percentage of NMOMs as a share mothers aged 15-49 is also noted between 2008 (18.28%) and 2017 (20.65%)[155] (however, neither of these increases are statistically significant). The overall difference in the estimates between the GHS and the NIDS is a result of motherhood being underestimated in the GHS data[156]. The main finding presented in Figure 4 suggests that (between 2002/2008 and 2017) there is a significant increase in non-marital fertility among mothers aged 15-49 and that this increase is not being

[152] The totals for each trend line will not equal to a 100 percent because the estimates are drawn from different datasets. This is the case of all of the figures in the trend analysis section.

[153] NMOMs are never married women who had at least one birth after the age of 29.

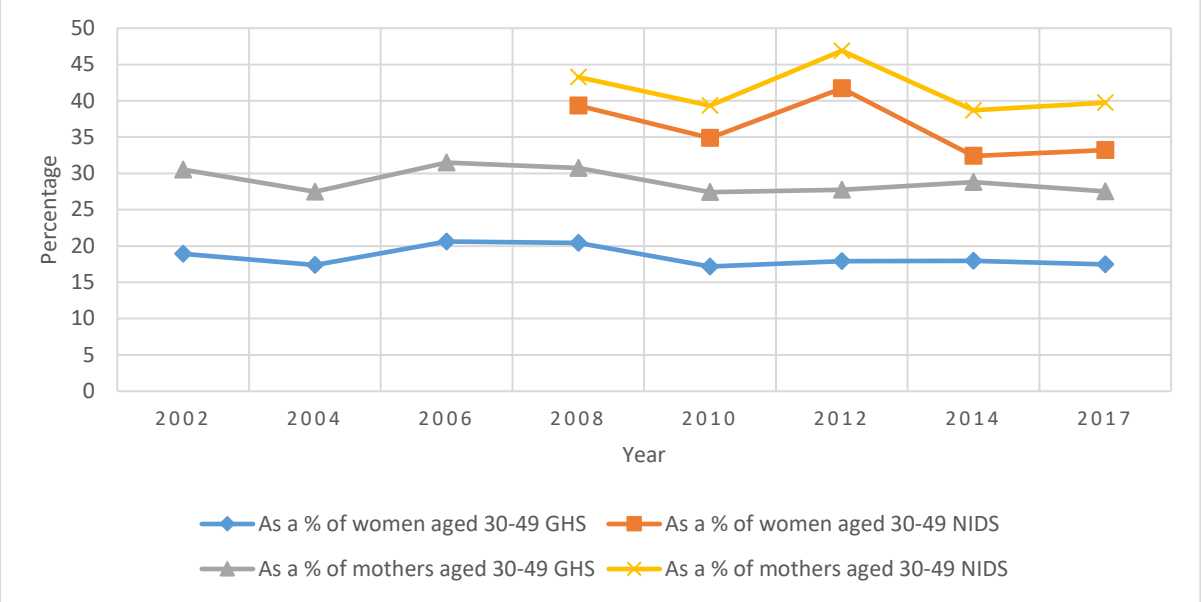
[154] GHS percentage difference = (2017 estimate - 2002 estimate) / 2002 estimate *100

[155] NIDS percentage difference = (2017 estimate – 2008 estimate) / 2008 estimate *100

[156] Refer to section 4.2 for a detailed discussion on how the differences between the GHS and the NIDS influences the interpretation of findings.

driven by older mothers. In fact, the results show no statistically significant increase in the share of NMOMs among all mothers aged 15-49 between 2002/2008 and 2017.

Figure 5: The percentage of never-married older mothers as a share of all mothers/women aged 30-49, 2002-2017



Source: Own calculations from the 2002-2017 GHS and the 2008-2017 NIDS
Notes: The data are weighted
The sample includes women/mothers aged 30-49
The first wave of the NIDS was collected in 2008 therefore, there are no NIDS estimates presented between 2002 and 2006

The analysis in Figure 5 focuses on a narrower age range and investigates whether there has been a change in the share of NMOMs as a percentage of women aged 30-49 and as a percentage of mothers aged 30-49. Looking at all women aged 30-49, the share of NMOMs decreased by 7.61% between 2002 (18.92%) and 2017 (17.48%). Similarly, a 15.56% decrease in the share of NMOMs as a percentage of all women aged 30-49 is noted between 2008 (39.32%) and 2017 (33.20%). Interestingly, a decrease in the share of NMOMs as a percentage of all mothers aged 30-49 is also observed. The results show a 9.89% decrease in the percentage of NMOMs as a share of mothers aged 30-49 between 2002 (30.54%) and 2017 (27.52%) and a decrease of 8.16% in the percentage of NMOMs as a share of mothers aged 30-49 between 2008 (43.25%) and 2017 (39.72%). Overall, neither of these decreases in the percentage of NMOMs among all mothers and women aged 30-49 are statistically significant however, the percentage change could possibly suggest a change in the fertility behaviour among older women.

5.3. A trend analysis of the socioeconomic and demographic characteristics of never-married older mothers

The analysis of non-marital fertility that is presented above demonstrates a significant increase in the percentage of never-married mothers of all mothers aged 15-49. A change in the percentage of NMOMs as a share of all mothers/women aged 30-49 is also noted (however these findings are not statistically significant). Based on these results, this section examines whether there have been changes in the profile of never-married mothers and NMOMs[157]. In particular, this section presents a trend analysis of the demographic and socioeconomic characteristics of never-married mothers aged 15-49 and NMOMs between 2002 and 2017. The analysis focuses on women who had at least one child between the ages of 15-49 and women who had at least one child after the age of 29 (NMOMs). The trend analysis spans a period of fifteen years from 2002 until 2017 and the analysis is presented at two-year intervals using data from the 2002 to 2017 GHS and the 2008 to 2017 NIDS. The overlap of data from 2008 is included to establish a basis of comparability between the surveys.

5.3.1 Trends in the demographic characteristics of never-married mothers and never-married older mothers

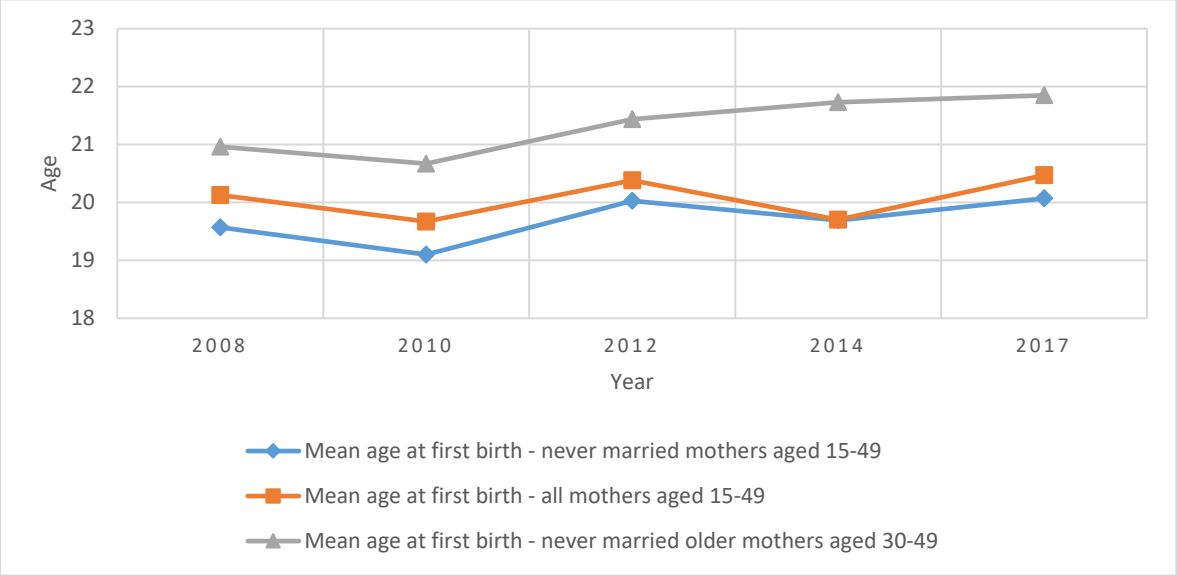
This section focuses on the demographic characteristics of never-married mothers and NMOMS and includes factors such as age[158], race, marital status, age at first birth, the

[157] A trend analysis of selected socioeconomic and demographic characteristics of NMOMs by household income level was conducted. The findings did not reveal anything surprising or anything that is different from what has already been presented in this section. The analyses, which were done on the NIDS data are included as an appendix.

[158] The analysis of the average age of mothers aged 15-49 and NMOMs (at the time of enumeration) show minimal changes over time. There has been a change of 0.27 years in the average age of mothers (aged 15-49) between 2002 (32.5 years) and 2017 (32.8 years). A smaller change of 0.01 years is noted between 2008 and 2017. Similarly, the average age of NMOMs increased by 0.31 years between 2002 (39.4 years) and 2017 (39.7 years) and decreased by 0.46 years between 2008 (39.4 years) and 2017 (38.9 years). Interestingly, the analysis of the average age of never married mothers aged 15-49 (at the time of enumeration) revealed a statistically significant increase of 1.78 years between 2008 (26.9 years) and 2017 (28.7 years) and a statistically significant increase of 1.4 years between 2008 (29.3 years) and 2017 (30.7 years).

geographic location of the household in which mothers live and household composition. The average age at first birth for never-married mothers aged 15-49, all mothers aged 15-49 and NMOMs are presented in Figure 6. The results show that never-married mothers and all mothers have similar ages at first birth while NMOMs appear to be starting families at a slightly older age. Additionally, the analysis in Figure 6 reveals that there are minimal changes in the average ages at first birth for never-married mothers aged 15-49 (0.50 years), mothers aged 15-49 (0.34 years) and NMOMs (0.89 years) between 2008 and 2017. On average, in 2017, never-married mothers and mothers aged 15-49 had their first child at the age of 20 while NMOMs had their first child at the age of 22. These results, which shows that NMOMs start their families at a slightly older age compared to never-married mothers and all mothers aged suggests that NMOMs are possibly postponing their fertility (neither of the changes in the age at first birth among mothers and NMOMs are statistically significant).

Figure 6: Average age at first birth of all mothers, never-married mothers and NMOMs, 2008-2017



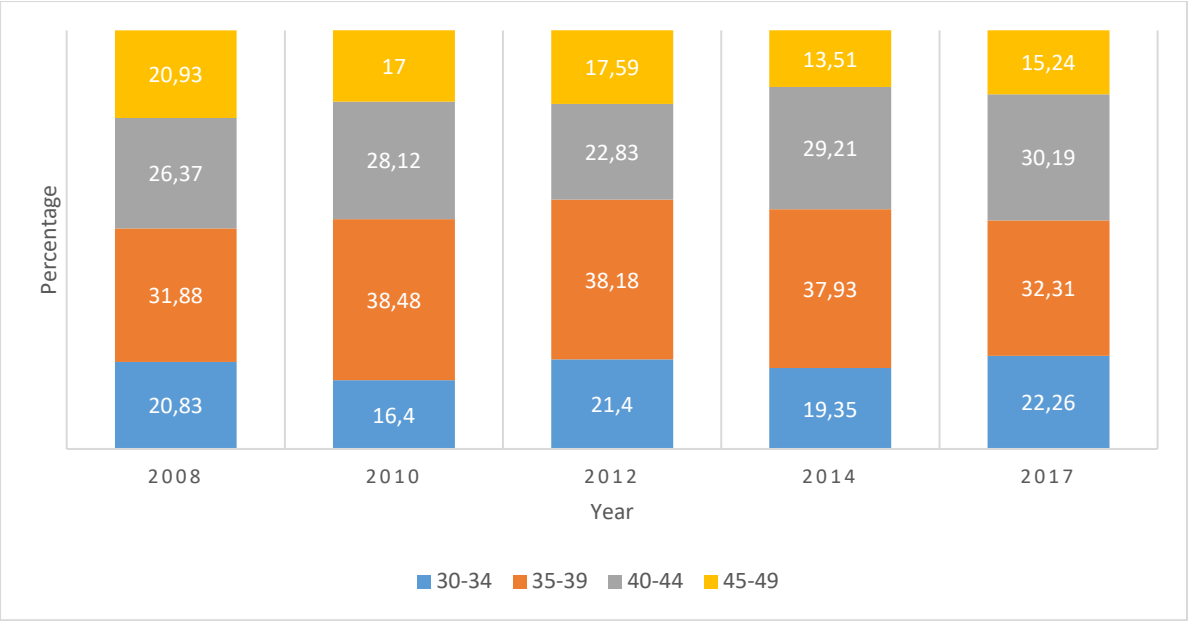
Source: Own calculations from the 2008-2017 NIDS
Notes: The data are weighted
The sample includes all mothers aged 15-49, never-married mothers and NMOMs
The first wave of the NIDS was collected in 2008 therefore, there are no NIDS estimates presented between 2002 and 2006

Presented in Figure 7 is the percentage of NMOMs within each age category between 2008 and 2017[159]. The results reveal an increase in the share of NMOMs who are aged between 35-39. In particular, between 2008 (31.88%) and 2017 (32.31%), the percentage of NMOMs who are

[159] The analysis of the age distribution of NMOMs using the GHS data are presented as an appendix (See Appendix B). In general, the GHS estimates are similar to those that are described using the NIDS data.

aged between 35-39 years increased by 1.35%. Additionally, increases in the percentages of NMOMs who are aged between 30-34 (6.87%) and 40-44 (14.49%) years and a decrease in the share of NMOMs who are aged 45-49 (27.19%) years are also noted between 2008 and 2017. The findings that are outlined in Figure 7 reveals a gradual increase in the share of NMOMs who are aged between 35 and 39 years. In general, the results suggest that any changes in the profile of NMOMs are not driven by age.

Figure 7: Percentage of never-married older mothers by age category, 2008-2017



Source: Own calculations from the 2008-2017 NIDS
Notes: The data are weighted
The sample includes NMOMs

The trend analysis of the marital status[160] of older mothers (that are included in Figure 8) highlight a steady decline in the percentage of married[161] older mothers[162]. In 2002, 76.26% of older mothers were married (or cohabiting) compared to 70.36% in 2017, amounting to a 7.74%

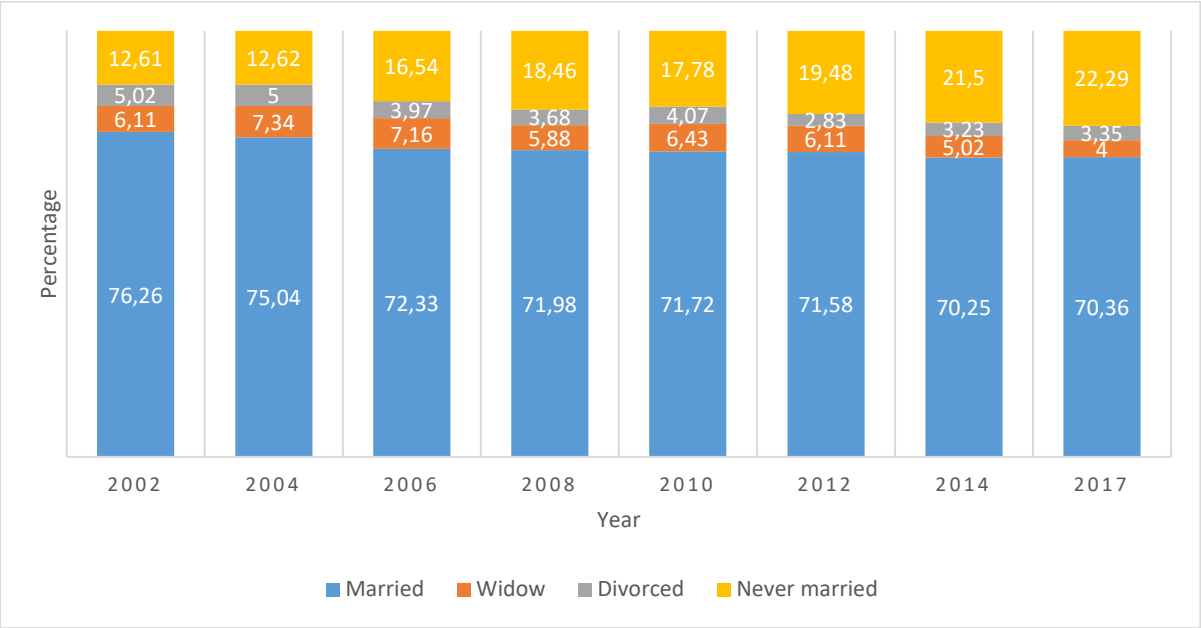
[160] Refer to the Data and Methodology Chapter for details on how the marital status variable is coded across the NIDS and the GHS data, and between the different rounds/waves of data.

[161] The married category includes mothers who are married or cohabiting.

[162] The trends in the marital status of older mothers are presented using the GHS data (Figure 8) as the NIDS findings do not reveal statistically significant changes in the percentage of older mothers who were cohabiting, widowed or divorced between 2008 and 2017 (as is revealed in the GHS data). As a result, the NIDS findings are included in Appendix B.

statistically significant decrease in the percentage of older mothers who were married between 2002 and 2017. Parallel to this decrease is a statistically significant increase (of 76.76%%) in the share of older mothers who were never married between 2002 and 2017. The analysis of the trends in marital status (Figure 8) also shows that the percentages of older mothers who were widows/widowed (34.53%, statistically significant) and divorced (33.27%, statistically significant) have decreased since 2002. This change coupled with a decrease in the percentage of older mothers who were married further supports the notion that older mothers are increasingly remaining unmarried.

Figure 8: Marital status of older mothers aged 30-49, 2002-2017

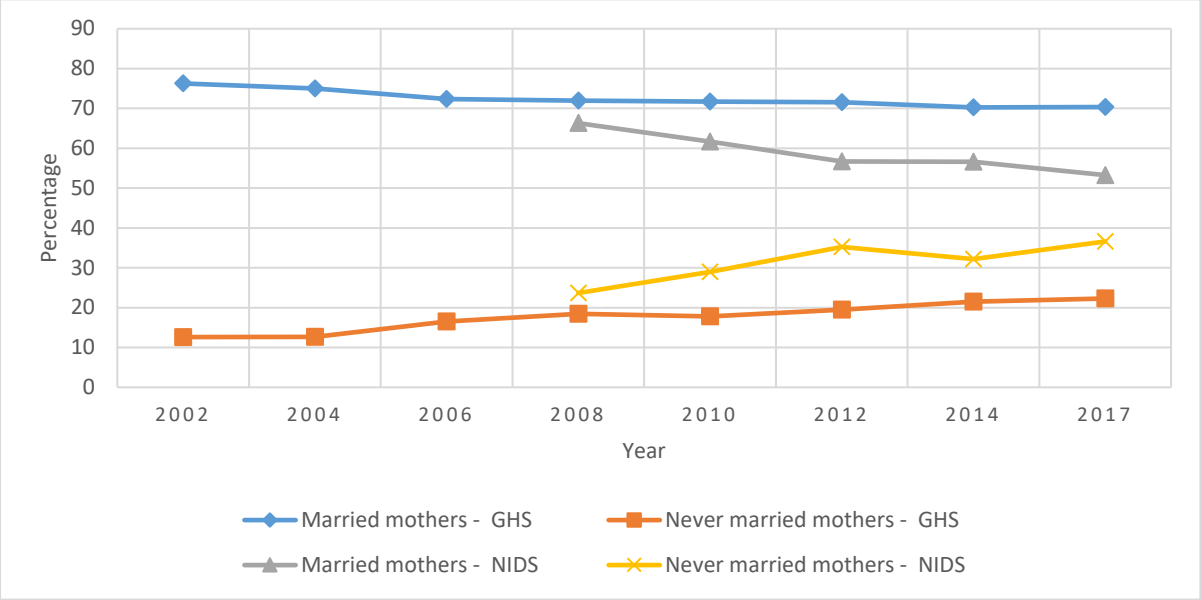


Source: Own calculations from the 2002-2017 GHS
Notes: The data are weighted
The sample includes older mothers aged 30-49

Although the results indicate that there has been a statistically significant increase in the percentage of older mothers who are never married between 2002 and 2017, the larger share of older mothers remain married followed by those who are never married. For example, in 2006, 72.33% of older mothers were married compared to 16.54% of older mothers who were never married, 7.16% who were widowed and 3.97% who were divorced. Taking into consideration that there has been no statistically significant increase in the percentage of NMOMs between 2002 and 2017 (as shown in Figure 4), the analysis of marital status suggests that the profile of these mothers have changed over time where an increasing amount of NMOMs are remaining unmarried.

In order to identify whether the decrease in the percentage of married older mothers (as shown in Figure 8) is specific to older mothers or is a general pattern among mothers aged 30-49, Figure 9 presents a trend analysis of the percentages of mothers aged 30-49 who are married and never married. The analysis shows that there is a statistically significant decrease in the percentage of mothers aged 30-49 who are married. The results reveal that between 2008 (66.29%) and 2017 (53.25%), there was a statistically significant decrease of 19.67% in the share of married mothers aged 30-49. Looking at never-married mothers aged 30-49, the analysis reveals a corresponding statistically significant increase of 54.67% in the share of never-married mothers aged 30-49 between 2008 (23.67%) and 2017 (36.61%). Similar results are noted in the GHS estimates. Overall, the results in Figure 9 shows that mothers aged 30-49 are demonstrating a similar decrease in marriage (as older mothers) and are increasingly likely to remain unmarried.

Figure 9: Percentage of married and never-married mothers aged 30-49, 2002-2017



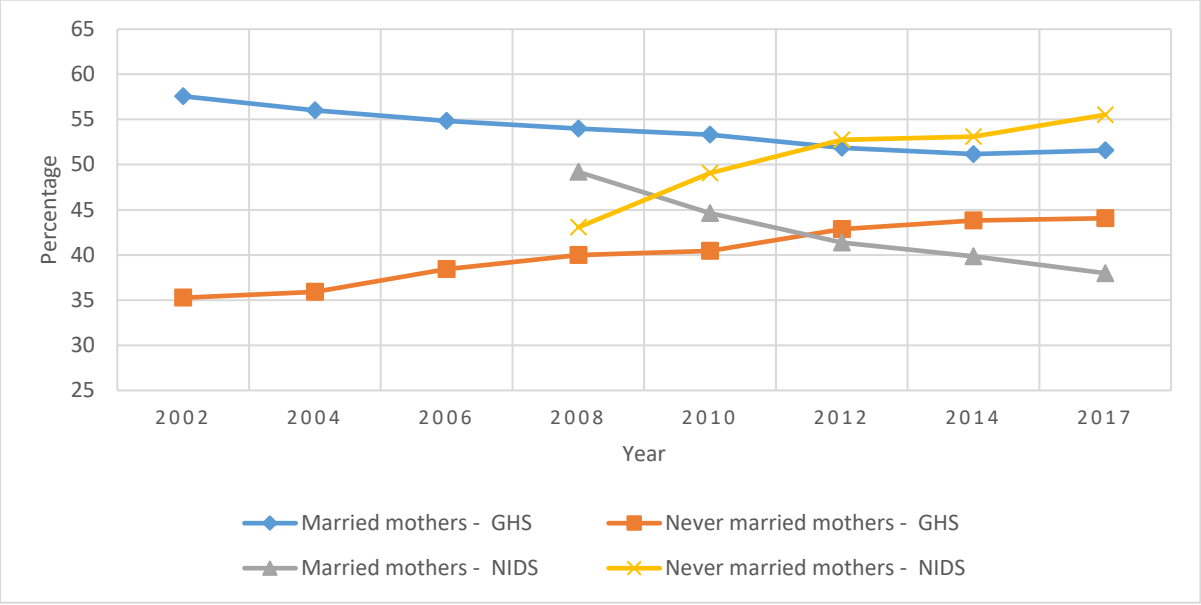
Source: Own calculations from the 2008 to 2017 NIDS and the 2002 to 2017 GHS
Notes: The data are weighted
The first wave of the NIDS was collected in 2008 therefore, there are no NIDS estimates that are presented between 2002 and 2006
The sample includes mothers aged 30-49

Thus far, the analysis of marital status has shown that older mothers[163] and mothers aged 30-49 are increasingly likely to remain unmarried as the percentages of these mothers who are married have significantly decreased between 2002/2008 and 2017. The last round of analysis on marital status is aimed at identifying whether the decrease in the percentage of married

[163] Older mothers are women who had at least one birth after the age of 29.

mothers is also observed among mothers aged 15-49. To this end, Figure 10 presents a trend analysis of the percentages of married and never-married mothers aged 15-49 between 2002 and 2017. Similar to the analysis of mothers aged 30-49 and older mothers, the results show a statistically significant decrease of 22.79% in the share of married mothers aged 15-49 between 2002 (49.19%) and 2017 (37.98%). The results also reveal a corresponding statistically significant increase of 28.94% in the share of never-married mothers aged 15-49 between 2008 (43.06%) and 2017 (55.52%). The trend analysis between 2002 and 2017 reveal similar statistically significant findings. In conclusion, the analysis of the marital status of mothers aged 15-49, 30-49 and older mothers highlights two main findings: firstly, the change in the marital status of mothers (the statistically significant increase in never-married mothers and the statistically significant decrease in married mothers) is not unique to older mothers and instead, seems to be a part of a larger pattern among mothers in South Africa. Secondly, the largest increase in the percentage of never-married mothers was to mothers aged 30-49 (an increase of 76.76% between 2002 and 2017 and an increase of 54.67% between 2008 and 2017).

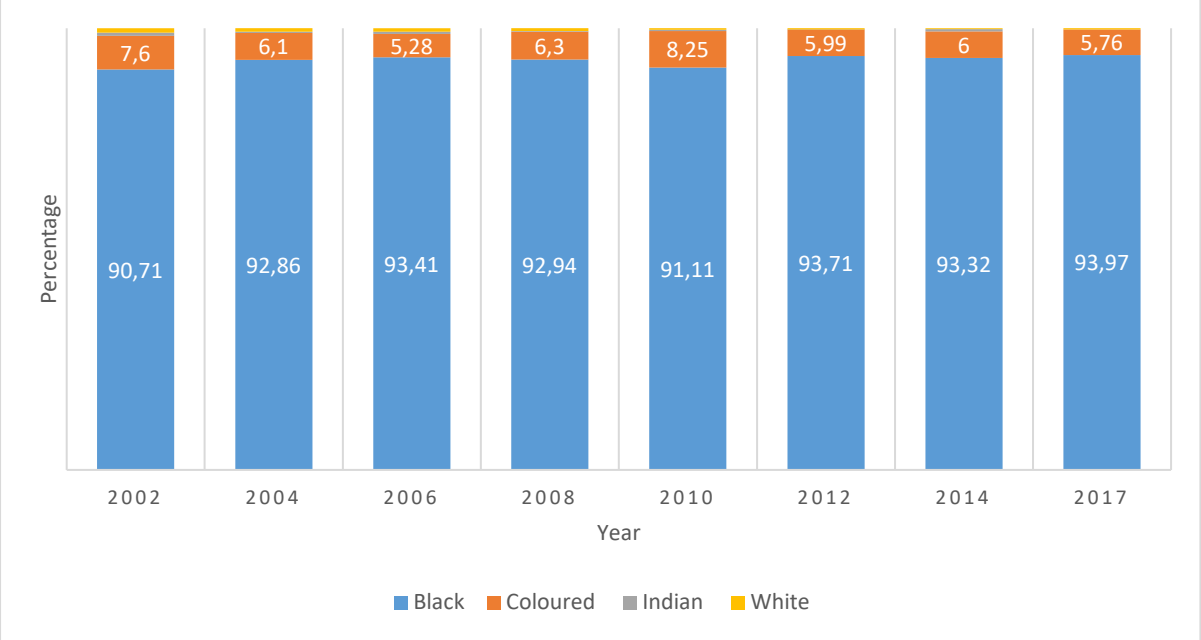
Figure 10: Percentage of married and never-married mothers aged 15-49, 2002-2017



Source: Own calculations from the 2008 to 2017 NIDS and the 2002 to 2017 GHS
Notes: The data are weighted
The first wave of the NIDS was collected in 2008 therefore, there are no NIDS estimates that are presented between 2002 and 2006
The sample includes mothers aged 15-49

The South African population is primarily comprised of Black people and therefore, it is expected that the large majority of NMOMs are Black, as highlighted in Figure 11[164]. Further analysis into the racial trends of NMOMs shows that over the period of analysis, Black women continue to have the single largest percentage of NMOMs compared to Coloured, Indian and White mothers. The analysis highlights a 3.59% increase in the percentage of NMOMs who were Black between 2002 (90.71%) and 2017 (93.97%) while during this period, there were decreases in the percentage of NMOMs who were Coloured (24.21%), Indian (34.72%) and White (73.47%). Overall, these trends show that the racial composition of NMOMs has not changed significantly over the period of analysis (2002-2017) and therefore, the changes in the characteristics of NMOMs are not driven by any race group in particular.

Figure 11: Racial distribution of never-married older mothers, 2002-2017

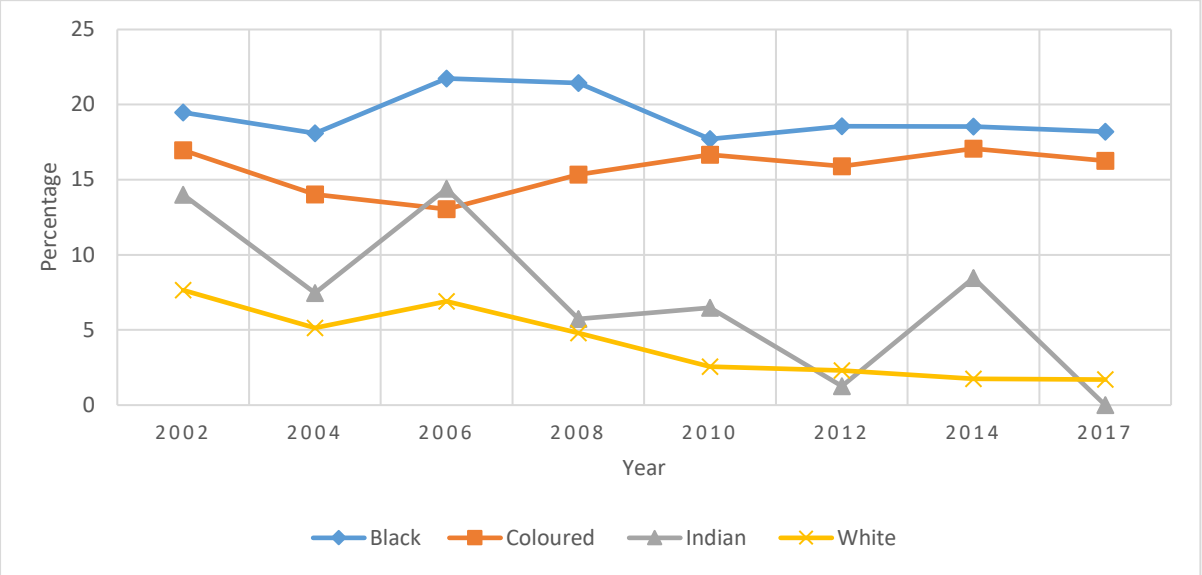


Source: Own calculations from the 2002-2017 GHS
Notes: The data are weighted
The sample includes NMOMs

[164] The NIDS estimates are included as an appendix for Figures 11 and 12 (as opposed to the GHS estimates) as many of the estimates for White and Indian people (in the NIDS data) are 0.00% (see Appendix B). The results that are described in Figures 11 and 12 are similar to the results that are produced using the NIDS data.

The trends in the racial composition of NMOMs are presented in Figure 11 while Figure 12 shows a trend analysis of the percentage of NMOMs within each race group[165] [166]. Across the four race groups, Black women are found to have the largest share of NMOMs followed by Coloured women. Overall, the findings reveal a decrease in the percentage of NMOMs within each race group. The share of Black NMOMs decreased by 6.47% between 2002 (19.47%) and 2017 (18.21%). Similarly, a decrease of 4.19% between 2002 (16.96%) and 2017 (16.25%) is noted for Coloured NMOMs. The changes in the share of Indian (39.54%) and White (77.78%) NMOMs between 2002 and 2017 should be interpreted with caution as the estimates are influenced by small sample sizes. The overall decrease in the percentage of NMOMs within each race group is not statistically significant which further suggests that the racial profile of NMOMs have not changed between 2002 and 2017.

Figure 12: Percentage of never-married older mothers within each race group, 2002-2017



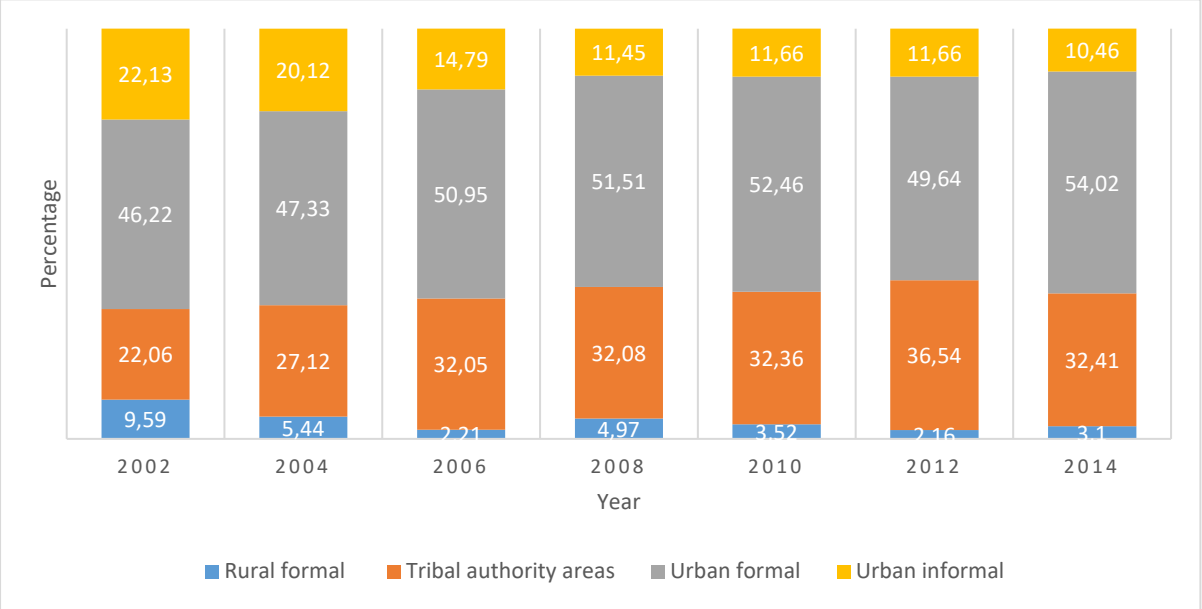
Source: Own calculations from the 2002-2017 GHS
Notes: The data are weighted
The sample includes NMOMs

[165] The results for Indian and White NMOMs that are shown in Figure 12 should be interpreted with caution as the estimates are influenced by small sample sizes and large standard errors. Additionally, there are no observations for Indian women in 2017.

[166] The denominator for the analysis that is presented in Figure 12 is never married women aged 30-49 and the row percentage of the analysis is presented. Thus, for example, the analysis that is presented is: Of all Black never married women aged 30-49, 18.21% were older mothers in 2017. This is different from the analysis that is presented in Figure 11 where the column percentage of the analysis is presented (the denominator is never married women aged 30-49). An example of the analysis that is presented in Figure 11 is: In 2017, 93.97% of never married women aged 30-49 were older mothers.

A trend analysis of the geographic location of NMOMs[167], which is presented in Figure 13 suggests that year-on-year, the largest percentage of NMOMs reside in urban formal areas. This is most likely a result of large-scale urban migration as people move to large cities in search of better employment opportunities and an improved quality of life. The results show that the percentage of NMOMs in urban formal areas has increased by 16.88% between 2002 and 2014 however, these changes are not statistically significant. This is in contrast to the statistically significant increase of 46.92% in the share of NMOMs living in tribal authority areas between 2002 and 2014. This growth could possibly suggest that the institution of marriage may have eroded over time in tribal authority areas. Additionally, the statistically significant change in the share of NMOMs who are living in tribal authority areas is in keeping with the results that are presented in Table 18 which showed that compared to all mothers aged 15-49, NMOMs are more likely to live in tribal authority areas.

Figure 13: Geographic distribution of never-married older mothers, 2002-2014



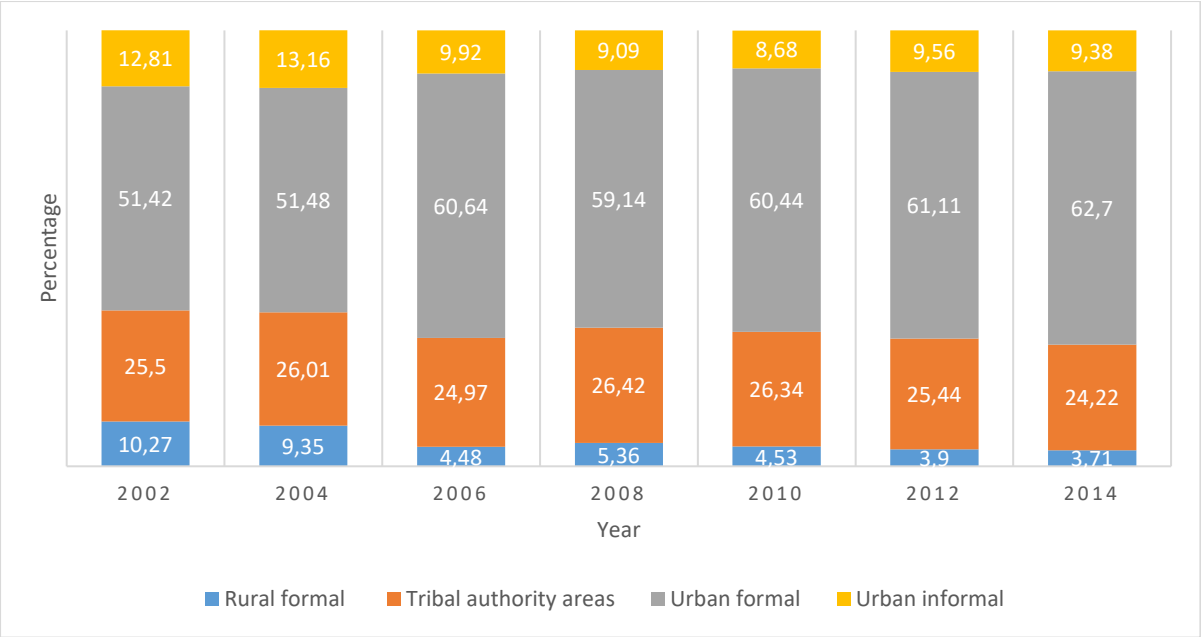
Source: Own calculations from the 2002-2014 GHS
Notes: The data are weighted
The sample includes NMOMs
There are no estimates that are presented using the 2017 GHS data because a different set of categories were used to identify an individual's geographic location[168]

[167] The trend analysis of the geographic distribution of NMOMs is presented using the GHS estimates as these results reveal statistically significant changes in the geographic location of NMOMs. The NIDS estimates, which are included as an appendix, do not reveal any statistically significant changes in the geographic location of NMOMs.

[168] Refer to the Data and Methodology Chapter for further details.

The results in Figure 13 also highlight that rural formal areas are home to the smallest share of NMOMs. The analysis shows that in 2004 and 2012, 5.44% and 2.16% of NMOMs lived in spaces that are classified as rural formal areas, respectively. Over the 15-year period of analysis, a 67.67% statistically significant decrease in the percentage of NMOMs living in rural areas is also noted. Similarly, a statistically significant decrease of 53.73% is also found in the percentage of NMOMs living in urban informal areas.

Figure 14: Geographic distribution of all mothers aged 30-49, 2002-2014



Source: Own calculations from the 2002-2014 GHS
Notes: The data are weighted
The sample includes mothers aged 30-49
There are no estimates that are presented using the 2017 GHS data because a different set of categories were used to identify an individual's geographic location

The main finding from the trend analysis of the geographic distribution of NMOMs is that there is a statistically significant increase in the percentage of NMOMs who are living in tribal authority areas. In order to ascertain whether this change is part of a broader pattern of mobility among older mothers or whether it is unique to NMOMs, Figure 14 presents a trend analysis of the geographic distribution of all mothers aged 30-49. Similar to NMOMs, the larger share of mothers aged 30-49 live in urban formal areas. The results reveal a statistically significant increase of 21.94% in the share of mothers aged 30-49 living in urban formal areas between 2002 and 2014. Additionally, there is a 63.88% and 26.78% statistically significant decrease (between 2002 and 2014) in the share of mothers aged 30-49 living in rural formal areas and urban informal areas, respectively. Lastly, the analysis of the geographic location of mothers

aged 30-49 reveals a 5.02% decrease in the share of all mothers who were living in tribal authority areas between 2002 and 2014. This finding, which is not statistically significant suggests that compared to the geographic distribution of all mothers aged 30-49, the geographic profile of NMOMs has changed over time where there is an increasing number of NMOMs who reside in tribal authority areas.

The last trend analysis focuses on the household composition of NMOMs. The analysis in Table 25 presents the household composition of NMOMs and mothers aged 30-49. The 2002 and 2017 GHS estimates and the difference between these estimates[169] are included in the table. Interestingly, the analysis shows that there have been no statistically significant changes in the household composition of NMOMs over time. This means that NMOMs continue to live in households with an average of 5 to 6 people of which 2 household members (on average) are younger than age fifteen. Looking at the adult household members, the results show that on average, NMOMs continue to live with 3 household members who are of working age however, it is of concern the number of employed household members remains less than one (on average).

In comparison to the household composition of NMOMs, the household composition of mothers aged 30-49 has changed between 2002 and 2017. The results reveal a statistically significant change in the average household size, the number of household members who are younger than 15 and the number of employed household members. Additionally, there has been a statistically significant change in the number of male household members and household members who are of working age. The household size of mothers aged 30-49 has decreased where the analysis shows that there are fewer men and children under the age of 15 who live in the same household as mothers aged 30-49. Unlike in the households of NMOMs, there has been a statistically significant increase in the number of employed members in the households of mothers aged 30-49. The analysis of household composition has revealed that while the

[169] The GHS estimates are presented in Table 25 as the results show statistically significant changes in the analysis of the household composition of mothers aged 30-49. The NIDS results do not reveal any statistically significant changes and are included as an appendix.

household composition of mothers aged 30-49 has changed between 2002 and 2017, the household composition of NMOMs has remained the same.

Table 25: The household composition of mothers aged 30-49 and never-married older mothers, 2002-2017

	2002	2017	Absolute Difference
Mothers 30-49			
Household composition			
Mean household size	4.16 (0.053)	3.67 (0.043)	-0.49*
Mean number of children under the age of 15	1.65 (0.032)	1.34 (0.026)	-0.31*
Mean number of employed people	0.84 (0.018)	0.95 (0.015)	0.11*
Mean number of people of working age	2.40 (0.032)	2.26 (0.025)	-0.14*
Mean number of pensioners	0.01 (0.001)	0.01 (0.001)	0.00
Mean number of females	2.60 (0.033)	2.31 (0.027)	-0.29
Mean number of males	1.56 (0.031)	1.36 (0.025)	-0.20*
NMOMs			
Household composition			
Mean household size	5.70 (0.146)	5.30 (0.111)	-0.40
Mean number of children under the age of 15	2.23 (0.090)	2.04 (0.065)	-0.19
Mean number of employed people	0.84 (0.038)	0.87 (0.035)	0.03
Mean number of people of working age	2.56 (0.080)	2.51 (0.065)	-0.05
Mean number of pensioners	0.00 (0.003)	0.00 (0.002)	0.00
Mean number of females	3.05 (0.087)	2.93 (0.074)	-0.12
Mean number of males	1.92 (0.089)	1.80 (0.064)	-0.12

Source: Own calculations from the 2002 and 2017 GHS
Notes: The data are weighted
Standard errors in parenthesis
* Denotes a significant change at the 95 percent level of confidence
(-) Denotes a decrease in the absolute values
The sample includes mothers aged 30-49 and NMOMs

In conclusion, the analysis in this subsection has shown that overall, there has been minimal changes in the demographic characteristics of NMOMs between 2002 and 2017. Some of these changes are a part of a broader change in the pattern of motherhood in South Africa while the other changes are specific to NMOMs. Firstly, the analysis of marital status has shown that there is an increasing percentage of older mothers who are remaining unmarried. This change seems to be a part of a broader change in motherhood as the analysis has also revealed an increase in the percentage of mothers aged 30-49 and mothers aged 15-49 who have never married between 2002 and 2017. The second change in the demographic characteristics is the increase in the percentage of NMOMs who live in tribal authority areas. This change in the geographic location appears to be unique to NMOMs as the trend analysis of the geographic distribution of all mothers aged 30-49 did not reveal similar findings. The last change is the increase in the average age at first birth among NMOMs. This change is not statistically

significant but is important to take note of as it suggests that on average, NMOMs are more likely to have their first child at an older age compared to all mothers aged 15-49 and never-married mothers aged 15-49.

5.3.2 Trends in the socio-economic characteristics of never-married mothers and NMOMs

This section explores the socioeconomic characteristics of NMOMs where different groups of mothers are analysed by their highest level of education[170], employment status and per capita total monthly household income. The analysis is presented for mothers and women aged 30-49 which serves as a comparison to ascertain whether any changes that are noted in the socioeconomic characteristics are unique to NMOMs or are a part of a broader trend in motherhood.

The trend analysis of the highest educational level[171] of NMOMs is presented in Table 26[172]. In particular, Table 26 includes the percentage change between 2008 to 2017[173] in the educational levels of NMOMs, all mothers aged 30-49[174] and all women aged 30-49[175].

[170] Refer to the Data and Methodology Chapter for a detailed summary of the different educational categories that are included in the different rounds of the GHS.

[171] The categories that are used in the education variable represent the following education levels: *No schooling - no formal education *Some primary schooling – grade R to grade 6 *Completed primary schooling – grade 7 *Some secondary schooling – grade 8 to grade 11 *Completed secondary schooling – grade 12/matric *NTC or NCV – National Training Certificate or National Certificate Vocational (all levels) * Certificate or diploma – certificates or diplomas with or without a matric certificate *Undergraduate degree or diploma – Bachelor's degree, Honours or diploma *Postgraduate degree – Master's or PhD.

[172] The distribution of the highest level of education in each year for NMOMs using the GHS (2002-2017) and the NIDS (2008-2017) data are presented as an appendix.

[173] The percentage change in the educational levels of NMOMs, all mothers aged 30-49 and all women aged 30-49 between 2002 and 2017, using the GHS data are presented as an appendix.

[174] Mothers aged 30-49, irrespective of when they had a child or their marital status.

[175] Women aged 30-49, irrespective if they have a child or of their marital status.

Looking at the analysis of NMOMs, the results point to a statistically significant decrease of 72.02% in the percentage of NMOMs who have no formal schooling between 2008 (8.90%) and 2017 (2.49%). A statistically significant decrease of 61.97% in the share of NMOMs who have some primary schooling between 2008 (18.33%) and 2017 (6.97%) is also noted. Importantly, there has been a statistically significant increase of 180.74% in the share of NMOMs who have a certificate or diploma between 2008 (8.41%) and 2017 (23.61%). This finding is noteworthy as it suggests that there is an increase in the number of NMOMs who have a tertiary qualification.

Table 26: Percentage difference in the educational levels of all women and all mothers aged 30-49 and never-married older mothers, 2008-2017

	All women (30-49)	All mothers (30-49)	NMOMs
Highest educational level			
No schooling	-59.00*	-60.32*	-72.02*
Some primary	-63.35*	-61.69*	-61.97*
Completed primary	-53.37*	-54.46*	-54.16
Some secondary	2.37	9.26	24.39
Completed secondary	7.02	6.21	5.99
NTC/NCV	-47.62	-10.53	80.00
Certificate/diploma	92.18*	83.85*	180.74*
Undergraduate degree or diploma	17.85	15.81	-13.53
Postgraduate degree or diploma[176]	241.67	88.89	--

Source: Own calculations from the 2008-2017 NIDS
Notes: The data are weighted
* Denotes a significant change at the 95 percent level of confidence
(-) Denotes a decrease in percentage
The sample includes all women aged 30-49, all mothers aged 30-49 and NMOMs

In comparison, the trend analysis of all mothers aged 30-49 and all women aged 30-49 reveals similar changes in the highest education level between 2008 and 2017. Similar to NMOMs, the results show a statistically significant decrease in the percentage of all mothers (30-49) and all women (30-49) who have no schooling, some primary schooling and those who have completed primary schooling. A statistically significant increase in the share of all mothers (30-49) and all women (30-49) who have a certificate or diploma between 2008 and 2017 is also noted. In conclusion, the trend analysis of the highest education level suggests that the increase in the percentage of NMOMs who have a tertiary qualification (a certificate or

[176] No difference is presented for NMOMs because there are no observations in the 2008 NIDS estimate of postgraduate degree/diploma.

diploma) is not unique to NMOMs and is likely a part of a broader pattern showing an increase in the percentage of mothers and women aged 30-49 who have a tertiary qualification.

In a similar manner, the decrease in the percentage of NMOMs who have no schooling and some primary schooling seems to be a part of a pattern among mothers and women aged 30-49 and is not a unique change in the highest educational level of NMOMs. Overall, the trend analysis of the highest educational level has shown that relative to all mothers and women aged 30-49, the larger share of NMOMs remain poorly educated as they have some secondary schooling as their highest level of education (see Appendix C). Additionally, the increase in the percentage of NMOMs who have a certificate or diploma is noteworthy and possibly alludes to a pattern where NMOMs increasingly have some form of tertiary education. However, relative to the percentage of NMOMs who have some secondary schooling or have completed schooling, the percentage of NMOMs who have a certificate or diploma remains small[177].

The next analysis of the socioeconomic characteristics presents a trend analysis of the employment status of NMOMs, all mothers aged 30-49 and never-married mothers aged 15-49[178]. The trend analysis between 2008 and 2017 and the percentage difference between the 2008 and 2017 estimates are included in Table 27. Looking at the analysis of NMOMs, there

[177] There are a few discrepancies in the estimates of tertiary education between the GHS and the NIDS data. For example, between 2002 and 2017 the GHS data shows a statistically significant increase of 478.79% in the share of women aged 30-49 who have an NTC/NCV qualification while the NIDS data found a 47.62% decrease in the percentage of these women between 2008 and 2017 (which is not statistically significant). Similarly, between 2002 and 2017 the GHS data highlights a 15.88% decrease in the percentage of mothers aged 30-49 who have a certificate/diploma while between 2008 and 2017 the NIDS estimates reveal a statistically significant increase of 83.85% in the share of these mothers. These discrepancies could be linked to the different ways in which the educational data was collected over the years and/ or the methodological differences between the surveys. The different periods of analysis could have also influenced the estimates and/or the small sample sizes of some of the estimates. Refer to the Data and Methodology Chapter for additional information on the educational variable

[178] The employment status trend analysis is not presented using data from the GHS as there is a break in the series. There is no employment status variable that was made available in the 2010 and 2012 datasets. I attempted to derive the estimates but there were large unexplainable differences between the estimates that I derived and the rest of the estimates in the series and therefore, it was decided to not present any employment status estimates from the GHS.

has been a 9.3% increase in the share of economically inactive NMOMs and a 13.46% increase in the share of employed NMOMs. The share of unemployed NMOMs has decreased by 35% however, neither of these changes in the employment status of NMOMs are statistically significant.

Table 27: Employment status of never-married older mothers, mothers aged 30-49 and never-married mothers aged 15-49, 2008-2017

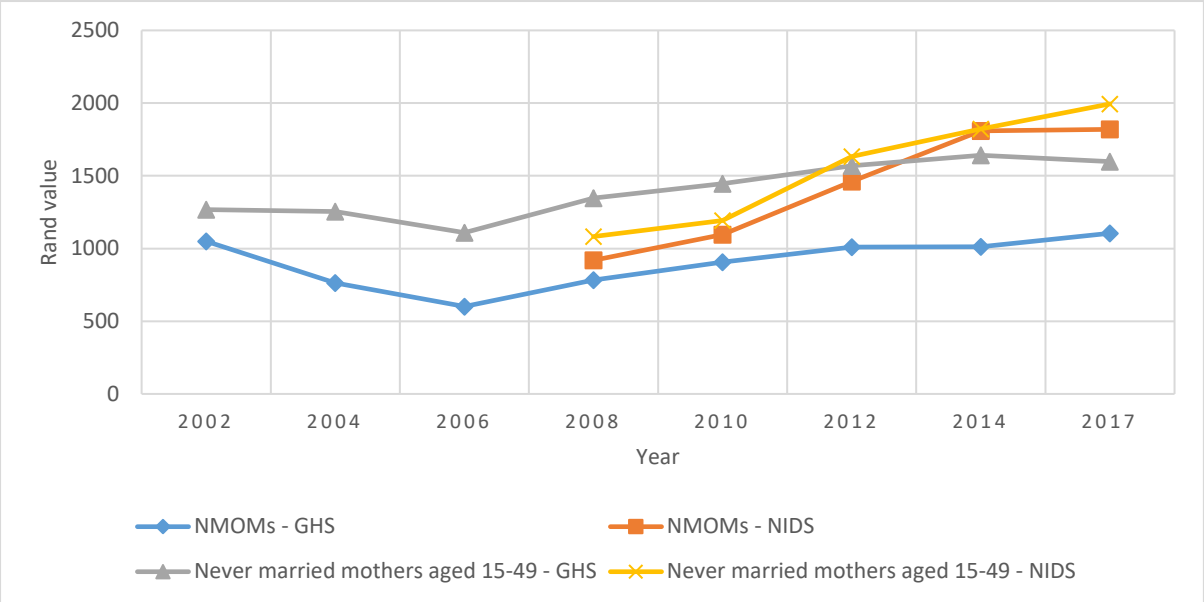
	2008	2010	2012	2014	2017	Difference
Employment status						
NMOMs						
Economically inactive	25.05 (2.705)	33.78 (3.019)	27.59 (2.419)	22.96 (2.166)	27.38 (2.212)	9.30
Employed	49.34 (3.331)	41.49 (3.318)	45.23 (2.840)	56.24 (2.703)	55.98 (2.613)	13.46
Unemployed	25.60 (2.843)	24.73 (2.971)	27.17 (2.627)	20.80 (2.253)	16.64 (1.948)	-35.00
Total	**100**	**100**	**100**	**100**	**100**	--
All mothers aged 30-49						
Economically inactive	22.62 (1.176)	35.22 (1.413)	26.80 (1.210)	24.84 (1.204)	27.21 (1.037)	20.29*
Employed	52.04 (1.421)	46.90 (1.513)	52.58 (1.441)	59.48 (1.326)	57.70 (1.171)	10.88*
Unemployed	25.34 (1.208)	17.88 (1.142)	20.62 (1.121)	15.68 (0.872)	15.09 (0.812)	-40.45*
Total	**100**	**100**	**100**	**100**	**100**	--
Never-married mothers aged 15-49						
Economically inactive	27.67 (1.284)	41.03 (1.335)	34.30 (1.250)	31.75 (1.110)	32.88 (1.142)	18.83*
Employed	37.20 (1.467)	33.52 (1.360)	37.91 (1.338)	45.19 (1.268)	47.36 (1.289)	27.31*
Unemployed	35.13 (1.431)	25.46 (1.214)	27.79 (1.222)	23.06 (1.056)	19.76 (0.968)	-43.75*
Total	**100**	**100**	**100**	**100**	**100**	--

Source: Own calculations from the 2008-2017 NIDS
Notes: The data are weighted
Column percentage
Standard errors in parentheses
* Denotes a significant change at the 95 percent level of confidence
(-) Denotes a decrease in percentage
The sample includes NMOMs, all mothers aged 30-49 and never-married mothers aged 15-49

Comparatively, the employment status of mothers aged 30-49 and never-married mothers aged 15-49 has changed over time. The results show a statistically significant increase in the share of all mothers (30-49) and never-married mothers (15-49) who were economically inactive and

employed between 2008 and 2017. There has also been a statistically significant decrease in the percentage of these mothers (never-married mothers (15-49) and all mothers (30-49)) who were unemployed between 2008 and 2017. In comparison to mothers aged 30-49 and never-married mothers aged 15-49, NMOMs have had the smallest increase in the percentage who are economically inactive. Additionally, NMOMs have had the smallest decrease in the percentage who were unemployed between 2008 and 2017. Relative to NMOMs and mothers aged 30-49, never-married mothers aged 15-49 have had the largest growth in employed mothers between 2008 and 2017. Overall, the results in Table 27 has shown that over time, the employment status of NMOMs has not significantly changed and that this is unique to NMOMS as the comparative trend analysis reveals statistically significant changes in the employment status of all mothers aged 30-49 and never-married mothers aged 15-49 between 2008 and 2017.

Figure 15: Average real per capita total monthly household income of never-married mothers aged 15-49 and never-married older mothers, 2002-2017



Source: Own calculations from the 2002-2017 GHS and the 2008-2017 NIDS
Notes: The data are weighted
The trends are based on real values in 2016 prices
The sample includes never-married mothers aged 15-49 and NMOMs

The last round of analysis of the socioeconomic characteristics is a trend analysis of the household income of NMOMs. Specifically, the trend analysis that is presented in Figure 15 plots the average per capita total monthly household income for NMOMs and never-married

mothers aged 15-49 between 2002 and 2017[179]. The estimates are presented in 2016 prices. The analysis shows that compared to never-married mothers aged 15-49, NMOMs live in households with a lower average per capita total monthly household income. Overall, the statistically significant increase of R900.51 in the average per capita total monthly household income of NMOMs between 2008 and 2017 is relative to the increase that is noted for never-married mothers aged 15-49 (R912.06, statistically significant).

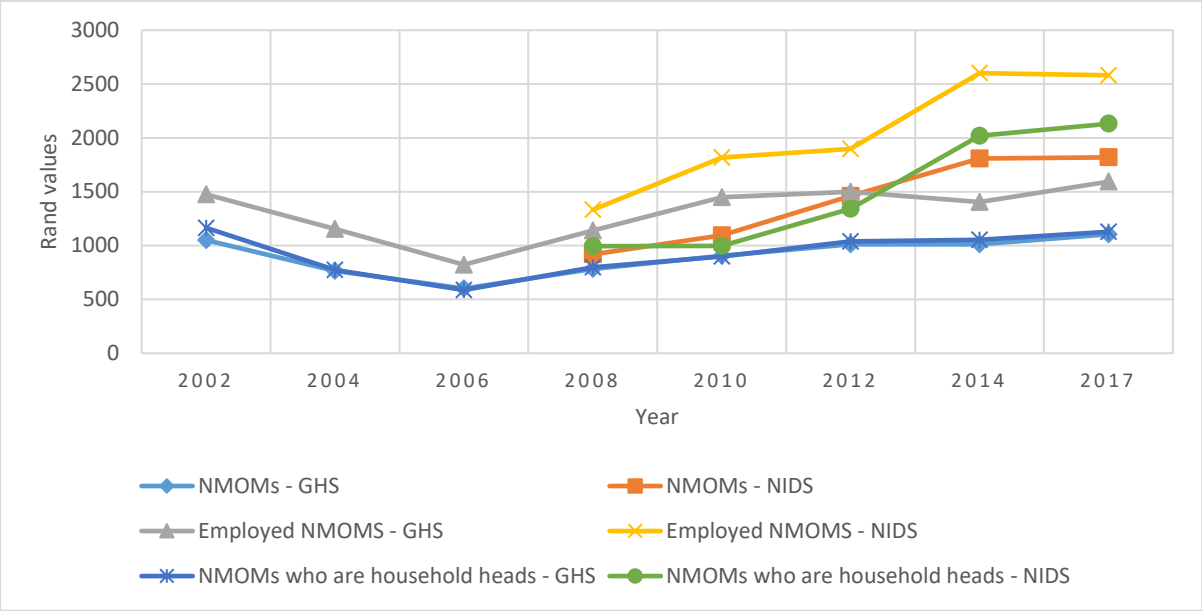
Further analysis into the household income of NMOMs is presented in Figure 16 where the average per capita total monthly household income of NMOMs, employed NMOMs and NMOMs who are household heads are presented. The results show that from 2006, there is a continuous increase in the average real per capita total monthly household income across all groups of NMOMs with employed NMOMs having a consistently higher average real per capita total monthly household income compared to the other groups of NMOMs. This increase in the average per capita total monthly household income more or less corresponds with the expansion of the grant system in the country.

All NMOMs and NMOMs who are household heads experience very similar trends in the average real per capita total monthly household income (Figure 16). This suggests that a large share of NMOMs are household heads or belong to households where the head is a NMOM as well. Relative to all NMOMs, employed NMOMs experienced the largest statistically significant increase of R1249.06 in the average per capita total monthly household income between 2008 and 2017 while during the same period, NMOMs who are household heads experienced a statistically significant increase of R1136.95 in the average per capital total monthly household income. The trend analysis of the household income of all NMOMs and employed NMOMs between 2002 and 2017 also reveal increases in the household income of these mothers however neither of these changes are statistically significant. Looking at NMOMs who are household heads, the trend analysis shows a R38.27 decrease in the

[179] A difference in the GHS and the NIDS estimates are expected as the NIDS household income variable includes a larger number of sources of income compared to the variable that is derived using the GHS data. Refer to the Data and Methodology Chapter for a detailed description of the different sources of income that are used in the creation of the household income variable in the NIDS and the GHS datasets.

household income of these mothers between 2002 and 2017 however this change is also not statistically significant.

Figure 16: Average real per capita total monthly household income of all never-married older mothers, employed NMOMs and NMOMs who are household heads, 2002-2017

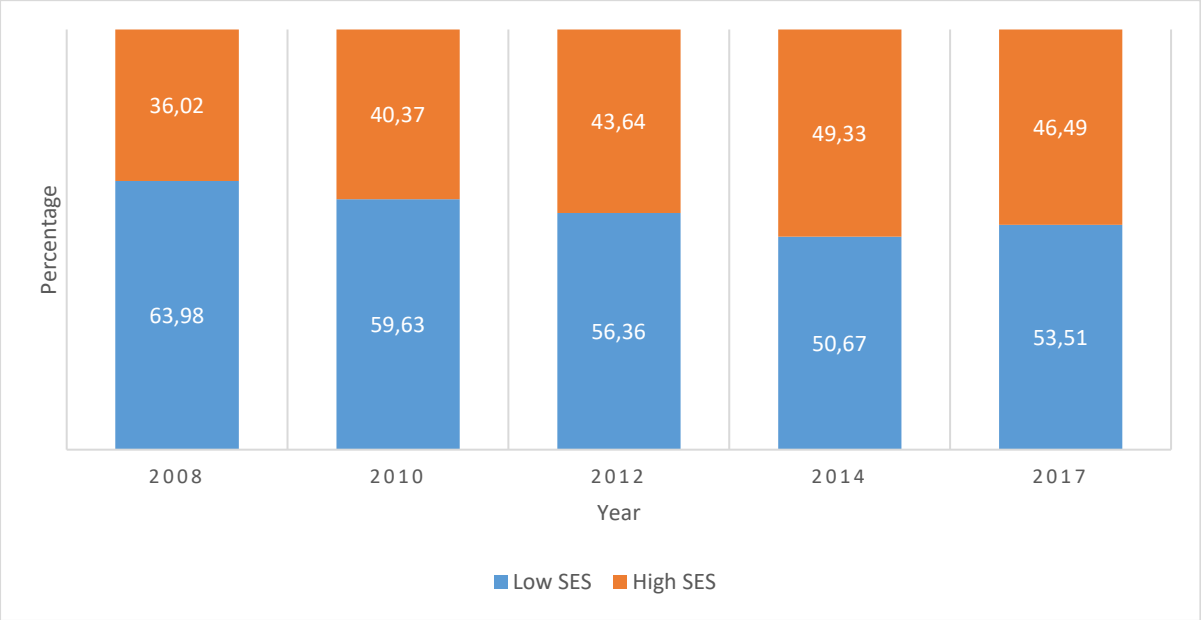


Source: Own calculations from the 2002-2017 GHS and the 2008-2017 NIDS
Notes: The data are weighted
The trends based on real values in 2016 prices
The sample includes all NMOMs, employed NMOMs and NMOMs who are household heads

Overall, the detailed analysis of the household income of NMOMs has shown that in general, all NMOMs live in households with a lower household income compared to NMOMs who are household heads and employed NMOMs. Additionally, between 2008 and 2017, there was a relative increase in the household income of employed NMOMs and NMOMs who are household heads while the increase in the household income of all NMOMs was much lower. In conclusion the analysis of the household income of NMOMs suggests that firstly, the increases in the estimates of household income are not unique to NMOMs as a statistically significant increase in the household income of never-married mothers aged 15-49 between 2008 and 2017 is also noted. Secondly, the positive changes, between 2008 and 2017 in the household income of the different groups of NMOMs are possibly not driven by an increase in the share of employed NMOMs as the results in Table 27 show no statistically significant increases in the share of employed NMOMs. This means that the increases in the household income of NMOMs could possibly be related to social grants or the income of other household members.

One of the key findings from the international literature on non-marital fertility is that women who are economically disadvantaged are more likely to have children outside of a marriage compared to women who are not economically disadvantaged (Jalovaara and Andersson, 2018; Klusener, 2015; Klusener and Goldstein, 2016; Mack, 2017; Surkyn and Lesthaeghe, 2004). Subsequently, the analysis in Figure 17 and 18 plots a trend analysis of the percentage of NMOMs who belong to a high and low household income level[180]. Mothers are classified into either a high or a low household income based on their average per capita total monthly household income. The analysis reveals that between 2008 and 2017, there has been no statistically significant change in the percentage of NMOMs of a high and of a low household income level. Overall, the larger share of NMOMs continue to belong to a low household income level.

Figure 17: The percentage of never-married older mothers by their household income level, 2008-2017



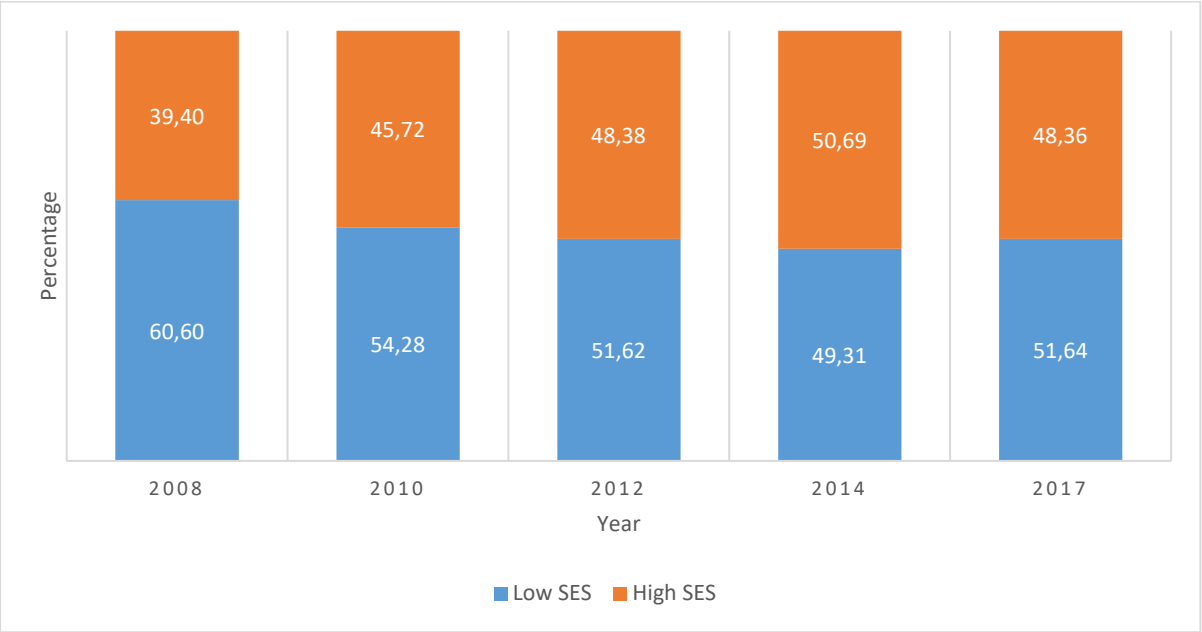
Source: Own calculations from the 2008 to 2017 NIDS
Notes: The data are weighted
The sample includes NMOMs

In comparison, the analysis of the household income level of never-married mothers reveals statistically significant changes between 2008 and 2017. The results in Figure 18 show a statistically significant increase of 22.73% in the share never-married mothers aged 15-49 who are of a high household income level. During the same period, there was a statistically

[180] Refer to the Data and Methodology Chapter for a description of how the household income level variable is created.

significant decrease of 14.78% in the share of never-married mothers aged 15-49 who are of a low household income level. Similar to NMOMs, the larger share of never-married mothers age 15-49 continue to belong to a low household income level.

Figure 18: The percentage of never-married mothers by their household income level, 2008-2017



Source: Own calculations from the 2008 to 2017 NIDS
Notes: The data are weighted
The sample includes never-married mothers aged 15-49

These findings suggest that, in comparison to never-married mothers aged 15-49, the household income level of NMOMs has remained the same between 2008 and 2017 and that the lack of change in the household income level is unique to NMOMs. This finding correlates with the lack of a statistically significant change in the household composition of NMOMs (as shown in Table 25) and the lack of a statistically significant increase in the percentage of employed NMOMs (as shown in Table 27) between 2008 and 2017. Additionally, the results also point to a growing cohort of never-married mothers of a high household income level. Further analysis into the characteristics of these women would be useful in determining whether they form a group of women who are successfully attached to the labour market, have the income stability that is required to raise a child and are therefore, selecting to be a never-married mother.

5.4 Concluding remarks

Overall, this chapter has demonstrated that there has been an increase in non-marital fertility in post-apartheid South Africa. However, and unexpectedly, this increase has not necessarily been driven by an increase in women who are having children when they are older (30-49). This increase in non-marital fertility is similar to fertility behaviour changes that have been noted in an American (Ventura, 2009; Wildsmith et al., 2011) and European (Klusener, 2015: Klusener and Goldstein, 2016; Mack, 2017) context. However, in contrast to the South African findings, an increase in births to unmarried older women (aged 30 and older) have also been noted within the United States (Ventura, 2009; Wildsmith et al., 2011). The increase in non-marital births in South Africa are in line with similar findings from various African countries (Clark et al., 2017; Fledderjohann, 2017; Smith-Greenaway and Clark, 2018). This suggests that non-marital fertility among older women may be a feature of high-income countries while a general increase in births to all unmarried women is more common in middle- to low-income countries.

Having found that there is an increase in non-marital fertility but not in the prevalence of NMOMs, the chapter set out to explore whether there is any evidence of a change in the characteristics of NMOMs over the 15-year period. The findings have demonstrated that, in general, there are only a few characteristics that seemed to have changed for NMOMs and this is in line with what was expected and is similar to what has been found in other contexts. At this point it is important to note that there have been no significant changes in the educational and employment levels of NMOMs. This suggests that within a South African context, non-marital fertility among older mothers is less likely to be a choice among older women who have high levels of education and are successfully attached to the labour market (Gustafsson and Worku, 2006) and is more likely to be a result of the high cost of *ilobolo* within a context of growing male unemployment and poor job opportunities (Posel and Rudwick, 2012). Further supporting this claim is the finding that relative to all mothers aged 15-49, NMOMs are associated with low income households.

In conclusion, the chapter has shown that Black women are overrepresented among NMOMs and that there has been a significant change in where NMOMs live. The majority of NMOMs live in urban areas however, the trend analysis has demonstrated that there has been a significant increase in the number of NMOMs who are living in tribal authority areas. This change could be linked to the general decrease in the number of older mothers who are married and the concurrent increase in the percentage of older mothers who have never been married. Lastly, the empirical evidence that is presented in this chapter suggests that in South Africa, NMOMs are more likely to be economically disadvantaged compared to all never-married mothers (aged 15-49). Related to the lack of change in the educational levels and employment status of NMOMs, this finding is not surprising and is in fact similar to findings from a European and an American context where researchers have noted that women who are economically disadvantaged are more likely to have children outside of a marriage (Jalovaara and Andersson, 2018; Klusener, 2015; Klusener and Goldstein, 2016; Mack, 2017; Mclanahan, 2004; Surkyn and Lesthaeghe, 2004).

Using the results from the trend analysis that is presented in this chapter, the next chapter (Chapter Six) predicts the characteristics of NMOMs. In addition to this analysis, the chapter also focuses on non-marital fertility in South Africa where regression models are used to estimate the characteristics of never-married women aged 15-49. Lastly, the analysis in the next chapter also aims to identify whether marital status is associated with older motherhood by predicting the characteristics of older mothers. In particular, these regression estimations analyse whether being never married is a statistically significant predictor of being an older mother by analysing the likelihood (log odds) of a never-married woman aged 30-49 being an older mother compared to a married woman aged 30-49.

Chapter Six: Determinants of being a never-married older mother

6.1 Introduction

Thus far this thesis has demonstrated that there has been an ongoing increase in non-marital fertility in South Africa among women aged 15-49 and that this increase has not necessarily been driven by (never-married) women having children at a later stage in their lives (i.e. in their 30s). The thesis has also highlighted that the larger share of never-married mothers aged 15-49 and NMOMs are of a lower socioeconomic status and that there has been a significant increase in the percentage of non-marital fertility among mothers of a higher socioeconomic status between 2002 and 2017. Building on these findings, this chapter aims to identify the characteristics of women who are more likely to be a NMOM, an older mother or a never-married mother aged 15-49 in a multivariate context.

In all three cases, the regression models are estimated on weighted 2017 NIDS and GHS data. The outcomes that are estimated from the NIDS data are presented in this chapter while the estimates from the GHS data are included as an appendix (Appendix D). This is done for three reasons: firstly, the analysis in the previous empirical chapter has provided evidence showing that motherhood is understated in the GHS. Secondly, the GHS does not contain information on the religious denominations of the respondent and the mother's education and therefore, the last regression model (model V) cannot be estimated using the GHS data and lastly, the GHS results are presented in an appendix to avoid the repetition of similar findings. The chapter is divided into four sections, the first section describes the model specifications that are used in the regression estimates. The second section presents logit estimations that predict the characteristics of NMOMs while in the third section the logit estimates predict the characteristics of being an older mother. The last section focuses on never-married mothers where the logit estimations predict the characteristics of being a never-married mother aged 15-49.

6.2 Model specification

Using binary logistic regression models, this chapter identifies the characteristics of women who are more likely to be NMOMs, older mothers and never-married women aged 15-49. In the case of NMOMs and older mothers, the regression is estimated for women aged 30-49[181] while for never-married mothers, the regression is estimated for women aged 15-49. To this end, three sets of five regression models are presented where the log odds (of a woman with particular characteristics) of either being a NMOM, older mother or a never-married mother aged 15-49 are estimated.

The characteristics (explanatory variables) that are used in the models have been identified in the trend analysis, the thematic analysis of the life histories of NMOMs and/or through the reviewed literature. The first model regresses the demographic characteristics of age and race against the likelihood of being an NMOM, older mother or never-married mother. The international literature on fertility focuses on the age of 30 as the age at which women who may have delayed their fertility will most likely start having children. Therefore, age 30-34 is used as the reference category in the regression model (see also Wu and MacNeill, 2002; Liu et al., 2011; Ventura, 2009). Black women are the reference category when race is included in the model as they are the majority of women in the sample. The second regression model, which estimates the log odds of being an older mother controls for marital status where being married is used as the reference category.

The second model estimates the spatial characteristics of geographic location and province against the likelihood being a NMOM, older mother or never-married mother aged 15-49. In this model, living in an urban area is the reference category as it is identified as the area most populace with NMOMs (as identified in the trend analysis). Similarly, the literature on marriage and childbearing in South Africa identifies KwaZulu-Natal as the province with the largest share of NMOMs (Palamuleni, 2010; Posel et al., 2011) hence KwaZulu-Natal is used as the reference category for the province variable. The socioeconomic characteristics of the

[181] The likelihood of being a NMOM is also estimated for African women aged 30-49 and is included in an appendix. The results are similar to those estimated for NMOMs.

highest educational level and employment status are introduced in the third model. For these variables, no schooling and being employed are the reference categories while the logarithm of the per capita total monthly household income is also introduced as a socioeconomic control. The fourth model controls for household characteristics which could possibly be associated with fertility. These include the gender of the household head (female household heads are the reference category) and household size.

The last model introduces individual level characteristics which emerged in the thematic analysis of the life histories (which are presented in Chapter Eight) and include whether the respondent's mother has some form of post-school education, the importance of religious activities and the religious affiliation of the respondent (no religion is the reference category). Due to the inherent differences in the structure and questions that are asked in the NIDS and GHSs[182], regression models one to five (as detailed above) are estimated on the NIDS data while models one to four are estimated on the GHS data. This difference is primarily based on the absence of information on the religious affiliation of the respondent, the importance of religious activities and whether the respondent's mother has some form of tertiary training in GHS data.

6.3 Logit estimations predicting the likelihood of being a never-married mother

This section is focused on estimating the likelihood of being a never-married mother aged 15-49[183] as the trend analysis (Chapter Five) showed that there has been a growth in the percentage of never-married women between 2002 and 2017. The main aim of this section is to identify the characteristics of women who are more likely to be never-married mothers. Similar to the previous regression estimations sections, five regression models will be estimated. The first model controls for the demographic characteristics of age, race and marital status (I), the spatial characteristics of geographic location and province are controlled for in the second model (II)

[182] A closer look at the similarities and differences of the NIDS and the GHS was presented in Chapter Four.

[183] Never married mothers aged 15-49 will be referred to as never married mothers for the rest of this section (section 6.3) for the ease of interpreting and reporting of findings.

while the highest educational level, employment status and the logarithm of per capita total monthly household income forms the third specification (III). The last two models control for a set of household characteristics (household size and the gender of household head) (IV) and personal characteristics (religious affiliation, whether religion is important to the respondent and whether the respondent's mother had some form of tertiary education) (V). The log odds of these models, which are estimated on the weighted 2017 NIDS data are presented. The same specifications (except for model V as the GHS does not contain these specific or similar variables) are estimated using the 2017 GHS and are included in Appendix D.

The logit estimations predicting the likelihood of being a never-married mother aged 15-49 is presented in Table 28. The estimates in model I, which control for demographic characteristics reveals that, once again, race and age are significant predictors. Women aged 45-49 are significantly less likely to be never-married mothers (-1.281) compared to women aged 30-34. Looking at race, Coloured (-1.033), Indian (-2.697) and White (-2.779) women have significantly lower odds of being a never-married mother compared to Black women. Overall, the findings in model I highlight that White women and women aged 45-49 are strong negative correlates of being a never-married mother.

The second model estimates the likelihood of being a never-married mother while controls for the spatial characteristics of geographic location and province are added. Women living in farm areas are found to have significantly lower log odds of being a never-married mother (-0.445) compared to women living in urban areas. Race and age remain significant correlates of being a never-married mother in model II. Noteworthy is the change in the log odds from -2.697 (model I) to -3.205 (model II) of Indian women being never-married mothers once spatial characteristics have been add to the model. This increase in the log odds indicates that firstly, compared to White and Coloured women, Indian woman have the lowest and significant log odds of being a never-married mother (compared to Black women). And secondly, of all the demographic and spatial characteristics which are controlled for in model II, race and in particular, being an Indian woman largely predicts the characteristics of being a never-married mother.

The socioeconomic characteristics of education level, employment status and the logarithm of per capita total monthly household income are introduced in model III. The findings show that highest education level is not a significant predictor of being a never-married mother while employment status and household income are significant predictors. Unemployed (-0.639) and economically inactive (-0.715) women are significantly less likely to be never-married mothers compared to employed women. The results reveal a significant and negative relationship between the logarithm of per capita total monthly household income and being a never-married mother suggesting that being a never-married mother is associated with a lower household income. This might be the case as never-married mothers are less likely to have access to male income. Women living in farm areas continue to have significantly lower odds of being never-married women (-0.430) compared to women living in urban areas. Lastly, looking at the effects of the socioeconomic controls on the demographic characteristics, race and age remain significant predictors of being a never-married women. In particular, Indian (-2.730) and White (-2.286) women have significantly strong negative log odds of being a never-married mother.

The fourth model controls for the household characteristics of household size and the gender of the household head. The estimates reveal that women living in male-headed households are significantly less likely to be never-married mothers (-1.850) compared to women living in female-headed households. Once again, this endogeneity in this relationship should be noted. A statistically significant and positive relationship between household size and being a never-married mother is identified where the larger the household size, the more likely a woman is to be a never-married mother. Controlling for household characteristics (model IV) has resulted in the highest education level of women remaining a non-significant predictor of being a never-married mother while employment status remains a statistically significant predictor (of being a never-married mother).

The statistically significant and negative relationship between being a never-married mother and the logarithm of per capita total monthly household income also remains in model IV. Living in a farm area is no longer a statistically significant predictor of being a never-married mother in models IV and V. It is likely that the household characteristics of the gender of the household head and the household size are linked to geographic location and therefore, once these household characteristics are controlled for, the significance of geographic location is

lost. This is further noted in the statistically significant relationship between living in a male-headed house and older motherhood and between household size and older motherhood. Lastly, age and race remain significant predictors of being a never-married mother in model IV.

Model V controls for personal characteristics such as religious affiliation, mother's education and whether religion is important to the respondent. The analysis of religious affiliation shows that Muslim women have the largest negative and significant log odds of being never-married mothers (-3.046) compared to women who have no religious affiliations. Continuing with religion, women who view religion as being important are found to be significantly less likely to be never-married mothers (-0.731) compared to those who do not view religion as being important. Lastly, mother's education is not a significant predictor of being a never-married mother.

The introduction of household controls has resulted in an increase in the significant negative log odds which are associated with women who live in a male-headed household. In model V, women who live in male-headed households are just over two times least likely to be never-married mothers compared to those who live in female-headed households. Once again, there is some endogeneity between living in a male-headed household and being a never-married mother. The logarithm of per capita total monthly household income and employment status remain significant predictors of being a never-married woman while the highest educational level of women continues to be a non-significant predictor. With regards to the demographic characteristics, age and race continue to be significant predictors of being a never-married mother.

Table 28: Logit estimation predicting the likelihood of being a never-married mother aged 15-49, 2017

	I	II	III	IV	V
Age 35-39	-0.433***	-0.425***	-0.446***	-0.471***	-0.427**
	(0.133)	(0.135)	(0.139)	(0.146)	(0.183)
Age 40-44	-0.638***	-0.616***	-0.694***	-0.779***	-0.792***
	(0.131)	(0.133)	(0.137)	(0.152)	(0.190)
Age 45-49	-1.281***	-1.263***	-1.368***	-1.418***	-1.410***
	(0.142)	(0.143)	(0.153)	(0.165)	(0.203)
Coloured	-1.033***	-1.099***	-1.067***	-1.034***	-0.953***
	(0.169)	(0.200)	(0.204)	(0.225)	(0.295)
Indian	-2.697***	-3.205***	-2.730***	-2.805***	-2.341***
	(0.485)	(0.490)	(0.496)	(0.480)	(0.707)
White	-2.779***	-2.732***	-2.286***	-2.213***	-2.683***
	(0.463)	(0.470)	(0.470)	(0.456)	(0.803)
Traditional areas		-0.021	-0.096	-0.160	-0.179
		(0.119)	(0.129)	(0.139)	(0.173)
Farm areas		-0.445**	-0.430**	-0.281	-0.316
		(0.221)	(0.212)	(0.231)	(0.289)
Some/completed primary schooling			0.096	0.285	0.352
			(0.272)	(0.288)	(0.357)
Some/completed secondary schooling			0.270	0.415	0.517
			(0.244)	(0.264)	(0.323)
Tertiary education			0.401	0.397	0.466
			(0.262)	(0.285)	(0.353)
Economically inactive			-0.715***	-0.612***	-0.651***
			(0.123)	(0.132)	(0.159)
Unemployed			-0.639***	-0.534***	-0.798***
			(0.148)	(0.160)	(0.217)
Logarithm of per capita total monthly household income			-0.478***	-0.309***	-0.390***
			(0.067)	(0.073)	(0.091)
Male-headed household				-1.850***	-2.198***
				(0.132)	(0.181)
Household size				0.076***	-0.044
				(0.019)	(0.030)
Mother has no tertiary education					0.148
					(0.333)
Religious activities are important					-0.731**
					(0.354)
Christian					0.169
					(0.322)
Jewish					0.544
					(0.842)
Muslim					-3.046***
					(1.106)
Hindu					--
African traditional spiritual beliefs					-0.036
					(0.380)

Constant	0.326***	0.967***	4.507***	3.138***	4.455***
	(0.084)	(0.148)	(0.554)	(0.642)	(0.925)
F stat	30.92	15.38	15.46	19.61	10.91
Prob > F	0.000	0.000	0.000	0.000	0.000
Observations	7045016	7045016	7009167	6927806	5060927

Source: Own calculations from the 2017 NIDS
Notes: The data are weighted
Standard errors in parenthesis
Significance levels: *** p<0.01, ** p<0.05, * p<0.1
The omitted categories are age 30-34, Black, Urban areas, KwaZulu-Natal, no education, employed, female-headed household, mother has tertiary education, religious activities are not important and no religion

The regression analysis in this section had set out to identify the characteristics of never-married mothers by regressing a set of demographic, spatial, socioeconomic, household and personal characteristics against the probability of being a never-married mother. With regards to the demographic characteristics, race is identified as a strong correlate of being a never-married mother. The results have shown that being a Black woman is closely related to becoming a never-married mother while in comparison, White women are least likely to be never-married mothers. Interestingly, non-marital fertility is closely associated with employed women and low-income households. This alludes to the notion that never-married mothers are likely to be employed in low paying jobs as a woman's highest education level is not a significant correlate of never-married motherhood. Lastly, the regression estimates have also underscored the strong influence of religion on never-married motherhood.

In conclusion, the results in this section have demonstrated that the demographic characteristics of age and race are strong predictors of never-married motherhood in South Africa. Additionally, being a Muslim woman is the strongest predictor of never-married motherhood where Muslim women have the lowest significant log odds of being a never-married mother. Overall, and in addition to race, age and religious denomination, never-married motherhood in South Africa is also closely associated with women do not feel that religious activities are important, those that are employed, belong to low income households and women who live in male-headed households.

6.4 Logit estimations predicting the likelihood of being an older mother

Thus far, the trend analysis (in Chapter Five) has revealed a statistically significant increase in the percentage of older mothers who are remaining unmarried while a corresponding decrease in the percentage of older mothers who are married is also noted. Subsequently, this section is aimed at identifying whether marital status is associated with older motherhood (having a child after the age of 29) and in doing so, the logit estimations that are presented in this section predict the likelihood of being an older mother. In terms of model specifications, the five models that are used to predict the likelihood of being a NMOM (section 6.3) are also used to predict the likelihood of being an older mother. The only change is the inclusion of the marital status variable as part of the demographic characteristics. Marital status is first introduced in model I and is included as a control in the remaining models (II-V). The regression models estimate the log odds of being an older mother using the weighted 2017 NIDS data and the estimates from the 2017 GHS data are included in an appendix (Appendix D). As described in the previous section, model I focuses on demographic characteristics, model II on spatial characteristics while model III and IV introduce socioeconomic and household characteristics. The last model controls for specific individual level characteristics and is only run on the NIDS data as these particular questions or similar indicators are not asked in the GHS (the GHS regression estimates are included in Appendix D).

Based on the logit estimations (model I) that are presented in Table 29, women who are cohabiting (-0.423), widowed (-0.407) or never married (-0.681) are significantly less likely to be older mothers compared to married women. The analysis also shows that Indian (-1.207) and White (-1.176) women have significant and negative log odds of being older mothers compared to Black women. Indian (-0.994) and White (-1.121) women continue to be significantly less likely to be older mothers (compared to Black women) when spatial characteristics are controlled for in model II. Similarly, age and marital status continue to be statistically significant predictors of being an older mother (model II). Lastly, the regression estimates in model II reveal that the spatial characteristics of place of residence (geographic location) and province are not statistically significant predictors of being an older mother. Thus far, models I and II have confirmed that marital status is a correlate of being an older mother

where in particular, never-married women are significantly less likely to be older mothers compared to married women.

Model III controls for the highest educational qualification, employment status and the logarithm of per capita total monthly household income. Of these characteristics, women who have some form of tertiary education are more likely to be older mothers (0.737) compared to those with no education. Unemployed women are also found to be significantly less likely to be older mothers (-0.304) compared to employed mothers. These findings allude to the notion that educated and employed women are strongly associated with older motherhood compared to unmarried and poorly educated women. The last socioeconomic control of household income has a negative association with the likelihood of being an older mother. The results show that as per capita total monthly household income increases, the log odds of being an older mother decrease. Geographic location remains a non-significant predictor of being an older mother while marital status remains a statistically significant correlate of being an older mother in model III. Interestingly, the inclusion of the socioeconomic controls has resulted in race becoming a non-significant predictor of an older mother. This suggests that having a tertiary education, being unemployed and households with a low income do a better job of describing the characteristics of an older mother compared to race.

By controlling for household characteristics in model IV, age remains a significant predictor of being an older mother, race continues to be non-significant while being never married remains negatively associated with being an older mother. The log odds of a never-married women being an older mother has increased from -0.896 in model III to -1.025 in model IV which indicates that marital status (in general) and in particular, being never-married is a strong predictor of being an older mother. Women with a tertiary education continue to have higher and significant odds of being an older mother compared to those with no education. Unemployed women remain significantly less likely to be older mothers compared to employed women (-0.259) while household size appears to be positively associated with the likelihood of being an older mother. The analysis of the logarithm of per capita total monthly household income remains negatively associated with being an older mother suggesting that women who reside in low income households are more likely to be older mothers (compared to women who

reside in high income households). Lastly, living in a male-headed household is found to be negatively associated with being an older mother (-0.315).

Table 29: Logit estimations predicting the likelihood of being an older mother, 2017

	I	II	III	IV	V
Age 35-39	0.987***	0.988***	1.093***	1.182***	1.218***
	(0.139)	(0.138)	(0.144)	(0.146)	(0.180)
Age 40-44	1.543***	1.538***	1.636***	1.695***	1.740***
	(0.143)	(0.145)	(0.150)	(0.150)	(0.185)
Age 45-49	1.434***	1.433***	1.562***	1.599***	1.621***
	(0.143)	(0.144)	(0.155)	(0.159)	(0.193)
Coloured	-0.204	-0.255	-0.123	-0.193	-0.023
	(0.156)	(0.188)	(0.210)	(0.211)	(0.254)
Indian	-1.207***	-0.994***	-0.266	-0.310	0.258
	(0.321)	(0.338)	(0.384)	(0.397)	(0.723)
White	-1.176***	-1.121***	-0.022	-0.136	-0.003
	(0.195)	(0.203)	(0.244)	(0.244)	(0.293)
Cohabiting	-0.423**	-0.396**	-0.557***	-0.511***	-0.645***
	(0.181)	(0.184)	(0.180)	(0.175)	(0.194)
Widow	-0.407*	-0.392*	-0.730***	-0.758***	-0.765***
	(0.209)	(0.209)	(0.216)	(0.223)	(0.261)
Divorced	-0.374	-0.339	-0.530**	-0.602**	-0.417
	(0.248)	(0.249)	(0.265)	(0.261)	(0.300)
Never married	-0.681***	-0.640***	-0.896***	-1.025***	-0.950***
	(0.122)	(0.123)	(0.123)	(0.130)	(0.160)
Traditional areas		0.136	-0.147	-0.219	-0.276
		(0.133)	(0.137)	(0.142)	(0.176)
Farm areas		0.070	0.012	0.018	0.075
		(0.264)	(0.262)	(0.258)	(0.312)
Some/completed primary schooling			0.202	0.254	0.107
			(0.296)	(0.316)	(0.488)
Some/completed secondary schooling			0.307	0.358	0.280
			(0.274)	(0.295)	(0.471)
Tertiary education			0.737**	0.766**	0.833*
			(0.297)	(0.317)	(0.498)
Economically inactive			-0.047	-0.027	-0.086
			(0.125)	(0.125)	(0.154)
Unemployed			-0.304**	-0.259*	-0.246
			(0.149)	(0.149)	(0.195)
logarithm per capita total monthly household income			-0.544***	-0.412***	-0.387***
			(0.072)	(0.074)	(0.089)
Male-headed household				-0.315**	-0.267*
				(0.125)	(0.147)
Household size				0.112***	0.230***
				(0.018)	(0.034)
Mother has no tertiary education					-0.338
					(0.267)
Religious activities are important					0.067

					(0.348)
Christian					-0.241
					(0.374)
Jewish					-0.769
					(0.785)
Muslim					-1.766**
					(0.849)
Hindu					-1.306
					(0.887)
African traditional spiritual beliefs					-0.381
					(0.480)
Constant	-0.765***	-1.045***	2.806***	1.285**	1.461
	(0.130)	(0.216)	(0.598)	(0.638)	(0.916)
F stat	20.57	10.84	10.02	10.67	7.37
Prob > F	0.000	0.000	0.000	0.000	0.000
Observations	7727224	7727224	7315752	7233345	5102245

Source: Own calculations from the 2017 NIDS
Notes: The data are weighted
Standard errors in parenthesis
Significance levels: *** p<0.01, ** p<0.05, * p<0.1
The omitted categories are: age 30-34, Black, married, Urban areas, KwaZulu-Natal, no education, employed, female-headed household, mother has tertiary education, religious activities are not important and no religion

The religious affiliation of respondents, the importance of religious activities, and whether the mother has some form of tertiary qualification are the individual level characteristics that are included as controls in the last regression model (V). The logit estimations show that Muslim women have significantly lower log odds of being older mothers (-1.766) compared to women who have no religious affiliation and interestingly, being a Muslim woman has the largest effect on predicting the characteristics of older mothers. Lastly, the estimates show that the remainder of the personal characteristics are not significant predictors of being an older mother in South Africa. The inclusion of these personal characteristics as controls has reduced the log odds of a never-married woman being an older mother (-0.950) however in general, being never-married continues to be a strong statistically significant predictor of being an older mother. Women who are cohabiting (-0.645) or are widowed (-0.765) also continue to have statistically significant and negative log odds of being an older mother compared to married women.

Interestingly, unemployed women no longer have statistically significant log odds of being older mothers while women with a tertiary education remain significantly more likely to be older mothers compared to women with no education. This finding is noteworthy as it suggests that there is an association between being an older mother and having some form of tertiary

education. Being an older mother remains associated with low household income while the log odds describing the likelihood of living in a male-headed household and being an older mother have reduced in model V. In conclusion, model V confirms that age and the different marital status categories are statically significant correlates of being an older mother in South Africa.

In summary, the regression analysis in this section focused on identifying whether marital status is a significant predictor of being an older mother. In particular, the regression models aimed to identify whether being married or unmarried are statistically significant determinants of being an older mother in South Africa. To this end, the analysis in this section has demonstrated that marital status is a significant correlate of being an older mother. The results indicate that being married is closely related to older motherhood while in comparison, never-married women are significantly less likely to be older mothers. This is an important finding that underscores the relationship between being married and being an older mother.

The regression analysis has also revealed that older mothers are more likely to have some form of tertiary education and thus highlights an association between having a tertiary education and older motherhood in South Africa. Larger household size is positively correlated with older motherhood which is interesting as geographic location (place of residence) is not a significant predictor of being an older mother. The endogeneity in the association between living in a male-headed household and being an older mother must be noted as women who live in male-headed households are found to be significantly less likely to be older mothers.

The analysis of the effect of household income on the likelihood of being an older mother has shown that older motherhood is positively associated with low income households. This finding is in contrast to the analysis of the household income of all mothers aged 30-49 (that is presented in Chapter Four) which revealed that older mothers live in households with the highest average per capita total monthly household income compared to all mothers aged 15-49, NMOMs and never-married younger mothers. Given this difference in the findings, it must be noted that the log odds which describe the relationship between household income and older motherhood decrease once household and personal characteristics are included in the regression models. This decrease in the log odds suggests that household income level is not a

strong predictor of being an older mother. Lastly, race is not significantly correlated with older motherhood in South Africa which is noteworthy and suggests marital status and age largely predict the demographic characteristics of being an older mother. Overall, the analysis in Table 29 have revealed that broadly, age, marital status, education, household income, the gender of the household head and household size are significant correlates of older motherhood in South Africa.

6.5 Logit estimations predicting the likelihood of being a never-married older mother

The logit estimations of the likelihood of being a NMOM for women aged 30-49 in South Africa is presented in Table 30. There are five models that are presented where the first model regresses demographic characteristics (I), the second model presents spatial characteristics (II), the third and fourth models introduce the socioeconomic (III) and household (IV) characteristics, respectively while the fifth model presents selected individual level characteristics (V). Women aged 30-49 are the sample in all five regression models and the estimates are presented as weighted log odds[184]. In the first column (I), age[185] and race are regressed against being a NMOM. The results indicate that race is a significant predictor of being a NMOM. The model shows that Coloured (-0.821), Indian (-2.403) and White (-2.665) women have significantly lower odds of being a NMOM compared to Black women. Overall, the findings in model I confirm that race is a significant demographic predictor of being a NMOM.

Race remains a significant predictor of being a NMOM when controlling for spatial characteristics (in model II). White women remain just over two and a half times less likely to be a NMOM compared to Black women. In contrast to the findings from the descriptive

[184] Including the GHS models that are presented in Appendix C.

[185] It is important to control for age given the different age structures between the race groups however age being a significant predictor of being a NMOMs suggests that women of older age groups are more likely to be NMOMs (because they have had more time to do so). This finding is expected and does not reveal any new information about the predicted characteristics of being a NMOM. As a result, the significance of age will not be commented on in the remainder of the regression models.

analysis, geographic location (which is controlled for in model II) is not a statistically significant predictor of being a NMOM. Compared to women living in urban areas, women living in traditional authority areas have higher log odds of being a NMOM (0.033) while conversely, women living in farm areas have lower log odds of being a NMOM (-0.148). Province is also a non-significant predictor of the spatial characteristics of a NMOM, except for women living in the Eastern Cape (-0.408) and Gauteng (-0.490) provinces. Women living in these provinces appear to be less likely to be a NMOM compared to women living in KwaZulu-Natal.

Model III estimates the likelihood of being a NMOM after adding in controls for socioeconomic characteristics. The statistical significance of race has changed where White women (-1.649) are no longer significantly less likely to be NMOMs compared to Black women. Indian (-1.862) and Coloured (-0.805) women remain significantly less likely to be NMOMs however the size of the log odds has reduced in model III. Geographic location and province remain non-significant correlates of being a NMOM. Interestingly, women who have some/completed secondary schooling (0.443) or some form of tertiary education (0.519) are significantly more likely to be NMOMs compared to women with no education. The model also shows that employment status is a statistically significant predictor of being a NMOM where economically inactive (-0.288) and unemployed (-0.384) women are less likely to be NMOMs compared to employed women. These education and employment status findings draw attention to a group of educated and/or employed women who have higher log odds of being NMOMs and alludes to the notion of non-marital fertility as a choice among older women (See Gustafsson and Worku, 2006; Martinez et al., 2012; Upchurch et al., 2002; Ventura, 2009; Wildsmith et al., 2011; Wu et al., 2000)[186]. Lastly, the estimates in Model III reveal a significant negative relationship between being a NMOM and the logarithm of per capita total monthly household income. This finding suggests that the higher the per capita total monthly income, the less likely a woman is to be a NMOM.

[186] There is only one South African reference which focus on the notion of non-marital fertility as a choice among older women.

In the fourth model (IV) the statistically significant and negative relationship between being an Indian or a Coloured woman and being a NMOM remains. While controlling for various household characteristics, the results in model IV identifies that living in a male-headed household has a negative and significant effect on the likelihood of being a NMOM (-1.331). In other words, the results suggest that women living in female-headed households are more likely to be NMOMs compared to women living in male-headed households. It should be noted that this relationship is influenced by endogeneity as not being married to a man is a key predictor of being in a female-headed household. Household size is also controlled for in model IV where the results suggest that the larger the household size the more likely a woman is to be a NMOM (0.076).

Looking at the human capital indicators, having a tertiary education and being economically inactive or unemployed are no longer statistically significant correlates of being a NMOM (once household characteristics are included as controls). However, women who have some/completed secondary schooling continue to have significantly higher odds of being a NMOM compared to those with no education. This change in the significance of education and employment status in predicting the characteristics of NMOMs suggests that the household characteristics which are included in model IV are better predictors of the characteristics of NMOMs compared to the socioeconomic characteristics which were added in model III. Per capita total monthly household income remains a statistically significant predictor of being a NMOM as the results show that the higher the per capita total monthly household income, the less likely a woman living in the household is to be a NMOM (-0.414).

Lastly, the inclusion of household characteristics in model IV (which are linked to geographic location) has resulted in a significant and negative relationship between living in tribal authority areas and being a NMOM (-0.365). This is the case as even though there is a statistically significant increase in the percentage of NMOMs who live in tribal authority areas (shown in Chapter Five), the larger share of NMOMs continue to live in urban areas. Therefore, the results show that compared to women who live in urban areas, those who live in tribal authority areas are significantly less likely to be NMOMs. Additionally, once living in a male-headed household and larger household sizes are controlled for and identified as significant predictors of being a NMOM, the statistically significant and negative relationship between

living in a tribal authority area and being a NMOM is revealed. Overall, the findings in model IV indicate that being an Indian woman is a significant and strong negative correlate of being a NMOM.

The last regression model (V) controls for individual level characteristics which include religious affiliation[187], the importance of religious activities and the whether the respondent's mother has some form of tertiary education. Interestingly, these factors do not have any statistically significant association with being a NMOM. However, the introduction of these factors has changed the log odds of race and the gender of the household head in predicting the characteristics of a NMOM. In model V, Indian women are found to be two times less likely to be NMOMs compared to Black women (-2.059) while women living in male-headed households have become one and a half times less likely to be NMOMs compared to women living in female-headed households (-1.668). These changes in the log odds indicates that even though the individual characteristics which are introduced in model V are not statistically significant predictors of NMOMs, controlling for them confirms that being an Indian woman and living in a male-headed household are strong predictors of being a NMOM.

In model V, women living in traditional areas continue to have significantly lower odds of being a NMOM (-0.480) compared to women living in urban areas. Similarly, the statistically significant and negative relationship between per capita total monthly household income and being a NMOM which was identified in model III and has remained in models IV and V. This is an import finding as it confirms that being a NMOM is associated with living in a low-income household. Interestingly, when controlling for personal characteristics, women who are economically inactive (-0.355) and those who are unemployed (-0.596) are found to have significant lower odds of being a NMOM compared to employed women (these indicators lost their significance when household characteristics were controlled for in model IV). These findings are in contrast with the employment distribution of NMOMs (Chapter Four) which revealed that the larger share of NMOMs are economically inactive. Lastly, having some/completed secondary schooling is no longer a significant predictor of being a NMOM in

[187] There are no observations for Muslim and Hindu religious affiliations.

model V. This is interesting as it indicates that in South Africa, being employed is closely associated with being a NMOM compared to a woman's highest educational level.

Table 30: Logit estimations predicting the likelihood of being a never-married older mother, 2017

	I	II	III	IV	V
Age 35-39	0.720***	0.719***	0.778***	0.870***	0.791***
	(0.175)	(0.174)	(0.178)	(0.182)	(0.246)
Age 40-44	0.990***	0.991***	0.990***	1.060***	0.881***
	(0.173)	(0.173)	(0.183)	(0.187)	(0.246)
Age 45-49	0.368*	0.388**	0.366*	0.459**	0.313
	(0.190)	(0.190)	(0.203)	(0.208)	(0.257)
Coloured	-0.821***	-0.906***	-0.805***	-0.826***	-0.539
	(0.211)	(0.245)	(0.262)	(0.280)	(0.364)
Indian	-2.403***	-2.504***	-1.862***	-1.838**	-2.059*
	(0.690)	(0.698)	(0.716)	(0.723)	(1.227)
White	-2.665***	-2.574***	-1.649	-1.577	-1.186
	(0.824)	(0.832)	(1.048)	(1.054)	(1.102)
Traditional areas		0.033	-0.257	-0.365**	-0.480**
		(0.153)	(0.159)	(0.168)	(0.223)
Farm areas		-0.148	-0.228	-0.168	-0.299
		(0.262)	(0.264)	(0.265)	(0.361)
Some/completed primary schooling			0.421	0.481	0.422
			(0.299)	(0.304)	(0.391)
Some/completed secondary schooling			0.443*	0.457*	0.501
			(0.268)	(0.273)	(0.353)
Tertiary education			0.519*	0.444	0.504
			(0.296)	(0.303)	(0.407)
Economically inactive			-0.288**	-0.199	-0.355*
			(0.140)	(0.146)	(0.189)
Unemployed			-0.384**	-0.292	-0.596**
			(0.179)	(0.183)	(0.258)
Logarithm of per capita total monthly household income			-0.577***	-0.414***	-0.464***
			(0.090)	(0.097)	(0.121)
Male-headed household				-1.331***	-1.668***
				(0.186)	(0.250)
Household size				0.076***	0.068**
				(0.020)	(0.032)
Mother has no tertiary education					0.220
					(0.558)
Religious activities are important					-0.432
					(0.424)
Christian					-0.330
					(0.394)
Jewish					0.599
					(0.864)
Muslim					--
Hindu					--

African traditional spiritual beliefs					-0.206
					(0.493)
Constant	-2.069***	-1.864***	2.085***	0.601	1.817
	(0.131)	(0.217)	(0.661)	(0.751)	(1.178)
F stat	10.55	4.93	6.64	8.82	5.71
Prob > F	0.000	0.000	0.000	0.000	0.000
N	7727224	7727224	7315752	7233345	5005018

Source: Own calculations from the 2017 NIDS

Notes: The data are weighted

Standard errors in parenthesis

Significance levels: *** p<0.01, ** p<0.05, * p<0.1

The omitted categories are: 30-34, Black, Urban areas, KwaZulu-Natal, no education, employed, female-headed household, mother has tertiary education, religious activities are not important and no religion

Overall, regression models I to V have demonstrated that in South Africa, Black women are more likely to be NMOMs which is confirmed by the analysis of the racial distribution of NMOMs that is presented in Chapter Four. Relative to Black women, Indian women are least likely to be NMOMs. Importantly and similar to the analysis of household income that is presented in Chapter Four, the regression estimates have shown that being a NMOM is closely related to living in a low-income household. This is noteworthy as it provides evidence which suggests that in South Africa, non-martial fertility among older mothers is associated with a low household income.

The endogeneity between the gender of the household head and being a NMOM needs to be noted. The results have shown that in regression models III to V, women who live in male-headed household are found to be significantly less likely to be NMOMs compared to women who live in female-headed households. Due to the endogeneity in this relationship, it is also likely that the nature of being a NMOM is closely linked to living in a female-headed household. Overall, the relationship between the gender of the household head and the likelihood of being a NMOM is noteworthy as the analysis of the characteristics of NMOMs (presented in Chapter Four) reveals that 89.52% of NMOMs live in female-headed households.

Another noteworthy finding that has been revealed in the regression analysis is that compared to women's highest level of education, their employment status is a better predictor of being a NMOM. This is interesting as it suggests that within a South African context, the highest

educational level is not a determinant of non-marital fertility among older mothers. This is in contrast to a European and American context where having higher levels of education has been linked to non-marital fertility (Mack, 2017; Martinez et al., 2012; Stipkova, 2015; Upchurch et al., 2002; Wildsmith et al., 2011, Wu and Mcneill, 2002). In conclusion, the regression analysis in this section had set out to predict the characteristics of NMOMs. The results have demonstrated that being a Black woman, living in an urban area, being employed, belonging to a female-headed household, and a low-income household are all statistically significant predictors of the characteristics of NMOMs in South Africa.

6.6 Concluding remarks

The main aim of this chapter was to predict the characteristics of never-married mothers, older mothers and NMOMs. In all three regression estimations, a set of demographic, spatial, socioeconomic, household and personal characteristics were regressed against the likelihood of being a never-married mother, an older mother or a NMOM. Given South Africa's political past, race was expected to be a significant correlate of all groups of mothers however, interestingly, race is only strongly associated with being a never-married mother. This means that in South Africa, Black women are more likely to be never-married mothers and thus, being Black is closely linked to non-marital fertility in the country. The analysis also demonstrated that compared to the other demographic characteristics which were controlled for in the regression estimations, race is not a good predictor of the characteristics of older mothers and while Indian women in particular, have statistically significant and the lowest odds of being a NMOM. Overall, the analysis of race has shown that Black women are closely linked to non-marital fertility in the country while the odds of being an older mother or a NMOM is not influenced by one's race group.

The analysis of the socioeconomic characteristics in Chapter Four has revealed that compared to NMOMs, older mothers are better educated and that larger percentages of older mothers have some form of tertiary education compared to NMOMs. This finding is confirmed by the regression analysis as having a tertiary education is a strong predictor of older motherhood in South Africa (and not of being a NMOM). Compared to the highest educational level, personal and household characteristics are identified as better and stronger predictors of NMOMs while

in general, the characteristics of never-married mothers in South Africa are not influenced by a woman's highest educational level.

In particular, the regression estimations of the characteristics of older mothers has identified a statistically significant relationship between marital status and older motherhood in South Africa. The findings indicate that being married is closely linked with being an older mother while women who remain unmarried are least likely to be older mothers. This finding is further substantiated by the analysis of the trends in non-marital fertility (Chapter Five) which revealed that there has been no statistically significant change in the percentage of older mothers who were married and never married between 2002 and 2017. In summary, these findings mean that in South Africa, older mothers continue to be married.

An important finding from this chapter is the relationship between household income and being a never-married mother, an older mother or a NMOM. Across all the regression models for the different groups of mothers, the results demonstrated that women who live in low-income households are significantly more likely to be either a NMOM, a never-married mother or an older mother compared to women who live in high-income households. Furthermore, once all of the controls were included in the regression estimations, the log odds describing the relationship between household income and motherhood was largest for NMOMs (-0.464) followed by never-married mothers (-0.390) and older mothers (-0.387). This is expected as the analysis of household income that is presented in Chapter Four showed that older mothers live in households with the highest average per capita monthly household income while NMOMs live in households with the lowest average per capita monthly household income. This evidence suggests that in South Africa, non-marital fertility (among all groups of mothers) is associated with belonging to a low-income household.

Lastly, the personal characteristics which were included as controls in model V are only statistically significant predictors of the characteristics of never-married mothers. This means that demographic, spatial, household and socioeconomic characteristics have a stronger influence on whether a woman will be a NMOM or an older mother compared to personal characteristics. In comparison, for South African women who are more likely to be never-

married mothers, the importance of religion and in particular, being a Muslim woman plays a significant role in whether a woman will be a never-married mother. The main reason for this difference is that these religious factors are significant in predicting the characteristics associated with non-marital fertility in general however, when focusing on the characteristics of a more specific group of mothers, these religious characteristics no longer significantly influence the likelihood of non-marital motherhood in South Africa.

The next chapter continues to investigate the influence of personal characteristics on motherhood in South Africa and builds on this chapter by focusing on South African's attitudes and beliefs regarding motherhood. Specifically, the next chapter analyses South African's attitudes towards marriage, childbearing and single parenthood and identifies whether attitudes towards pre-marital sex have changed over time. The chapter ends with a set of regression estimations that identifies the characteristics of individuals who feel that marriage should come after education and employment stability, who feel that *ilobolo* impedes marriage in South Africa and that children should be born within a marriage. Overall, the main aim of the next chapter is to ascertain whether South African's opinions on non-marital fertility either largely assimilate or are at odds with their childbearing and marriage practices.

Chapter Seven: South African's views on behaviours related to non-marital fertility

7.1 Introduction

The SASAS introduces a unique perspective to the data analysis as it quantifies people's opinions and beliefs on the social, political and economic issues that are experienced in South Africa. As a result, the inclusion of the SASAS data enriches the context from which the trends in and characteristics[188] of non-marital fertility are understood and it aids in identifying whether changing attitudes may have coincided with changing patterns of non-marital fertility in the country. Overall, the inclusion of the analysis of the SASAS provides an important perspective to an understanding of non-marital fertility in South Africa.

This chapter is ordered as follows; the first part of the chapter provides an investigation of attitudes towards sexual activity before marriage[189] in the form of a trend analysis using data from the 2003 to 2016 rounds of the SASAS. The second part of the chapter uses data from various modules of the SASAS to highlight South Africans' views on marriage and single parenthood. This analysis presents a snapshot of attitudes towards these social issues at different points in time as information on these themed modules are a part of the SASAS rotational modules and have thus far only been collected once each (per module). In particular, the data that are used for the analysis of attitudes towards single motherhood and childrearing have been collected in the 2003 round of the SASAS while information on the various concepts of marriage were collected in the 2005 round of the SASAS[190].

[188] Findings from Chapters Four, Five and Six.

[189] Questions which address moral issues (like premarital sexual activity) have the possibility of being influenced by social desirability bias therefore, the results from this chapter should be interpreted with caution.

[190] The 2007 round of the SASAS which collected information on women, childcare and work was a client module, so the data were not made available for public use. I have attempted to contact the principal researcher at the SASAS to check whether it is possible for me to have access to the information however I have received no response from him.

Through the use of multivariate regression analysis, the last part of this chapter identifies the characteristics of individuals who are more likely to share specific views on issues surrounding non-marital fertility. Specifically, the following three statements are regressed against a set of demographic (gender, age, marital status and race) and socioeconomic (educational level, employment status and per capita and household total monthly income) characteristics: (1) *People should first get an education and start a working career before getting married;* (2) *The payment of ilobolo is the main reason why many people do not get married these days* and (3) *A person should be married first before having a child*. These statements are included in the 'family life' module that is collected in the 2005 round of the SASAS.

The analysis that is presented in this chapter is representative of individuals aged 16 and older and certain analyses have been disaggregated by the demographic characteristics of the respondents[191]. The questions that are analysed from each of the SASAS modules use a Likert scale response option [192] of: strongly agree, agree, neither, strongly disagree and don't know. In all of the cases, the 'don't know/can't choose' response options are set to system missing. Additionally, the 'strongly agree' and 'agree' response options are collapsed into one category called agree and similarly the 'strongly disagree' and 'disagree' response options are collapsed into one category (called disagree).

Table 31: Marital distribution of individuals aged 16 and older, 2016 and 2017

Marital status	2016 SASAS	2017 GHS	2017 NIDS
Married	29.26 (1.199)	40.36 (0.243)	35.13 (0.495)
Divorced	4.74 (0.515)	2.59 (0.076)	3.30 (0.199)
Widowed	6.25 (0.514)	6.13 (0.109)	6.94 (0.221)
Never married	59.75 (1.337)	50.91 (0.246)	54.63 (0.516)
Total	**100**	**100**	**100**
Sample size (n)	2982	49138	26120

Source: Own calculations from the 2016 SASAS, the 2017 GHS and the 2017 NIDS
Notes: Data are weighed
Standard errors in parentheses
Column percentage presented
The sample is representative of individuals aged 16 and older

[191] Each round of the SASAS contains a range of demographic characteristics of the respondents.

[192] Except for the question on premarital sexual intercourse that is outlined in section 7.3.1 (Premarital sexual intercourse).

The analysis in Table 31 provides a comparison of the distribution of individuals aged 16 and older across the 2016 SASAS, the 2017 GHS and the 2017 NIDS, by marital status. The main reason for this analysis is to assess the comparability of the SASAS data with the GHS and the NIDS data. The analysis shows that the GHS estimates are higher than the NIDS and the SASAS estimates. For example, in 2017 the GHS data estimated that 40.36% of individuals aged 16 and older were married compared to 35.13% estimated in the NIDS data and 29.26% in the SASAS. The difference in the estimates of individuals who were never-married also differs as the SASAS analysis revealed that 59.75% of individuals were never-married in 2016 compared to 50.91% estimated from the 2017 GHS data and 54.63% estimated in the 2017 NIDS data. The difference in the estimates between these surveys could be a result of the differing sampling strategies and/or the different structures of the surveys. For example, in the GHS, the household head is asked to provide information on each household member while in the NIDS, each household member is interviewed. In contrast, only one household member (who is not necessarily the household head) in interviewed in the SASAS. Nevertheless, the findings that are presented in Table 31 suggest that the results from the 2016 SASAS are roughly in line with the results from the 2017 GHS and the 2017 NIDS.

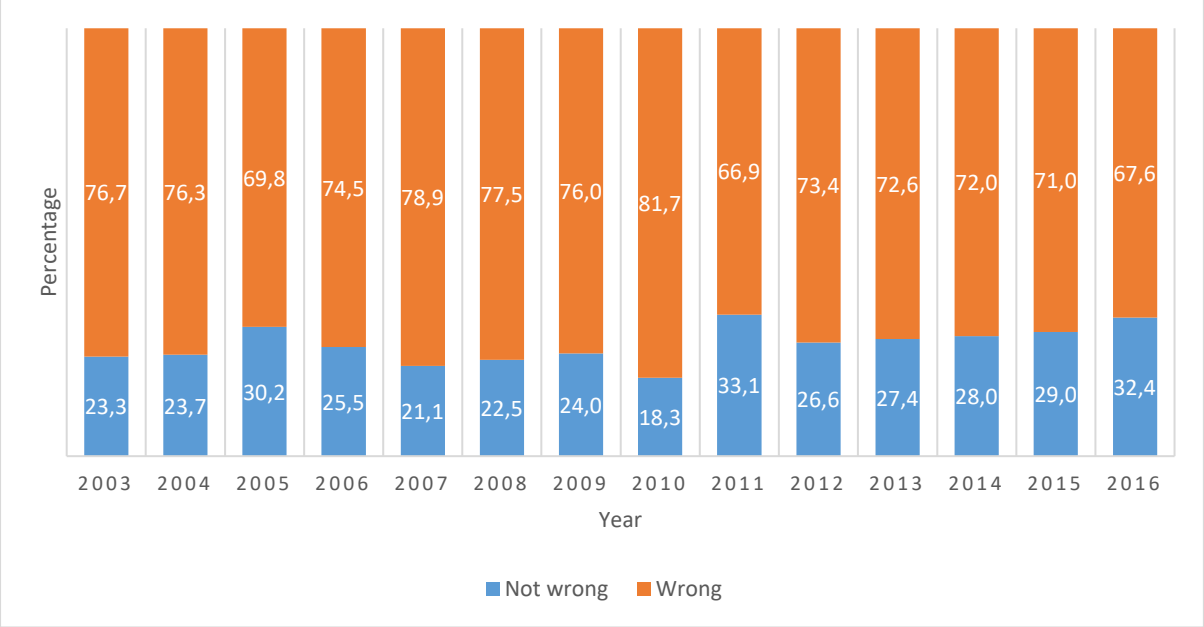
7.2 Changes in South Africans views about premarital sexual activity

An analysis of changes in South Africans' attitudes towards premarital sexual intercourse from 2003 until 2016 is presented in Figure 19. The question that is being analysed is: *Do you think it is wrong or not wrong if a man and a woman have sexual relations before marriage?* The question, which is the same in all rounds of the SASAS makes use of the following response options: 1 – not wrong at all, 2 – wrong only sometimes, 3 -almost always wrong, 4 -always wrong and 5 – cannot choose[193]. Response options 2, 3 and 4 are combined to form a 'wrong' category while response category 1 is labelled as 'not wrong'. The 'cannot choose' response option (response option 5) is set to system missing as it does not reveal any meaningful insights about South Africans' attitudes on premarital sex.

[193] Response 5 – 'cannot choose' changes to 'do not know' from 2005 and onward.

The analysis (Figure 19) shows that a larger share of South Africans feel that it is 'wrong' for a man and woman to engage in sexual relations before marriage. However, the results suggest that this view is changing as there has been a statistically significant decrease of 11.92% between 2003 (76.71%) and 2016 (67.57%) in the share of South Africans who believe that premarital sexual activity is wrong. In response to this decrease, there has been a statistically significant increase of 39.24% between 2003 (23.29%) and 2016 (32.43%) in the share of South Africans who feel that there is nothing wrong with having sex before marriage. Overall, the trend analysis in Figure 19 indicates that South African's views on the morality of sexual intercourse before marriage is changing alongside the increase in the share of non-marital fertility in the country.

Figure 19: South Africans' views on premarital sexual activity, 2003-2016

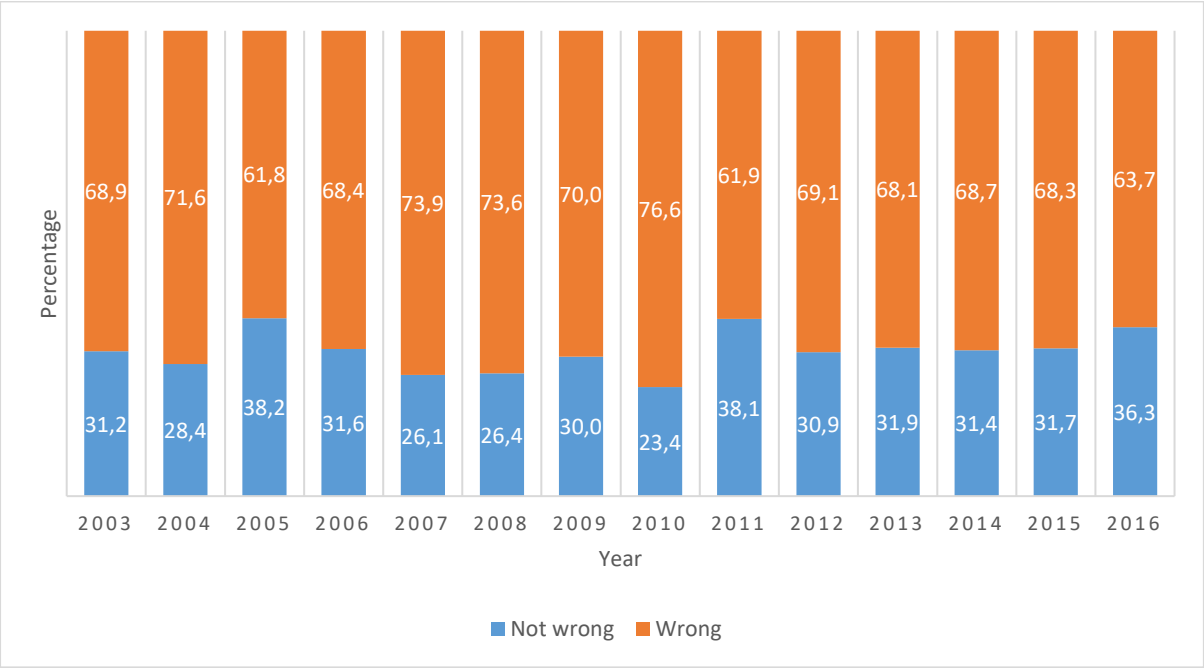


Source: Own calculations from the 2003 to 2016 SASAS
Notes: Data are weighted
The sample includes individuals aged 16 and older

Building on the results that are presented in Figure19, Figures 20 and 21 provide an analysis of South Africans' views on premarital sexual activity by gender. The results that are presented in Figure 20 focus on males' views on premarital sexual intercourse while females' views are presented in Figure 21. The analysis in Figure 20 shows that of all South African men, the larger percentage believes that engaging in premarital sexual activity is wrong. There has been a 16.63% increase between 2003 and 2016 in the percentage of men who feel that engaging in sexual activity before marriage is not wrong and a 7.52% decrease between the same time period in the percentage of men who view premarital sexual activity as wrong (however these

changes in the estimates are not statistically significant). This indicates that overall, South African men continue to believe that people should become sexually active only once they are married.

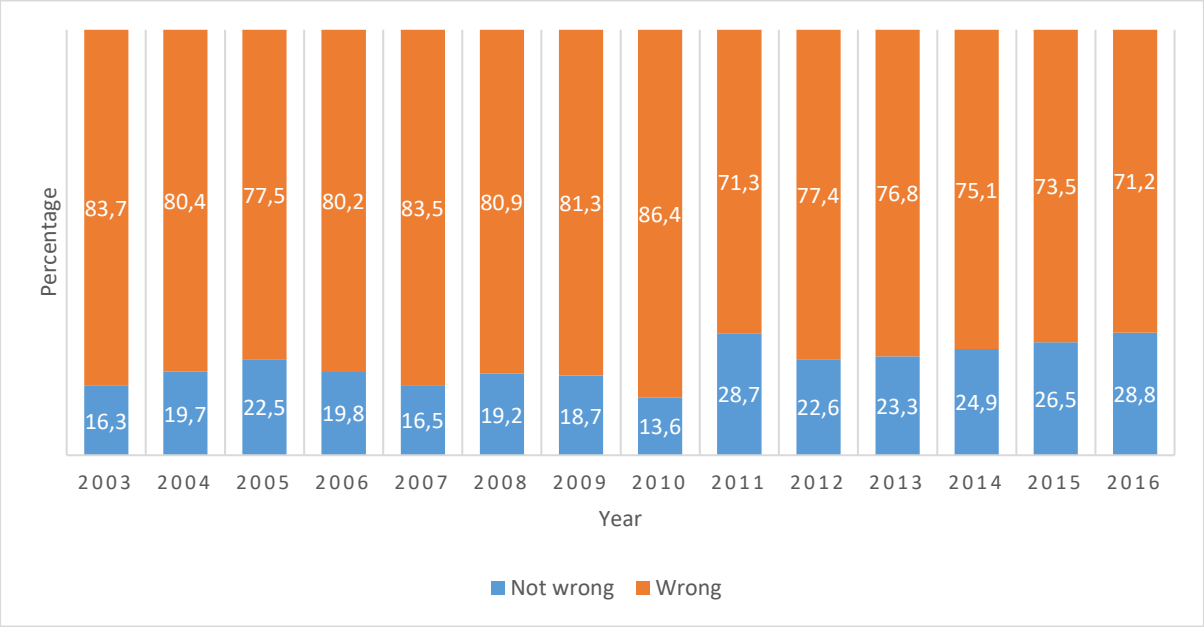
Figure 20: Males' views on premarital sexual activity, 2003-2016



Source: Own calculations from the 2003 to 2016 SASAS
Notes: Data are weighted
The sample includes males aged 16 and older

Looking at the views of South African women, Figure 21 illustrates that similar to men, the larger share of females believe that premarital sexual activity is wrong. Interestingly, there has been a 76.53% (statistically significant) increase between 2003 and 2016 in the percentage of females who do not feel that sexual intercourse outside of a marriage is morally wrong while during the same period, there has been a 14.93% statistically significant decrease in the share of females who frown upon sexual relations outside of a marriage. Noteworthy is the larger, year-on-year percentage of males who have positive sentiments about premarital sexual activity compared to females. For example, in 2005, 38.24% of males indicated that they do not think that sexual relations before marriage is wrong compared to 22.54% of females. Similarly, in 2013, 31.88% of male South Africans shared positive sentiments about premarital sexual activity compared to 23.25% of female South Africans. Overall, these results suggest that women's acceptance of premarital sexual activity has changed over time however, men are more open to the idea of sex before marriage.

Figure 21: Females' views on premarital sexual activity, 2003-2016



Source: Own calculations from the 2003 to 2016 SASAS
Notes: Data are weighted
The sample includes females aged 16 and older

In summary, the findings in this section have showed that South Africans, in general, do not agree with the notion of sex before marriage however the analysis revealed that this view is changing in relation to the increase in levels of non-marital fertility in the country. The analysis of gender indicated that in general, males are more likely to share positive sentiments about premarital sexual activity however the share of men who support the notion of premarital sex has not changed significantly between 2003 and 2016. In comparison, there is an increasing number of females who feel that sexual interactions outside of a marriage is not wrong.

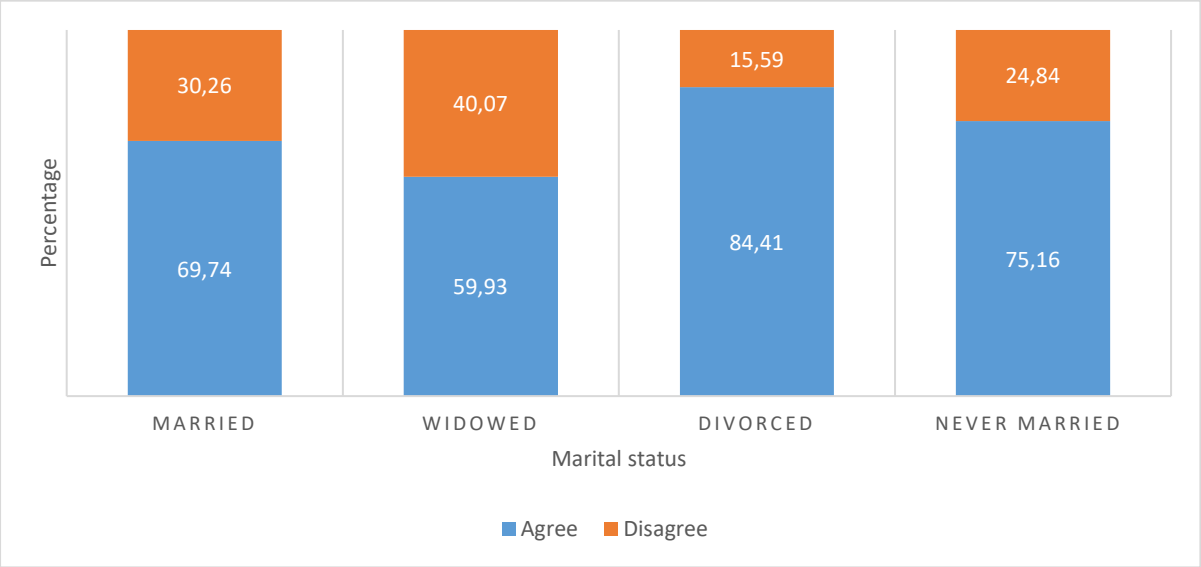
7.3 South Africans' views on childrearing in relation to single parenthood

This section presents an analysis of childrearing in relation to single parenthood where the statement: *one parent can bring up a child as well as two parents can*[194] is analysed. The opinions are disaggregated by demographic characteristics to ascertain whether South

[194] Respondents can select one of the following responses to the statement: 1 - strongly agree, 2 – agree, 3 – neither nor, 4 -disagree, 5 – strongly disagree and 6 – do not know. Response options 1 and 2 are combined and labelled as 'agree' and similarly, response options 4 and 5 are combined and labelled as 'disagree'. Response options 3 and 6 are set to system missing.

Africans' opinions differ based on their race and/or marital status. In particular, differences in opinions that are based on race and marital status are explored as the analysis that is presented in Chapter Four has revealed differences in the racial characteristics of NMOMs and differences in the marital distribution of older mothers

Figure 22: South Africans' views on childrearing by marital status, 2003



Source: Own calculations from the 2003 SASAS
Notes: Data are weighted
The sample includes individuals aged 16 and older

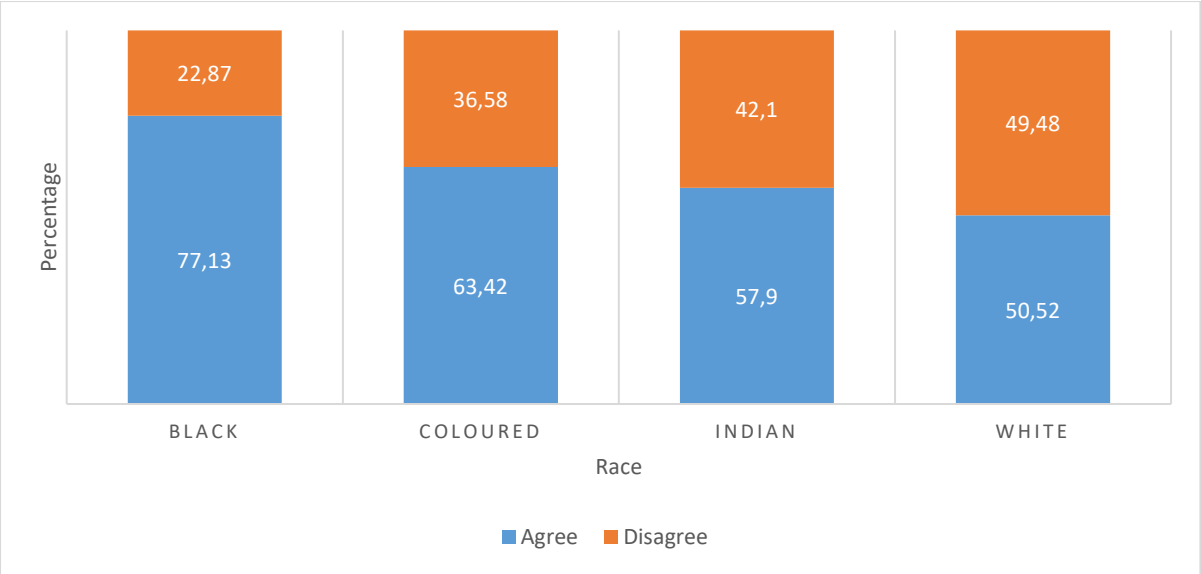
A preliminary analysis of the statement revealed that 72.52% (1.684)[195] of South Africans believe that one parent can raise a child just as well as two parents can compared to 27.48% (1.684) who disagree with the statement. Further analysis of the statement by marital status (Figure 22) reveals a difference in opinions. The results suggest that divorced (84.41%) and never married (75.16%) South Africans are more likely to agree that single parents are just as good as two parents at raising a child compared to married (69.74%) and widowed (59.93%) individuals. Overall, the larger share of individuals across the different marital categories agree that one parent can bring up a child just as well as two parents can.

South Africans' opinions on single parenthood are disaggregated by race in Figure 23. The results show that Black individuals (77.13%) are more likely to agree with the statement compared to Coloured (63.42%), Indian (57.90%) and White (50.52%) individuals. The

[195] The standard errors are in parenthesis.

differences in opinions are noteworthy as the results show that almost half of the Indian (42.10%) and White (49.48%) sample disagrees with the statement. In general, the larger share of individuals of each race group agree that one parent can bring up a child just as well as two parents. In conclusion, the analysis in this section has shown that opinions on childrearing in regard to single parenthood differ based on race and marital status however, in general, a larger share of individuals agree that one parent can raise a child just as well as two parents can.

Figure 23: South Africans' views on childrearing by race, 2003



Source: Own calculations from the 2003 SASAS
Notes: Data are weighted
The sample includes individuals aged 16 and older

7.4 South African's views on marriage

This section is focused on South African's attitudes towards marriage in relation to education, employment, living arrangements and cultural practices[196]. The analysis is disaggregated by selected demographic characteristics to identify any difference in opinions based on these characteristics. The first set of analyses explores South Africans' opinions on women remaining unmarried and focusing on their career. In particular, the statement that is analysed is: *Women in South Africa should feel free to remain unmarried and get interesting jobs, as is common in America and Europe*. In order to highlight any differences in the opinions that are

[196] The response options for all of the statements that are analysed in this section are *agree and disagree*. The 'agree' response category includes the 'strongly agree' and 'agree' responses while similarly, the 'disagree' response category includes the 'strongly disagree' and 'disagree' responses. The 'neither nor' and 'do not know' options are set to system missing.

presented, the analysis is disaggregated by race and marital status. The preliminary analysis shows that of all individuals in the sample, 71.48% (2.082)[197] agree that women should focus on their career and remain unmarried while 28.52% (2.082) disagree with the statement.

Table 32: South African's views on women focusing on a career over marriage by race and marital status, 2005

Women in South Africa should feel free to remain unmarried and get interesting jobs, as is common in America and Europe by race				
	Race			
	Black	**Coloured**	**Indian**	**White**
Agree	66.42 (2.570)	87.48 (2.539)	82.92 (3.088)	90.23 (1.982)
Disagree	33.58 (2.570)	12.52 (2.539)	17.08 (3.088)	9.77 (1.982)
Total	**100**	**100**	**100**	**100**
	Marital status			
	Married	**Widowed**	**Divorced**	**Never married**
Agree	69.63 (2.557)	77.65 (4.396)	77.95 (6.211)	71.55 (3.322)
Disagree	30.37 (2.557)	22.35 (4.396)	22.05 (6.211)	28.45 (3.322)
Total	**100**	**100**	**100**	**100**

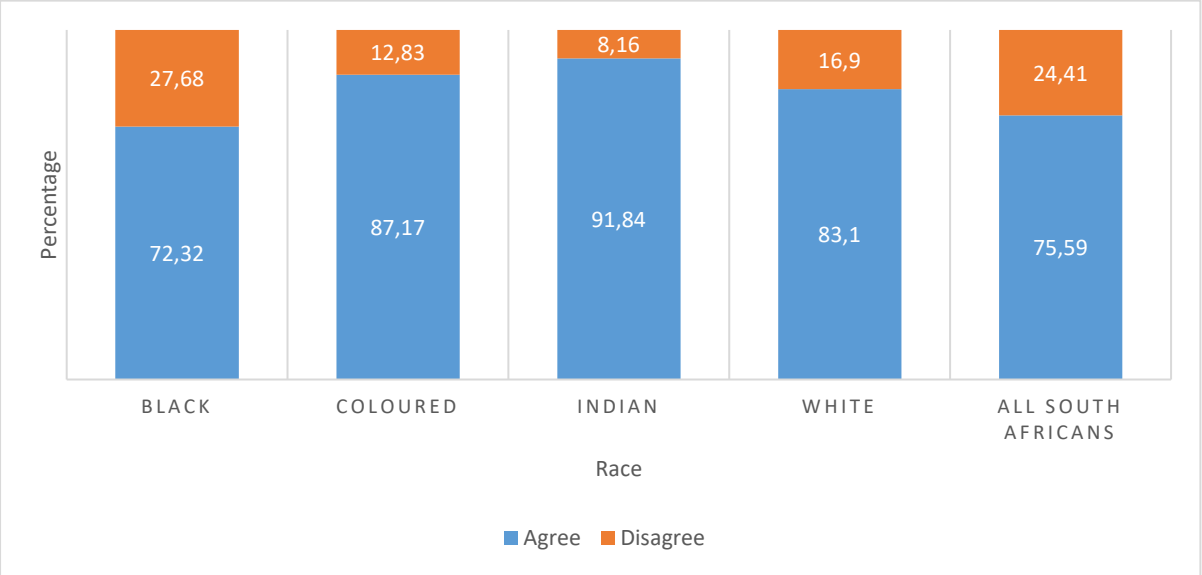
Source: Own calculations from the 2005 SASAS
Notes: Data are weighted
The sample includes individuals aged 16 and older

The racial characteristics and marital status of individuals who agree or disagree with the statement are presented in Table 32. Looking at race, firstly, the analysis shows that the larger share of individuals of all race groups agree with the statement. Secondly and in particular, White individuals (90.23%) are more likely to agree that women should not marry and instead, focus on their career compared to Coloured (87.48%), Indian (82.92) and Black (66.42%) individuals. The analysis of marital status shows that the larger share of individuals in all of the marital categories believe that women should focus on their career and remain unmarried. Similar percentages of widowed (77.65%) and divorced (77.95%) women agree with the statement compared to smaller percentages of never married (71.55%) and married (69.63%) individuals. In summary, the results have shown that in general, South Africans' support the idea of women working and remaining unmarried and that these opinions vary slightly by race and marital status.

[197] The standard errors are in parenthesis.

The next set of analyses explores South Africans' opinions on whether people should focus on their career and education before marrying. The opinions on the statement: *People should first get an education and start a working career before getting married* are disaggregated by race. Firstly, the analysis shows that in general, 75.59% (1.687) of South Africans support the idea of becoming educated and working before getting married while 24.41% (1.687) disagree. The analysis by race that is presented in Figure 24 reveals that Indian South Africans (91.84%) are more likely to agree with the idea of becoming educated and working before getting married compared to Coloured (87.17%), White (83.10%) and Black (72.32%) South Africans. Overall, the results show that the larger share of South Africans in all race groups support the idea of spending time on becoming educated and working before entering into a marriage.

Figure 24: South Africans' views on delaying marriage in favour of an education and a career by race, 2005

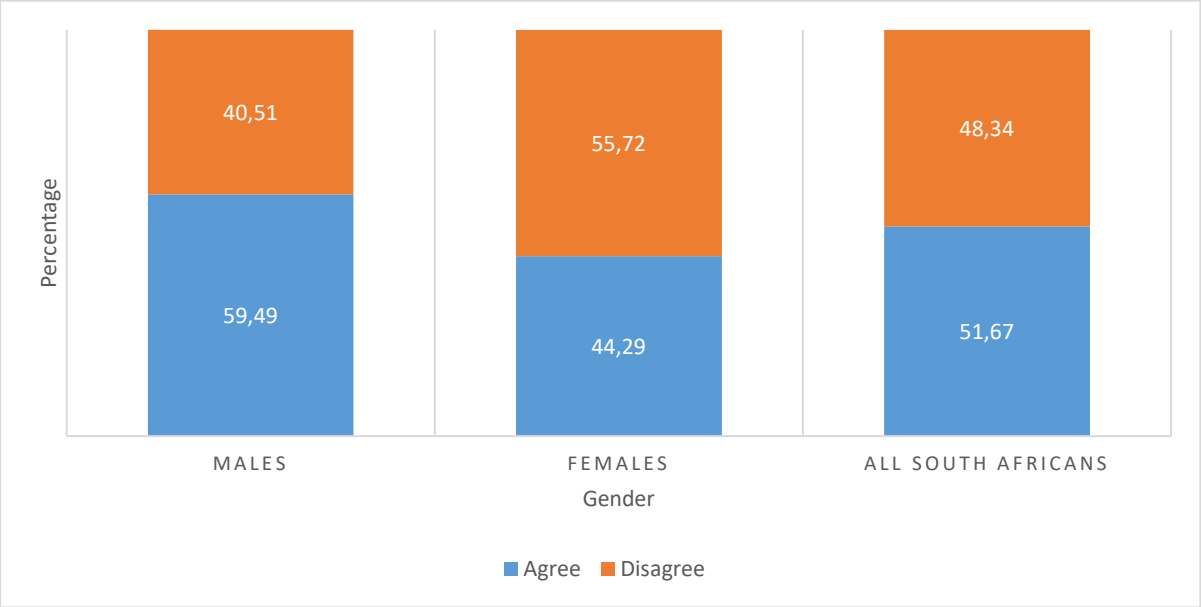


Source: Own calculations from the 2005 SASAS
Notes: Data are weighted
The sample includes individuals aged 16 and older

The body of literature that is focused on the family has broadly detailed that, for South Africans who cohabit, cohabitation is either a prelude to marriage or an alternate to marriage (in situations where the relationship does not end) (Amoateng and Heaton, 2015; Posel et al., 2011). The results in Figures 25 and 26 further explore this notion by presenting an analysis of South Africans' opinions on whether people should cohabit if they intend on marrying. The analysis is based on the following statement: *It is a good idea for a couple who intends to get married, to live together first* where Figure 25 presents the views of all South Africans which are disaggregated by gender. In general, South Africans' views on cohabitation seem to be split

as the results show that 51.67% agree that couples who intend on marrying should cohabit while 48.34% disagree with this living arrangement. Additionally, there are gender differences in the opinions as the results show that males are more likely to agree with the idea of cohabiting before marriage (59.49%) compared to females (44.29%).

Figure 25: South Africans' opinions on cohabiting by gender, 2005

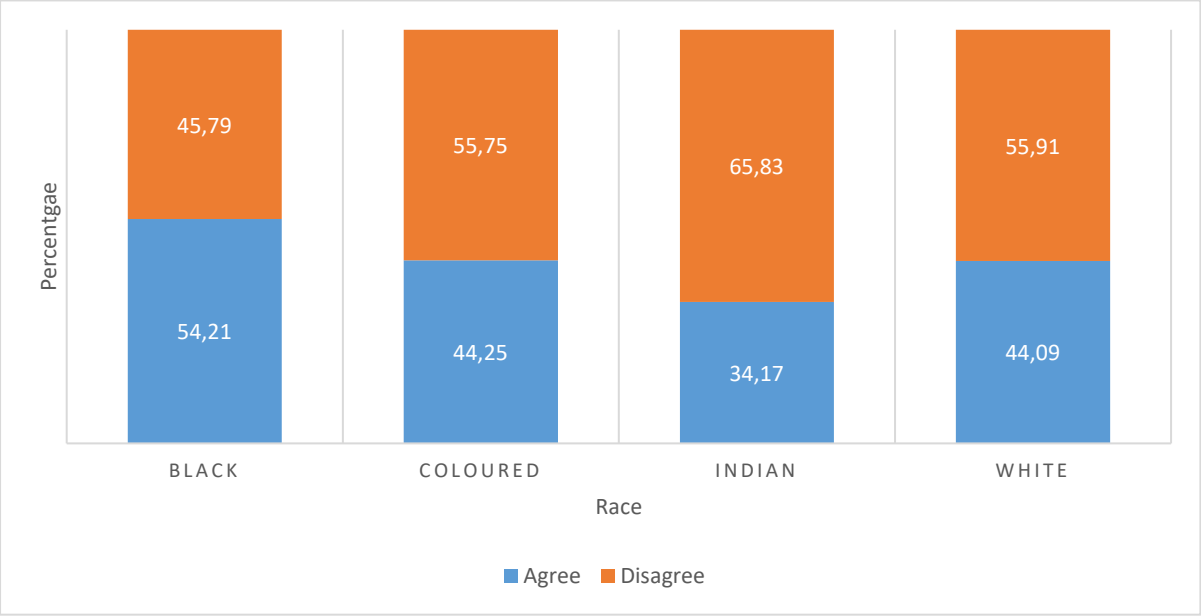


Source: Own calculations from the 2005 SASAS
Notes: Data are weighted
The sample includes individuals aged 16 and older

Further analysis reveals racial differences in South Africans' views on cohabitation which are presented in Figure 26. The results show that Black individuals are more likely to agree with the idea of cohabiting before marriage compared to Coloured, White and Indian individuals. Keeping in mind that the results that are presented in Figure 26 are representative of all South Africans aged 16 and older, this finding is unexpected and is at odds with the marital distribution of all mothers aged 15-49[198] which found that only 8.54% of all mothers are in a cohabiting relationship. This suggests that the larger share of South Africans have liberal sentiments about cohabiting before marriage however these sentiments do not influence their behaviour (living arrangements). Overall, the analysis that is presented in Figures 25 and 26 indicate that there are gender and racial differences in opinions about whether couples who intend to marry should cohabit.

[198] The analysis in Chapter Four has shown that the larger share of all mothers (aged 15-49) is Black.

Figure 26: South Africans' views on cohabitation by race, 2005



Source: Own calculations from the 2005 SASAS
Notes: Data are weighted
The sample includes individuals aged 16 and older

A number of South African studies have drawn attention to the restricting effect of the cultural practice of *ilobolo* on Black marriages (Amoateng and Heaton, 2015; Casale and Posel, 2010; Gustafsson and Worku, 2006; Kalule-Sabiti et al., 2007; Posel and Rudwick, 2011). In light of this literature, Table 34 presents an analysis on whether South Africans' believe that *ilobolo* is the reason for people not marrying. In particular, the following statement is analysed: *The payment of ilobolo is the main reason why many people do not get married these days.* The analysis is restricted to a Black sample as the practice of *ilobolo* is a Black marriage custom and therefore, by restricting the sample to Black individuals the results are representative of individuals who are assumed to be influenced by the practice in some way.

The results in Table 33 present the opinions of all Black individuals which are disaggregated by gender and marital status. Looking at the opinion of all Black people, the result is split where 50.52% believe that *ilobolo* is an impediment to marriage while 49.48% disagree with this statement. Interestingly, the results show no gender differences in the opinion of whether *ilobolo* is an impediment to marriage. This finding is unexpected as it was assumed that because of the commercialisation of *ilobolo* (Amoateng and Heaton, 2015; Posel and Rudwick, 2011) and Black men's responsibility to pay *ilobolo* for their future bride, a larger share of Black men would have indicated that they feel that *ilobolo* is an impediment to marriage.

Table 33: South Africans' views on the relationship between *ilobolo* and marriage in contemporary South Africa, 2005

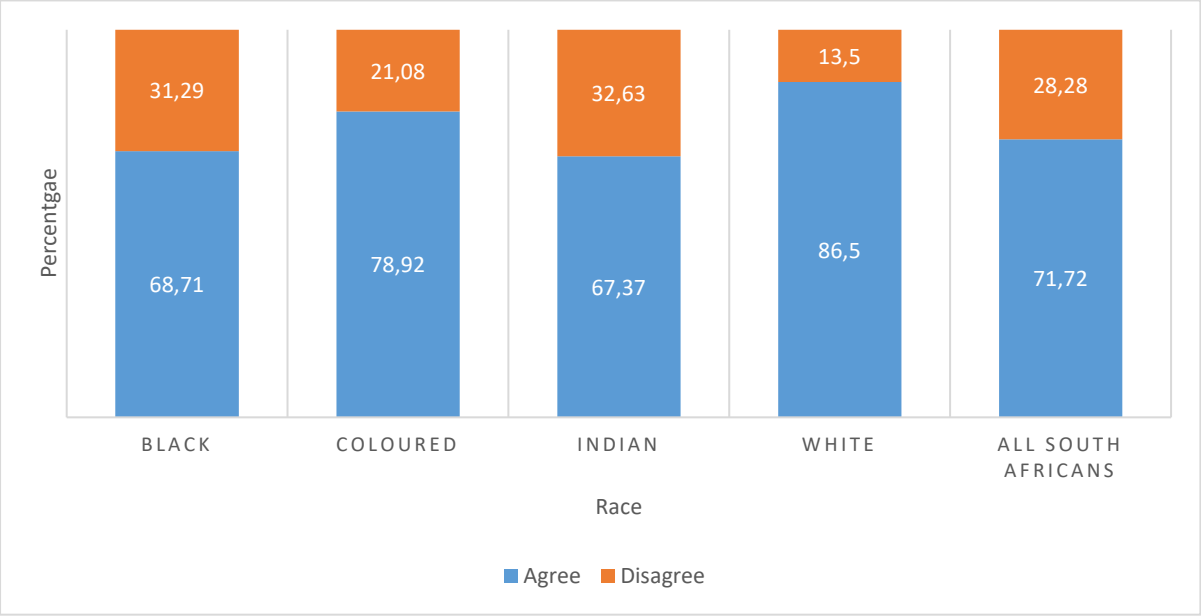
The payment of *ilobolo* is the main reason why many people do not get married these days for Black people only				
All African South Africans				
Agree	49.48 (2.527)			
Disagree	50.52 (2.527)			
Total	**100**			
	Gender			
	Male	**Female**		
Agree	49.22 (4.123)	49.72 (3.039)		
Disagree	50.78 (4.123)	50.28 (3.039)		
Total	**100**	**100**		
	Marital status			
	Married	**Widowed**	**Divorced**	**Never married**
Agree	40.35 (3.394)	35.67 (6.188)	45.51 (9.459)	55.76 (3.635)
Disagree	59.65 (3.394)	64.33 (6.188)	54.49 (9.459)	44.24 (3.635)
Total	**100**	**100**	**100**	**100**

Source: Own calculations from the 2005 SASAS
Notes: Data are weighted
The sample includes African individuals aged 16 and older

The last set of results that is presented in Table 33 reveals Black individuals' opinions on the relationship between *ilobolo* and marriage by marital status. The results show that relative to Black individuals who are married, widowed or divorced, the larger share of Black individuals who are never-married feel that *ilobolo* is the reason why people do not marry. In summary, the results in Table 33 indicate that Black individuals do not believe that *ilobolo* is a barrier to marriage in contemporary South Africa.

The final set of analyses in this section explores South Africans' opinion on non-marital childbearing where the statement: *A person should be married before having a child* is analysed. The results in Figure 27 shows that a large share of South Africans' feel that childbearing should happen within a marriage. Looking at the opinions by race, the findings indicate that White individuals are more likely to support the idea of childbearing within a marriage (86.50%) compared to Coloured (78.92%), Black (68.71%) and Indian (67.37%) individuals. Irrespective of these differences, the larger share of South Africans' of each race group believe that childbearing should happen within a marriage.

Figure 27: South Africans' views on non-marital childbearing, 2005



Source: Own calculations from the 2005 SASAS
Notes: Data are weighted
The sample includes individuals aged 16 and older

Thus far, the analysis in this chapter has demonstrated that in general, South Africans' value education and career development over marriage and agree that individuals should spend time on becoming educated and developing a career before entering into a marriage. There are gender and racial differences that are noted in South Africans' views on cohabitation however overall, a large majority of South Africans' feel that unmarried couples should not live together. Interestingly, Black South Africans' view on *ilobolo* is split where half of the respondents believe that *ilobolo* is an impediment to marriage while the other half feel that *ilobolo* does not negatively affect marriage.

Lastly, Figure 27 reveals that a large share of South Africans' agree that childbearing should take place within a marriage (71.72%). The analysis by race also shows that the larger share of individuals in each race group feel that non-marital childbearing is wrong. These attitudes on non-marital fertility, by race are at odds with the actual fertility behaviours of women within each race group (except for White South Africans). For example, Figure 27 shows that Indian South Africans are least likely to agree that childbearing should take place within a marriage (67.37%) however, of all Indian women, only 18.92% are never-married mothers (the second

lowest percentage) (Table 17[199]). On the other hand, 78.92% of Coloured South Africans view non-marital fertility negatively (the second highest percentage) however, Coloured women have the second highest percentage of never-married mothers (50.56%). In contrast, the results which show that 86.50% of White South Africans agree that childbearing should take place within a marriage (the highest percentage) (Figure 27) is in line with the 18.54% of all White women who are never-married mothers (the lowest percentage) (Table 17).

7.5 Multivariate analysis of attitudes towards non-marital fertility and marriage

This section investigates further South Africans' views on *ilobolo*, education and career development and childbearing in relation to marriage within a multivariate context. The main aim of this section is to predict the characteristics of South Africans who are more likely to believe that education and career development should come before marriage. Additionally, the characteristics of individuals who are more likely to believe that *ilobolo* is an impediment to marriage and that childbearing should take place within a marriage are also predicted. In particular, the regression estimations are predicting the responses for the following statements: *People should first get an education and start a working career before getting married, The payment of ilobolo is the main reason why people do not get married these days* and lastly, *a person should be married before having a child.*

7.5.1 Model specifications

A multivariate logit regression analysis is used to predict the characteristics of individuals who are most likely to agree with the above statements. For each statement, respondents who agree or strongly agree with the statement are coded as 1 and all others as 0. The regression model which regresses the characteristics of individuals against the likelihood of viewing *ilobolo* as a deterrent to marriage is estimated twice; first for a Black sample only and then for all respondents. This is done to identify whether the characteristics of Black people who view *ilobolo* as an obstacle to marriage differs from the characteristics of all individuals who feel

[199] The NIDS estimates from Table 17 are being reported.

the same way about the cultural marriage practice. The rest of the models are estimated for all respondents in the sample.

The controls that are used in the models include a set of demographic and socioeconomic variables. The demographic variables include age categories, race (except for the model which is restrict to a Black sample), gender and marital status while the related reference categories include age 35-49, Black individuals, males and being married. The socioeconomic characteristics include educational level, employment status and total monthly household income. Of these characteristics, no schooling, being employed and a total monthly household income of more than R5000 are the references categories. The measure of total monthly household income that is being used is made available in the 2005 SASAS with the following response categories: no income, R1 - R500, R501 – 1500, R1501 – R5000, R5001 and more and refuse/uncertain/don't know The 'refuse/uncertain/don't care' responses have been set to system missing.

7.5.2 Logit estimations predicting the characteristics of South Africans who feel that time should be focused on education and career development before entering into a marriage

The regression estimations in this section predict the characteristics of individuals who are more likely to feel that time should be spent on gaining an education and developing a career before getting married. The analysis, which is representative of all individuals in the sample is presented in two models. The first model estimates the log odds of agreeing to the above statement while controlling for demographic characteristics (I) and the second model introduces socioeconomic characteristics to the regression specification (II). The demographic characteristics which are controlled for are age, race, marital status and gender while the socioeconomic factors include the highest level of education, employment status and total monthly household income.

The estimates in model I (Table 34), which control for demographic characteristics, show that women are significantly more likely to feel that it is important to spend time on an education and career before entering into a marriage (0.187) compared to men. Age appears to be a significant correlate where individuals aged 25-34 are significantly less likely to agree with the

idea of getting married after establishing a career (-0.478) compared to those aged 35-49. Individuals who are 50 years and older are more likely to agree with the statement (0.118) compared to those aged 35-49 however this finding is not statistically significant.

The analysis of marital status shows that widowed (0.100) and never married (0.078) individuals are more likely to agree with the above statement compared to those that are married (however these findings are not significant). Race is revealed as a significant correlate where in particular, Coloured (0.374), Indian (1.401) and White (0.644) individuals are significantly more likely to have positive attitudes about becoming educated and developing a career before entering into a marriage. This is interesting as Black South Africans are more likely to experience non-marital fertility and therefore, the findings suggest that Black individuals' opinions on education, career development and marriage differ from their lived realities. In summary, the results in model I have identified race as a significant correlate of the characteristics of individuals who may agree with the idea of marrying after gaining an education and establishing a working career. At this point, being an Indian South African is found to be a statistically significant and strong predictor of someone who may agree with the statement.

Model II introduced the socioeconomic characteristics of highest educational level, employment status and total monthly household income[200] to the regression estimations. The introduction of these socioeconomic controls has caused age to lose its statistical significance in being a predictor of an individual who may believe that time should be spent on education and career developing before entering into a marriage (in model II). Individuals who live in households with a household income of between R1501 and R5000 are significantly more likely to agree with the statement compared to those who live in households with a household income of R5001 or more.

[200] The data for the per capita total monthly household income variable are presented as bracket income categories in the 2005 SASAS. There are no point estimates that are made available.

Table 34: Logit estimations predicting the characteristics of individuals who feel that education and career development should be focused on before marrying, 2005

	I	II
Female	0.187 (0.161)	-0.002 (0.155)
16-24	-0.127 (0.267)	-0.175 (0.277)
25-34	-0.478** (0.233)	-0.374 (0.233)
50 and older	0.118 (0.185)	-0.145 (0.232)
Widow/Widower	0.100 (0.249)	0.224 (0.268)
Divorced	-0.091 (0.421)	0.294 (0.343)
Never married	0.078 (0.222)	0.163 (0.212)
Coloured	0.374** (0.183)	0.249 (0.202)
Indian	1.401*** (0.248)	1.761*** (0.359)
White	0.644** (0.278)	1.283*** (0.415)
Primary school		-0.182 (0.288)
Gr 8-11		-0.266 (0.294)
Matric		-0.220 (0.338)
Tertiary education		0.703 (0.506)
Broadly unemployed		-0.052 (0.205)
Economically inactive		0.110 (0.250)
No income		0.619 (0.461)
R1 - R500		0.478 (0.433)
R501 - R1500		0.089 (0.349)
R1501 - R5000		0.608* (0.347)
Constant	0.408**(0.182)	0.278(0.450)
F Statistic	4.37	3.14
Prob > F	0.000	0.000
Observations	2,841	2,270

Source: Own calculations from the 2005 SASAS
Notes: The data are weighted
Standard errors in parenthesis
The sample includes individuals aged 16 and older
*** p<0.01, ** p<0.05, * p<0.1
The omitted categories are males, age 35-49, married, Black individuals, no schooling, employed individuals, total monthly household income of R5001 and more

Being an Indian or a White South African remains statistically significant and positive predictors of individuals who may be in support of the statement. The socioeconomic characteristics which are controlled for in model II have resulted in a change in the log odds of Indian (1.761) and White (1.283) South Africans from model I. This indicates that relative to the remainder of the demographic characteristics and the socioeconomic characteristics which are being controlled for, race and in particular being an Indian or a White South African are strong predictors of an individual who may agree with the statement. In fact, besides having a household income of between R1501 and R5000 none of the other socioeconomic characteristics which are controlled for in model II are significant predictors. This means that being an Indian or a White South African are the only demographic (statistically significant)

predictors of an individual who is more likely to feel that education and employment should be focused on before marrying.

Interestingly, the results in model II show that having more education is not significantly associated with the preference of delaying marriage for a career and education. However, South Africans who have a tertiary education have higher log odds of prioritising an education and a career over getting married (0.703) compared to individuals with no education. In summary, the analysis in this section has shown that Indian (1.761) and White (1.283) South Africans are strongly associated with preferring to become educated and establishing a career before getting married. These findings are similar to the results that are presented in Figure 24 where 91.84% (the highest percentage) of Indian South Africans support the idea of postponing marriage in favour of an education and career. Interestingly, compared to Coloured South Africans (0.249), White South Africans have significantly higher odds of prioritising an education and employment before marriage (1.283) (Table 34) while the analysis of South Africans' opinions by race (Figure 24) shows that a larger share of Coloured individuals agree with the statement (87.17%) compared to White individuals (83.10%).

7.5.3 Logit estimations predicting the characteristics of South Africans who view ilobolo as an impediment to marriage in contemporary South Africa

This section examines opinions on the impact of *ilobolo* on marriage and identifies the characteristics of individuals who agree that the payment of *ilobolo* is the main reason why many people do not get married these days. There are four regression models that are presented in Table 35. The estimates in models I and II are representative of all South Africans while the estimates in models III and IV are representative of Black South Africans only. Among both samples, the first set of regression estimates (models I and III) controls for demographic characteristics (gender, age, marital status and race) while the second set of estimates (models II and IV) controls for socioeconomic characteristics (highest educational level, employment status and total monthly household income).

The first set of regression estimations predict the characteristics of all South Africans who may feel that *ilobolo* is a barrier to marriage. Model I control for a set of demographic characteristics

which include gender, age, race and marital status. The analysis shows that race is a significant correlate where Coloured (-1.379) and White (-1.459) South Africans are significantly less likely to feel that *ilobolo* is an impediment to marriage compared to Black individuals. This finding is not surprising as these groups of South Africans do not practice the traditional marriage custom. The analysis of marital status shows that never-married individuals are more likely to agree that *ilobolo* is the reason for people not marrying compared to married individuals however, this finding is not statistically significant. Similarly, the different age categories and being female are not significant predictors of the characteristics of individuals who may feel that *ilobolo* is a barrier to marriage in contemporary South Africa.

The introduction of socioeconomic controls in model II has reduced the log odds of Coloured (-1.220) and White (-0.843) women who are significantly less likely to agree with the statement however, once again, this finding is expected. Widowed South Africans are found to be significantly less likely to feel that *ilobolo* is the reason for people not marrying compared to married individuals. Interestingly, the analysis of employment status reveals that unemployed (-0.466) and economically inactive (-0.497) individuals are significantly less likely to feel that the cost of *ilobolo* makes marriage unattainable compared to employed individuals. This finding is surprising as unemployed and economically inactive individuals are expected to experience difficulty in paying the *ilobolo* cost compared to employed individuals. This implies that being employed is positively associated with the perception that *ilobolo* payment is a barrier to marriage. Lastly, the results show that South Africans who live in households with a lower income are significantly more likely to feel that *ilobolo* impedes marriage compared to individuals who live in households with a monthly income of R5001 and higher which indicates that living in low income households is associated with viewing *ilobolo* as a barrier to marriage.

Models III and IV predict the characteristics of Black individuals who are more likely to view *ilobolo* payment as the reason for low levels of marriage in South Africa. Model III reveals that there are no demographic predictors among Black individuals who view *ilobolo* as a barrier to marriage. The inclusion of the socioeconomic controls in model IV has revealed a statistically significant and negative association between being a widow and feeling that *ilobolo* restrains marriage in South Africa (-0.635). The analysis of employment status shows that Black

individuals who are unemployed (-0.521) and economically inactive (-0.576) are significantly less likely to view *ilobolo* negatively in relation to marriage compared to Black individuals who are employed. The results in model IV identifies household income as a significant correlate of Black individuals who feel that *ilobolo* is negatively related to marriage. The findings show that Black individuals who live in low-income households are significantly more likely to view *ilobolo* as a barrier to marriage.

Table 35: Logit estimations predicting the characteristics of individuals who feel that the 'payment of *ilobolo* is the main reason why many people do not get married these days', 2005

	All South Africans		Black South Africans	
	I	II	III	IV
Female	0.094 (0.166)	0.129 (0.154)	0.126 (0.188)	0.184 (0.172)
16-24	-0.034 (0.260)	-0.274 (0.235)	-0.037 (0.279)	-0.234 (0.253)
35-49	-0.232 (0.230)	-0.353 (0.230)	-0.201 (0.256)	-0.376 (0.258)
50 and older	-0.154 (0.243)	-0.150 (0.283)	-0.147 (0.277)	-0.140 (0.328)
Widow	-0.226 (0.252)	-0.487* (0.286)	-0.305 (0.300)	-0.635* (0.337)
Divorced	0.155 (0.307)	0.170 (0.371)	0.242 (0.394)	0.137 (0.481)
Never married	0.316 (0.201)	0.288 (0.202)	0.351 (0.220)	0.327 (0.224)
Coloured	-1.379*** (0.184)	-1.220*** (0.212)	--	--
Indian	-0.064 (0.199)	0.300 (0.281)	--	--
White	-1.459*** (0.294)	-0.843** (0.366)	--	--
Primary school		0.455 (0.325)		0.508 (0.348)
Gr 8-11		0.165 (0.334)		0.111 (0.364)
Matric		0.197 (0.372)		0.111 (0.408)
Tertiary education		0.689 (0.462)		0.799 (0.532)
Broadly unemployed		-0.466** (0.207)		-0.521** (0.231)
Economically inactive		-0.497** (0.242)		-0.576** (0.287)
No income		0.819* (0.441)		0.976* (0.543)
R1 - R500		1.087*** (0.422)		1.160** (0.511)
R501 - R1500		0.416 (0.348)		0.515 (0.449)
R1501 - R5000		0.733** (0.320)		0.877** (0.429)
Constant	-0.387 (0.248)	-0.803 (0.490)	-0.431 (0.271)	-0.886 (0.586)
F Statistic	8.80	4.02	1.51	2.12
Prob > F	0.000	0.000	0.161	0.005
Observations	2,841	2,270	1,772	1,549

Source: Own calculations from the 2005 SASAS

Notes: The data are weighted

Standard errors in parenthesis

The sample includes individuals aged 16 and older

*** p<0.01, ** p<0.05, * p<0.1

The omitted categories are males, age 25-34, married, Black individuals (models III and IV), no schooling, employed individuals, personal and household total monthly income of R5001 and more

The analysis in this section has firstly demonstrated that there is no difference in the characteristics of Black South Africans and all South Africans who feel that *ilobolo* is the

reason for low marriage rates in the country. Secondly, the findings indicate that living in a low-income household and being employed are associated with negative views on the impact of *ilobolo* on marriage. The negative association between living in a low-income household and feeling that *ilobolo* restrains marriage is linked to the findings in Chapter Four which demonstrated that non-marital fertility is associated with low income households in the country. As a result, these findings provide further evidence indicating that in South Africa, women who live in low-income households are more likely to be never-married mothers compared to women who live in high-income households. Looking at South Africans' opinions on the relationship between *ilobolo* and marriage, the results in Table 33, which present opinions by gender, differ from the regression estimates that are presented in Table 35. The regression analysis shows that women are more likely to feel that *ilobolo* is an impediment to marriage (0.129, model II) compared to men however, the opinions that are presented in Table 33 shows that almost equal percentages of men (49.22%) and women (49.72%) agree with the statement. In contrast, the opinions by marital status (Table 33) are similar to the regression estimates that are presented in Table 35. Compared to married (40.35%), divorced (45.51%) and widowed (35.67%) South Africans, those who are never married are more likely to agree that *ilobolo* is a barrier to marriage (55.76%). This is also noted in regression model II where never married South Africans have the highest odds of agreeing with the statement (0.288) compared to married South Africans. Widowed South Africans have the lowest and negative odds of agreeing that *ilobolo* is an impediment to marriage (-0.487) compared to married South Africans, a finding which is also noted in the opinions that are presented in Table 33.

7.5.4 Logit estimations predicting the characteristics of South Africans who feel that childbearing should take place within a marriage

The last set of regression estimates identifies the characteristics of individuals who feel that marriage should precede childbearing[201] (Table 36). Model I controls for a set of demographic characteristics which include age, gender, marital status and race while the socioeconomic characteristics that are controlled for in model II include the highest level of education, employment status and total monthly household income. The estimates in model I reveal that females have slightly higher odds of believing that childbearing should take place after marriage (0.120) compared to men. Interestingly, individuals aged 25-34 are significantly less

[201] The statement that is analysed is: *A person should be married before having a child.*

likely to have a moral issue with non-marital fertility (-0.573) compared to those aged 35-49. Additionally, individuals aged 16-24 (-0.359) and those aged 50 and older (-0.117) also have lower odds however, these estimates are statistically non-significant. The analysis of marital status shows that White South Africans are significantly more likely to feel that childbearing should happened within a marriage (0.705) compared to Black South Africans. Overall, the estimates in model I reveal that marital status and gender do not influence South Africans' opinions on non-marital childbearing. In contrast, race and age are identified as significant correlates of the characteristics of South Africans who feel that childbearing should take place within a marriage.

Interestingly, the significance of several demographic variables changes when controlling for socioeconomic status (Table 36). The estimates in model II indicate that in addition to individuals aged 25-34 (-0.522), younger individuals aged 16-24 (-0.564) are also significantly less likely to agree that childbearing should take place within a marriage (compared to those aged 35-49) after controlling for educational level, employment status and household income. The analysis of marital status and race reveals that widows (0.609) and White (0.874) individuals are significantly more likely to have positive sentiments about childbearing within a marriage compared to married and Black individuals, respectively.

As expected, employment status is identified as a positive correlate where unemployed (0.421) and economically inactive (0.427) South Africans view non-marital childbearing negatively compared to those who are employed. This finding is possibly associated with the high cost of childrearing. The remainder of the socioeconomic variables, which are controlled for in model II are non-significant predictors of the characteristics of individuals who feel that childbearing should happened within a marriage. With regards to the highest educational level, it is worth noting that individuals with primary schooling (0.068), matric (0.053) and some form of tertiary education (0.625) have slightly higher odds of agreeing that childbearing should happen within a marriage compared to individuals with no schooling.

Table 36: Logit estimations predicting the characteristics of individuals who feel that childbearing should take place within a marriage, 2005

	I	II
Female	0.120 (0.159)	-0.178 (0.157)
16-24	-0.359 (0.247)	-0.564** (0.271)
25-34	-0.573*** (0.221)	-0.522** (0.225)
50 and older	-0.117 (0.182)	-0.296 (0.238)
Widow/Widower	0.318 (0.241)	0.609** (0.257)
Divorced	0.175 (0.299)	0.456 (0.332)
Never married	-0.026 (0.208)	0.196 (0.213)
Coloured	0.214 (0.171)	0.166 (0.199)
Indian	0.112 (0.224)	-0.124 (0.302)
White	0.705*** (0.253)	0.874** (0.370)
Primary school		0.068 (0.309)
Gr 8-11		-0.027 (0.316)
Matric		0.053 (0.362)
Tertiary education		0.625 (0.507)
Broadly unemployed		0.421** (0.206)
Economically inactive		0.427* (0.256)
No income		0.362 (0.458)
R1 - R500		0.051 (0.462)
R501 - R1500		-0.206 (0.331)
R1501 - R5000		-0.116 (0.317)
Constant	0.558*** (0.182)	0.436 (0.468)
F Statistic	2.52	1.76
Prob > F	0.005	0.02
Observations	2,841	2,270

Source: Own calculations from the 2005 SASAS

Notes: The data are weighted

Standard errors in parenthesis

The sample includes individuals aged 16 and older

*** p<0.01, ** p<0.05, * p<0.1

The omitted categories are males, age 35-49, married, Black individuals, no schooling, employed individuals, personal and household total monthly income of R5001 and more

In conclusion, the results in Table 36 indicate that the characteristics of individuals who view non-marital fertility negatively are influenced by age, marital status, race and employment status. In particular, the analysis in this section has demonstrated that being unemployed (or economically inactive) and being a White South African is negatively associated with the idea of non-marital childbearing. Additionally, in comparison to older South Africans, younger South Africans are more open to the idea of having children outside of a marriage. Finding that White South Africans are significantly more likely to agree that childbearing should take place within a marriage (0.874) is in line with the opinions that are presented in Figure 27 where the highest percentage of South Africans who view non-marital fertility negatively, are White (86.50%). Similarly, Indian South Africans are least likely to agree that childbearing should

take place within a marriage (67.37%). This finding is mirrored in the regression analysis where Indian South Africans have the lowest and negative odds of feeling that childbearing should take place after marriage (-0.124).

7.6 Concluding remarks

The main focus of this chapter was to highlight South Africans' attitudes towards issues related to non-marital fertility. In general, South Africans' share negative sentiments about premarital sexual intercourse however, the analysis has demonstrated that these views are changing in relation to the increasing levels of non-marital fertility in the country. The views of female South Africans mirror that of all South Africans as the analysis showed that over time, an increasing number of females have indicated that there is nothing wrong with being sexually active outside of a marriage. Interestingly, although a larger share of males (compared to females) are in support of the idea of premarital sexual relations, the percentage of these men have not changed over the analysis period. Overall, the analysis of South Africans' views on premarital sexual interactions have shown that in the context of an increasing acceptance of premarital sexual relations, the larger share of South Africans continues to maintain conservative views of premarital sex.

These conservative views extend to non-marital fertility as the majority of South Africans think that childbearing should take place within a marriage and thus non-marital fertility is perceived negatively. This finding is interesting as it underscores a mismatch between people's opinions on having a child outside of a marriage and the noted increase in non-marital fertility in the country (Chapter Five). Further analysis has identified that younger people are more likely to be in support of having a child outside of a marriage while White South Africans and those who are unemployed or economically inactive are less likely to view non-marital fertility positively.

Linked to these negative sentiments of premarital sexual intercourse and non-marital fertility is the view that couples should not cohabit before marriage. South Africans' opinions on cohabitation seem to be split as almost half of the sample agree with the idea of cohabiting

before marriage while the other half of the sample disagree with this notion. Furthermore, gendered differences in the opinions on cohabiting are noted as females are found to be more likely to frown at the thought of cohabiting while males on the other hand, are more accepting on this living arrangement. In contrast to these negative views on premarital sexual intercourse, non-marital fertility and cohabitation, South Africans' believe that single parents are just as good as two parents in raising children.

Many South Africans also believe that education and career development should be prioritised over marriage. This is even the case for women specifically as the analysis showed that a large majority of South Africans believe that women should be free to remain unmarried and pursue interesting jobs. Interestingly, the multivariate analysis revealed that Indian and White South Africans are more likely to share this view on education, career development and marriage while having an education or being employed are not significant characteristics of individuals who may feel this way. In summary, the analysis highlights a dichotomy in opinions where South Africans maintain conservative views regarding premarital sexual intercourse, non-marital fertility and cohabitation while delaying marriage in favour of an education and career is viewed in a positive light.

Interestingly and in contrast to the current South African literature (Amoateng and Heaton, 2015; Casale and Posel, 2010; Gustafsson and Worku, 2006; Kalule-Sabiti et al., 2007; Posel and Rudwick, 2011), Black South Africans do not believe that *ilobolo* is instrumental in the country's declining marriage rates. The analysis which was also disaggregated by gender and marital status found that Black South Africans disagree with the notion that *ilobolo* is a barrier to marriage in the country. These findings indicate that the cultural meaning that is associated with the traditional practice of *ilobolo* remains in contemporary South Africa. Further analysis which predicted the characteristics of individuals[202] who may feel that *ilobolo* is an impediment to marriage revealed that these individuals are more likely associated with low-income households and are employed.

[202] The regression models which were estimated for all South Africans and Black South Africans only, revealed no differences in the results.

The next chapter presents the life histories of four NMOMs. The chapter details the dynamics surrounding non-marital fertility in contemporary South Africa by discussing the various life trajectories experienced by these women. This qualitative analysis serves to enrich the understanding of non-marital fertility in South Africa and provide a context to the quantitative findings that are presented earlier in the thesis. The chapter ends with a discussion on whether the narratives of the NMOMs largely complement or are in contrast with the empirical findings of this thesis.

Chapter Eight: Exploring the life histories of four never-married older mothers

8.1 Introduction

Key to gaining a holistic understanding of the various dynamics that surround non-marital fertility and in particular, NMOMs in South Africa is to position the analysis within the micro-context by exploring the lived realities of these women at a grassroots level. Not only does research of this nature contribute to the understanding of the different experiences of non-marital fertility (i.e. that NMOMs are not a homogenous group), it also provides a knowledge base from which to interpret the larger extent of non-marital fertility as demonstrated through the analysis of large-scale national surveys (as presented in Chapters Four, Five and Six).

A social constructivist theoretical lens is adopted to understand the life histories of these NMOMs as the perspective is steeped in the understanding that social realities are fluid in nature and are based on past experiences and perceptions of events (Spillman, 2002). This theoretical perspective allows for the differences in experiences to be identified even among research participants who seem to have homogenous characteristics. In her work which focuses on culture and cultural sociology, Spillman (2002) cautions against using the term 'African' to represent all Black people as it masks cultural intricacies which differ among different Black ethnic groups. This suggests that when race is no longer used as a proxy for culture, the analysis will begin to show ethnic differences which have been influenced by law, history and traditional cultural practices.

To avoid the conflation of race and culture, Spillman (2002) mentions that culture needs to be understood as being fluid and dynamic in nature and is viewed as a tool that is used to generate meaning in various contexts, specifically related to traditional practises. Understanding that culture is not static but is rather continuously evolving allows for the identification of differences in culture based on people's beliefs and experiences (Spillman, 2002; Madhavan et al., 2013). Furthermore, acknowledging that culture is a tool that is used to make-meaning assimilates with the social constructivist theoretical perspective which is adopted in this chapter

(Spillman, 2002). The conflation of race and culture will not be a problem that is experienced in this thesis as three out of the four research participants are of Zulu ethnicity. In this regard, any differences that are noted between the Xhosa and the Zulu research participants will be noted.

To this end, this chapter paints a picture of the lived realities of NMOMs by exploring details about the events and decisions which have shaped them into being NMOMs. The chapter begins with a description of the research sample where an outline of their demographic and socioeconomic characteristics is provided. The chapter then explores the narratives of these NMOMs which are thematically analysed according to the events which have led them to becoming never-married mothers and subsequently, NMOMs, their views on having children outside of a marriage and how they manage with the everyday challenges of being a never-married mother and NMOM. The chapter ends with a discussion of how the qualitative findings either complement or contrast with the empirical findings that are presented in Chapters Four (characteristics), Five (trend analysis), Six (determinants) and Seven (SASAS).

8.2 Description of the sample

This section provides a description of the key information for each research participant. The research participants have been assigned a pseudonym to protect their privacy and any information like the names of schools, landmarks or cities have been changed. Only research participants who reside in KwaZulu-Natal were selected as KwaZulu-Natal is found to have the lowest and fastest declining marriage rates compared to other provinces and the country as a whole (Channon et al., 2016; Palamuleni, 2010). Furthermore, Sennott and colleagues (2016) have reported an increase in the percentage of non-marital fertility in a demographic surveillance site in KwaZulu-Natal between 1993 and 2012. The findings on the characteristics of NMOMs (Chapter Four) were broadly used to select the research participants and as a result, only Black mothers of a lower socioeconomic status were selected for inclusion in the study.

A summary of the key characteristics of the research participants are provided in Table 37. The first research participant, Sihle, is a domestic worker in a high-income household in the north

of Durban. She was born in Port Shepstone, KwaZulu-Natal and moved to Durban when her mother had passed away. Upon the loss of her mother, Sihle became responsible for taking care of her father which included the responsibility of household chores like cleaning and cooking. With regards to schooling, Sihle completed up to grade 11 at a high school in Port Shepstone. She failed her final year school exams and did not attempt to rewrite the exam as she found it very difficult. Sihle, who's family was involved in *ilobolo* negotiations on her behalf considers herself to have never married as her partner has lost his job and can no longer afford to pay towards her family's *ilobolo* request. Nevertheless, Sihle and her partner remain committed to each other and have 5 children together. Three of Sihle's children were born before she turned 30 years of age while two of her children were born after the age of 30. She does not cohabitate with her partner or live with any adult male household members as a result, Sihle is a female household head in a lone parent household[203]. Lastly, Sihle is a Black woman who is 43 years old and is of Zulu ethnicity.

The second research participant, Anna, was born in the Eastern Cape and is also a Black woman but of Xhosa ethnicity. She is 46 years old and works as a domestic worker in a high-income household in a city in the north of Durban. Anna's formal education ended in grade four. Her father had passed away when she was young, so her uncle assumed the responsibility of educating her. Unfortunately, her extended family could no longer afford to pay her school fees, so Anna was taken out of school and taught how to tend to the garden and household. As an adult, Anna taught herself how to read and write in English by reading the newspaper and challenging herself to have conversations with others in English. Anna, who remains committed to her partner, has never been married and has never had *ilobolo* paid on her behalf. She has two children from a previous partner who was killed as a result of taxi violence (his family owns taxis) and five children with her current partner. Anna who does not cohabitate with her partner or reside with an adult male household member, is a female household head of a lone parent household. Of all seven of her children, one was born while she was younger than the age of 30 while the remaining six were born after she turned age 30. In terms of being employed and satisfying domestic roles, Anna has her hands full as she has two sets of twins; one set is 8 years old while the other set is 6 months old.

[203] Lone parent households consist of a single person living with only their children and no other household members (Hall and Mokomane, 2018).

Table 37: Summary of the key characteristics of the research participants

	Participant 1	Participant 2	Participant 3	Participant 4
	Sihle	**Anna**	**Mary**	**Bontle**
Age	43	46	40	45
Place of birth	Port Shepstone, KwaZulu-Natal	Eastern Cape	Ulundi, KwaZulu-Natal	Zululand, KwaZulu-Natal
Race	Black	Black	Black	Black
Ethnicity	Zulu	Xhosa	Zulu	Zulu
Educational level	Failed matric	Standard 4	Grade 11	Second year at university
Reason for not completing school	Failed, did not rewrite	Financial constraints	Financial constraints	Not applicable
Employment status	Employed	Employed	Employed	Employed
Employment sector	Private household – Domestic worker	Private household – Domestic worker	Service – old age home for the sick and elderly	Education - Higher education
Marital status	Never married	Never married	Never married	Never married
Ever involved in *ilobolo* negotiations	Yes	No	No	Yes
Cohabitating	No	No	No	No
Female household head	Yes	Yes	Yes	Yes
Number of adult males in the household	0	0	0	1 - nephew in university
Type of household	Lone parent household	Lone parent household	Lone parent household	Extended household
Number of fathers	1	1	2	3
Number of children	5	7	3	3
Number of births before the age of 30	3	1	0	2
Number of births after the age of 30	2	6	3	1

Mary, who is the third research participant, was born in Ulundi in KwaZulu-Natal. She is a Black woman of Zulu ethnicity who is 40 years old. Mary's highest educational level is grade 11 as her family could not afford to pay school fees for her final year. She remained at home under the care of her parents until she fell pregnant for the first time. After falling pregnant and being abandoned by the father of the child, Mary was forced to seek employment as she was now responsible for taking care of her child. She currently works as a caregiver at an old age and frail care home where she has received training on how to care for the sick and the elderly. Mary has three children from two different men and her first two children have the same father.

She remains in contact with the father of her last child however they are no longer in a relationship and he (or the father of the first two children) does not contribute financially to the child. Mary, who has had all of her children after the age of 30 is not cohabitating with a partner, does not live with an adult male household member and is therefore, a female household head in a lone parent household. Lastly, Mary has not had any *ilobolo* payments made on her behalf and remains unmarried.

Bontle, the last research participant was born in Zululand, KwaZulu-Natal. She is 45 years old and is a Black woman of Zulu ethnicity. Bontle had a very different schooling career compared to the other research participants. She was awarded a bursary to a boarding (high) school for performing well in primary school and was subsequently awarded a bursary to study at university. She completed the second year of a degree but failed the third year three times before having to leave university and find employment. Bonlte currently works at a higher learning institution as an academic administrator. She has three children from three different men and is currently in a relationship with the father of her youngest child. Bontle had her first two children before she turned 30 years of age while the last child was born after the age of 30. Her eldest child is a pharmacist who has established her own household and her second child is away at boarding school. The last child lives at home with Bontle and her nephew making Bonlte the household head of an extended household[204]. She does not cohabitate with her current partner but remains open to the idea of cohabitation. Bontle, who has never been married has had *ilobolo* payments made on her behalf however, she ended the relationship with her prospective groom as he was an unfaithful partner.

8.2.1 Comparing the characteristics of the research participants with the characteristics of never-married older mothers that were identified using data from the GHS and the NIDS

For the most part, the characteristics of NMOMs that were identified in Chapter Four are similar to the characteristics of the research participants. For example, the analysis in Chapter Four showed that NMOMs are more likely to be employed (compared to all mothers aged 15-49) and to work in private households (compared to all mothers aged 15-49, 30-49 and never

[204] In the case of Bontle, an extended household consists of a single parent living with her child and a family member (Hall and Mokomane, 2018).

married younger mothers), as a domestic worker. Similarly, two of the research participants are domestic workers. The findings from the NIDS data showed that NMOMs are more likely to be household heads or live in female-headed households and likewise, all of the research participants are household heads. The analysis of the highest education level showed that relative to other mothers, NMOMs are least likely to have a tertiary education and are more likely to have some secondary schooling. Comparably, none of the research participants have any tertiary education while three out of the four (research participants) have some secondary schooling.

The household characteristics of NMOMs are also found to be similar to those of the research participants. For example, the research participants do not live with any pensioners (0.09)[205] or with any other employed members (except for themselves) (1.11). Additionally, compared to all mothers, NMOMs are more likely to live with their biological children and similarly, all of the research participants live in the same household as their children. In this regard, Bontle explained that she will not send her son to boarding school because she cannot reside in the household without him. In a similar manner, Sihle shared that she enjoys living with all five of her children as she gets to spend time with them when they share meals and shop. She went on to state that she is very glad that she gets to experience all of their development milestones.

The NIDS findings differ from the household characteristics of the research participants in relation to the average number of working-age individuals there are in the household. With regards to the research participants, they are the only household member of working age as they live with their children and no other household members[206]. In comparison, the NIDS findings suggest that NMOMs live in households with an average of 2 household members of working age. Overall, this section has shown that the empirical findings which identified the characteristics of NMOMs are reasonably similar to the demographic and socioeconomic characteristics of the research participants.

[205] The estimates that are in parenthesis are the estimates of each household characteristic of NMOMs that are presented in Chapter Four.

[206] Except for Bontle, who lives with her nephew and her child.

8.3 Exploring the lived histories of four never-married older mothers in Durban, South Africa

8.3.1 Becoming a never-married mother and never-married older mother

A key perspective that emerged in all four narratives is that premarital sex is morally wrong, and that childbearing should take place within a marriage. Coupled with these sentiments is the view that *ilobolo* is an important cultural practice which needs to be followed. In doing so, emphasis should be placed on the meaning and value of the *ilobolo* custom by requesting a nominal amount of *ilobolo* cost to be paid in exchange for a bride. Given these sentimentalities and reasoning, Bontle, Anna and Mary became never-married mothers as they engaged in unprotected sex and proceeded to become NMOMs due to their lack of contraceptive use. In the case of Anna, the contraception method that she practiced had failed. When probed, Mary, Anna and Bontle shared that they were aware of the different contraceptive methods that were available when they conceived for the first time. Furthermore, they also understood that they could fall pregnant if they did not practice any form of contraception. For example, Mary relayed a conversation that she had with her mother when she was much younger and then reflects on her first pregnancy:

> She [Mary's mother] said that you [Mary] must not do sex, you must use the condom. Sometimes you get the child, but you are still a child. Who is going to support your child? And she said, you must never trust any man…. I know about it [contraception] but I don't know what happened. Everything happened fast [commenting on her first pregnancy].

Bontle, Sihle and Anna share similar discussions which they had with teachers/nurses/nuns at school or with older female family members. This narrative indicates that there is a disconnect between being knowledgeable about contraception and actually being able to practice safe sexual behaviour. or that for some reason, these women had a low perception of their risk of falling pregnant. This is the case for Bontle as she explains how she fell pregnant with her first and second child after being aware of the possibility of conceiving while having unprotected sex:

> [About her first child] I didn't want to have a baby, but nothing made me think about the teachings about contraception. In that moment, it just didn't strike me. [About her second child] That's another one where I don't know why I didn't have a condom that day. Then I fell pregnant. It wasn't the first time I was with him. We had always been using condoms and then for some reason, we just didn't on that day, and I fell pregnant.

Additionally, Bontle mentions that men do not suggest the use of contraception during sexual intercourse and that "if a woman doesn't bring it up, then men just will not". Anna alludes to being persuaded into not using contraception as she shared that "you know, sometimes you say you have to use it [a condom] but the boy can make blind your eyes". Further discussions on contraception use has revealed that Anna, Bontle and Mary possibly conceived during their sexual debut. The lack of family planning seems to be a common feature between these three research participants as they emphasised that they did not want a child at that point in their lives (when they had their first child) and that none of their children were planned. In fact, none of their births were planned and the rest of their pregnancies were a result of failed attempts at using contraceptives. In Anna's case, she feels that she was not supposed to have her last four children (two sets of twins) as she was using an injectable contraceptive at that time. She mentions that she had been using this method of contraception for eight years prior to having her first set of twins and had not made an error with the dates of when her next injectable contraceptive was due. This left her confused as to why she fell pregnant to which the doctor could not provide any answers. Anna describes how she felt when she had her last set of twins:

> It is so hard, I am frightened. So many children I have, now to bring another two set, I am mad. Then I was frightened to talk things like that to the people… [commenting on how people would view her] What is wrong with this girl, she is mad. What are you going to do, so many kids? Even some people, they are asking me how many kids you have, I am frightened to tell them I have two sets of twins and then I have this three. I was not supposed to get these two set twins. I was only supposed to have this three.

Besides conveying embarrassment at having seven children, Anna's comments also provide insights on how she was not mentally prepared to have this many children and of course that the two sets of twins were not in the least bit planned or wanted. Similarly, reflecting on her last pregnancy, Bontle states that she did not plan to have another child and that the condom that they were using during sexual intercourse had broken at some point.

Sihle's journey to becoming a never-married mother and NMOM is very different from that of Mary, Bontle and Anna. She explains that her children were planned and that she was sexually active for three years before she stopped using contraception so that she could fall pregnant. In fact, Sihle's ideal family size has been met as she highlights that "…I like five (children). Like before, the time I am young, I like five children. Now it's okay, no more [children] now". All five of her children are from the same partner who remains committed to their relationship. Sihle's partner had begun *ilobolo* negotiations after the birth of the first child but could not continue with the payment after he lost his job, he remains unemployed.

There are three salient points to note from Sihle's life history. The first is that she and her partner value and respect the cultural practice of *ilobolo* and have decided to marry and live together only after her partner has paid her *ilobolo* value in full. Secondly, Sihle believes that non-marital fertility is wrong and shared that she will advise her sons to marry before having children with a woman and lastly, she actively made the decision to be a never-married mother as she had practiced some form of family planning method. These three points clearly suggest that for Sihle and her partner, the need to have children (and start a family) was stronger and outweighed their negative views of non-marital fertility and the desire to marry and practice *ilobolo* traditions.

8.3.2 Views on having children outside of a marriage

For Anna, Mary and Bontle, their first births were associated with a sense of shame and embarrassment as these pregnancies were unplanned and, in a sense, unwanted. Besides not being emotionally and financially ready for children, these women were not in a marriage nor were they engaged in *ilobolo* negotiations with their partner (and family). This contributed to their feelings of embarrassment and went against their belief that childbearing should take place

within a marriage. Additionally, these participants had to cope with being new mothers with little or no support from their partners where for example in Mary's case, her partner had disappeared once he found out that she was pregnant.

Contributing to this sense of regret and embarrassment is the feeling that there was nothing that these women could do about their pregnancies. Anna and Mary shared that when their medical tests confirmed that they were pregnant, they were offered the option of aborting the pregnancy. Interestingly, they turned down the option because they felt that becoming pregnant was out of their control and there was nothing that they could do about it. For example, Anna indicated that she was happy about having her first child but when probed about her happiness even though the child was not planned she stated that, "Yes I didn't plan it but now, what are you going to do. I have to take it". Anna continues to feel helpless and as if she lacks the agency to change her fate as she states that when she was provided with the option of aborting her last set of twins, her response was "what can I do, I can't do anything now. I have to keep it, it is mine". Sihle maintains that her children were planned however she seems unsettled with having to have her children outside of a marriage. And similar to Anna, when asked about how she felt about having her first child outside of a marriage, she responds, "what can I do, nothing now".

Bontle's journey into motherhood was somewhat different. She realised that she was unable to care for a child emotionally and financially as she had just begun university and therefore, sought assistance from a pregnancy crisis centre which was available at the university that she was attending. The service providers at the crisis centre encouraged her to have the baby and once it was born, they would arrange for it to be fostered while she completed her university degree. The baby would be returned to her once she had completed her degree. Having the baby fostered and eventually returned was not a viable option for Bontle. As a result, she decided to ask her aunt for assistance in caring for the child while she was away at university. Even though this arrangement worked out well, Bontle regrets having her children. When asked if she would have preferred not to have any children she stated that, "when I look at my finances and where I will be if I didn't have them [her children]– If I had only one [then] maybe I would be somewhere in life".

The regret and sense of shame which Bontle felt when she had her first baby outside of a marriage continued when she became pregnant for the second time. Reflecting on her second pregnancy, Bontle aptly describes how she felt when she found out that she was pregnant for the second time:

> I didn't want the baby, not because I couldn't afford to raise the baby but because I was ashamed. Second baby at home, not married.

Bontle acted on these feelings and decided that it was best if she terminated the pregnancy. She relays her visit with a gynaecologist in a private hospital:

> I asked the doctor [for an abortion] when I fell pregnant with the second one, but the doctor managed to talk me out of it [an abortion]. Then I kept the baby. He sat with me for about an hour and by the time he was done, I was like, looking forward to having the baby.

Bontle goes on to share that she has lovely children and that she made the right decision by not terminating her second pregnancy. Through her narrative, she describes how having three children outside of a marriage has defined her life and lifestyle. She seems to harbour some regret at the way her life has unfolded as a result of having children and mildly indicates that she should have made better choices and decisions regarding children and marriage when she was younger. In contrast, Sihle cannot fathom the idea of not having any of her children to the extent that she completely rejects the concept of an abortion. She continuously reaffirms her happiness in being a mother to five children and the different ways in which her children bring her happiness and satisfaction. Sihle expressed some fear and anxiety during the birth of her first child but these were related to her being a new mother and these feelings were temporary as her partner was and remains happy and supportive of her and the family.

8.3.3 Managing being a never-married mother and a never-married older mother

Being a never-married mother and eventually a NMOM means different things to the participants and defines them in different ways. The one commonality that is associated with having a child outside of a marriage is primarily being the sole caregiver and the responsible parent. Mary seems to have experienced the most difficulty associated with having children outside of a marriage. She describes how she conceived during sexual debut and contracted HIV as her partner did not disclose his HIV status to her. Mary has two children from her first partner and one child from the second partner; both men did not want babies and were not willing to take on any parental responsibility for them. She explains:

> My first children, the father left me. He didn't want to support the child. They leave me with the children that's why I decide to take care of them.

Mary was also not offered a lot of support from her family. She mentions that when she gave birth to her first child, her sister had visited and helped out for three days however, she was alone during the delivery of her baby. Mary continues to have a sexual relationship with the father of her last child who she describes as 'disappeared' when she told him that she was pregnant. He remains uninterested in the child, offers no financial or emotional support and does not take any interest in the child's wellbeing. The responsibilities that are associated with being a single parent has defined Mary as every decision thereafter was made in relation to providing for her child. She explains how she supported her first child before finding her current employment:

> The first one I was not [formally] working but I managed because I was receiving the child support grant and I was selling the vetkoek[207] [in the informal economy]. In the morning, I was doing [making] the vetkoek and take my child on the back and then go to see it. I was going to the beachfront and at the garage and I was sitting there [selling her product at the beach and at a petrol station].

[207] A vetkoek is a fried dough bread.

Bontle, having just had started a university degree faced different pressures associated with caring for her first child. She had to make the difficult decision of leaving her child in Zululand to be cared for by her aunt while she studied in Durban. The father of the child was also young and not in a position to be the child's primary caregiver while Bontle was studying. She explains how within the situation, she did her best to make sure that her child was being taken care of and was not in need of anything:

> I had a baby in April and then my aunty in Zululand took her and raised her so I would just go and visit her over the holidays. And he [the child's father] had a job at Shoprite and he would deposit money for them to buy her formula. And from my [university] bursary money I would buy clothes, you know, different sizes of clothes so that as she grows, she could use it. As a baby, you'd never say she has a parent who was unemployed because she was always taken care of and my aunt took very good care of her.

Bontle feels very proud and happy that she had managed to raise her child without having to explore the option of foster care while she studied at university. Bontle's daughter is a qualified pharmacist who lives alone and occasionally sends money home. This is something that Bontle is bitter about as she feels that she had made many sacrifices to raise her child and therefore, she expects more financial assistance from her daughter. The idea of expecting some form of repayment for raising their children is also mentioned by Mary and Sihle. They acknowledge that the cost of *ilobolo* is a deterrent to marriage however Mary and Sihle feel that *ilobolo* payment is owed to them in return for the difficulties that they had experienced and the sacrifices that they had made when their daughters were younger.

Anna and Sihle seem to have similar post-childbirth narratives. As mentioned, Sihle's first child was planned and wanted while in comparison, Anna's was not. However, they were both supported by their partners and families who played and continue to play an important role in child-rearing. Where possible, their partners assist financially and do their best to be actively involved in their children's lives. For example, Anna mentions that her partner pays for the children's school fees and contributes towards the monthly groceries. Sihle's partner who is

unemployed, spends time with the children during the weekends, helps out with homework and baths, and plays with and feeds the younger children. Sihle even happily shares that her partner cooks for the children and that he is a good cook. Together with the financial support from her partner, Anna works two jobs to ensure that her children are fed and educated while similarly, Sihle works three jobs.

These participants, who are in committed relationships have expressed their desire to marry and follow *ilobolo* practices. After the birth of their children, Anna and her partner have accepted that they can no longer marry because the larger portion of their money goes into providing for their children which makes it difficult for her partner to save towards *ilobolo* payment. Anna explains:

> He wants to [get married] but now, you know we do the wrong thing. We bring the kids first, that's why it's very hard. We have to look after the kids first. … Now that thing [taking care of the children] is holding us [restricting marriage], we can't do nothing.

Sihle remains optimistic about getting married as she shares that, when her partner was employed, he had purchased the cattle that was requested by her father. She goes on to state that once he finds employment again, he will save up to pay for the monetary *ilobolo* cost and they will marry shortly thereafter. Even though Mary and Bontle are not looking to marry soon, they feel that the high *ilobolo* cost is a barrier to marriage. Conversely, they maintain that they require *ilobolo* to be paid in exchange for their daughter's hand in marriage.

8.4 Linking the experiences of NMOMs with the empirical findings from the GHS, the NIDS and the SASAS

Thus far, the analysis in this chapter has demonstrated that NMOMs are not a homogenous group as the varying lived experiences of these women have provided them with a unique experience of being a NMOM. This section builds on this analysis by demonstrating how the

life histories of NMOMs adds context/detail to the empirical findings that are presented in Chapters Four, Five, Six and Seven. Attention will also be focused on where the narratives of these NMOMs contrast with the findings from the survey data. There are three main themes that are focused on in this section: opinions on the relationship between *ilobolo* and marriage, the concept of non-marital fertility while the last theme identifies the similarities and differences between the characteristics of the interviewed NMOMs (research participants) and the socioeconomic and demographic characteristics of NMOMs using survey data, as presented in Chapter Four.

8.4.1 Views on the impact of ilobolo on marriage in South Africa

South Africans in general share mixed views about the impact of *ilobolo* on marriage. The findings from the SASAS data reveals that 49.48% of Black respondents agree that the cost of *ilobolo* is the reason why people do not marry while 50.52% of Black respondents disagree with this notion. These mixed sentiments are somewhat shared by the research participants and the discussion of their views of *ilobolo* in relation to marriage provide insights into the complexities that surround *ilobolo*, marriage and never-married motherhood. All of the research participants believe that the cost of *ilobolo* is the main reason for them having children outside of a marriage and remaining unmarried. Anna shares that her children were not planned, and she did not intend on having children outside of a marriage however, she remains unmarried because her partner cannot afford to pay the *ilobolo* cost that was requested by her family. She maintains that she no longer has any hope of marrying her partner as his wage is barely enough to support their children and as a result, he cannot save up enough money to pay *ilobolo*.

Sihle shares similar sentiments as she explains that she had practiced family planning and decided to begin a family with her partner outside of a marriage as she knew that he will not be able to save up enough money to pay for *ilobolo*. Her partner, who had begun *ilobolo* negotiations with her family, can no longer afford to pay the *ilobolo* cost as he has lost his job and is having difficulty finding another job. Sihle's story draws attention to the challenges faced by Black men in the labour market and the impact that this has on their ability to pay *ilobolo* and get married. The economic difficulties that Sihle's partner is experiencing have been documented in the South African marriage literature. The authors detail that in a context

of growing male unemployment and poor job opportunities, *ilobolo* serves as a barrier to marriage for a large number of Black men and women (Amoateng and Richter, 2003; Kalule-Sabiti et al., 2007; Posel et al., 2011; Posel and Rudwick, 2011, 2013, 2014). In addition, Hunter (2016) states that a large majority of economically disadvantaged South Africans will remain unmarried.

Mary and Bontle share similar sentiments about the negative effect of the cost of *ilobolo* on marriage however, they maintain that *ilobolo* is an important cultural practice that needs to be followed. Bontle believes that *ilobolo* is being practiced incorrectly in contemporary South Africa as families have become focused on the monetary exchange instead of the cultural meaning behind the practice. She believes that the tradition of *ilobolo* needs to be continued and that emphasis should be placed on its cultural meaning while a nominal amount is asked from the prospective groom. Bontle, who has two daughters insists that *ilobolo* must be paid for her daughters' hand in marriage and that she will not consent to a wedding if *ilobolo* is not paid for them. However, she states that she will request a low *ilobolo* value from her future son-in-law and ensure that her daughters understand the importance of following the *ilobolo* traditions.

Interestingly, and in contrast to her earlier views, Bonlte indicated that *ilobolo* is owed to her in recognition of the sacrifices that she had made when raising her daughters. Bontle stresses that her eldest daughter is a pharmacist and because she is educated and has established a career, she will not let her marry unless *ilobolo* is paid for her. Mary also expressed similar feelings indicating that she currently faces many challenges as a single mother (her children are still young) and therefore, will insist on *ilobolo* being paid for her daughter when it is time for her to marry. These sentiments are at odds with the findings that are presented by James (2017) where a research participant in the study indicated that the request for a higher *ilobolo* value for an educated daughter is not part of the customary marriage tradition but rather an act of capitalism (James, 2017).

8.4.2 Views on non-marital fertility

All of the research participants felt strongly that non-marital fertility is wrong. Bontle went as far as saying that her life would be different (better) if she didn't have her children outside of a marriage. The research participants mentioned that, as young women, they were taught that having children outside of a marriage is wrong and that they should become sexually active and have children only once they are married. In their narratives, the research participants detailed that they would ensure that their children understand that non-marital fertility is wrong. And in turn, will advise them to focus on becoming educated and to establish a career before they think about marriage and children. Anna mentioned that when she is talking to her children about non-marital fertility, she will use her life as an example of how difficult things get when you have children outside of a marriage. Sihle, on the other hand, stated that she will teach her sons that they should first study and find employment so that they can get married and take care of their family. She stresses that they should not have children outside of a marriage, as their father has done. Overall, all of the research participants have indicated that they will be very upset if any of their children have a child outside of a marriage, irrespective of whether it is their daughter or their son.

These views on non-marital fertility align well with the overall views of South Africans. The findings from the SASAS data revealed that 71.72% of South Africans agree with the notion that childbearing should happen within a marriage. Additionally, the negative sentiments that were expressed by the research participants about premarital sexual intercourse also support and provide context to the trend analysis which identified that over the years, the larger share of South Africans' continue to believe that premarital sexual activity is wrong. Interestingly, the analysis by gender revealed a significant increase in the percentage of female respondents who feel that there is nothing wrong with becoming sexually active before marriage. These sentiments are not shared with the research participants who were interviewed.

Overall, South Africans' attitudes about having children outside of a marriage are in alignment with the fertility behaviours of South African women. The narratives shared by the research participants and the findings from the SASAS data underpin the view that non-marital fertility is wrong, and that sexual intercourse and childbearing should take place within a marriage. Given that there has been a significant increase in the levels of non-marital fertility in the

country, the vast majority of births continue to occur within a marriage. The findings showed that the increase in the percentage of women who are having children outside of a marriage is not driven, necessarily, by older mothers which is reflected in the strong opposition to the notion of non-marital fertility among the research participants.

The SASAS data was also used to predict the characteristics of South Africans who are likely to feel that childbearing should take place within a marriage. These findings revealed valuable insights as they showed that younger South Africans are less likely to agree that childbearing should happen within a marriage compared to older South Africans. This substantiates further the negative sentiments about non-marital fertility that were expressed by the research participants.

8.5 Concluding remarks

This chapter has drawn attention to the various challenges experienced by NMOMs. The shared narratives which detail the different life events which have led to these women becoming NMOMs suggest the never-married mothers are not a homogenous group. Even though they all have had their children outside of a marriage, these women maintain that non-marital fertility is wrong and that being an unmarried mother is challenging and requires a lot of sacrifices. These women have also provided insights into the complex relationship between *ilobolo* and marriage and the desire for the marriage practice to continue in an affordable way.

Overall, the qualitative findings that are presented in this chapter largely complement the empirical findings and provide a context from which to understand these findings. The mixed sentiments regarding *ilobolo* that were identified in the SASAS data were further explained in the narratives of the NMOMs. This offered insights into the importance of culture in understanding the relationship between *ilobolo* and marriage and the strong influence of the cost of *ilobolo* in determining whether a woman becomes a never-married mother and in particular, remains unmarried.

The events which have resulted in the research participants becoming never-married mothers and subsequently, NMOMs have also provided a context from which to understand South Africans' views on premarital sexual activity and childbearing. Although the research participants and South Africans in general, believe that premarital sexual activity and childbearing is wrong, the narratives described that in the context of economic difficulties (difficulties related to paying *ilobolo*), childbearing is valued over marriage. In summary, the analysis in this chapter has underscored the value of the qualitative data in providing a context-rich understanding of the empirical findings. Furthermore, the characteristics of NMOMs which were identified in Chapter Four are found to be fairly representative of the socioeconomic and demographic characteristics of the research participants. The next chapter focuses on describing how this thesis has contributed to the existing literature on non-marital fertility in South Africa.

Chapter Nine: Conclusion

The international literature has identified an increase in the percentage of adult women who are having children outside of a marriage in a number of different contexts. These increases in the levels of non-marital fertility have been associated with increased educational and employment opportunities for women which, in turn, have provided them with greater control over their fertility. Over time, changes in social norms regarding premarital sexual intercourse, marriage and childbearing, coupled with women's increased control over their fertility, has created a platform for non-marital births in various high-income and middle-to low-income country contexts. In addition to these factors, non-marital fertility within a high-income country context is also associated with the widespread access and effective use of modern contraception, delayed marriage and changing gendered roles. Against this backdrop, growing levels of non-marital fertility have been observed in countries like the United States, Canada and various European countries.

A key difference in the drivers of non-marital fertility in European countries (compared to the United States) is the effect of the economy on marriage and childbearing. The European fertility literature details how the economic crisis in the late 1980s[208] has resulted in delayed marriage as couples could not afford to pay for a wedding (Surkyn and Lesthaeghe, 2004). This delay in marriages had coincided with increasing levels of cohabitation and thus, an increase in births outside of a marriage (or within a cohabiting union). Secularisation is also identified as a driver of non-marital fertility in European countries. The adoption of Western ideals and the reduced influence of religious institutions in restricting different types of family structures have contributed to a change in attitudes and beliefs regarding marriage and childbearing (Klusener, 2015; Mack, 2017). In these countries, the value of marriage as an important social institution has, therefore, been eroding over time. Overall, the growth in the number of women who are having children outside of a marriage in high-income countries is largely associated with the upliftment and empowerment of women.

[208] In particular, the economic collapse of the Eastern Bloc. See Klusener (2015) for further details.

The drivers of non-marital fertility in middle- to low-income country contexts are similar to those that are identified in high-income countries. Important to the increase in non-marital fertility is woman's increased educational and employment opportunities which has provided them with greater control over their fertility. Specific to a number of middle- to low-income countries on the African continent is the rising age at first marriage as a determinant of non-marital fertility. The African fertility literature has identified older ages at first marriage and women's changing perceptions of marriage and childbearing as key drivers of non-marital fertility within a middle- to low-income country context. Contributing to these factors is the societal acceptance of non-marital fertility.

Similar societal changes have been noted in South Africa where research has focused on changing norms and beliefs which influence premarital sexual intercourse and non-marital fertility in the country. Having a child outside of a marriage is rarely stigmatised in South Africa as extended family networks provide childrearing care and support to unmarried mothers. Women in contemporary South Africa also have increased educational and employment opportunities and access to modern contraception. Changing attitudes to marriage is associated with marriage (in South Africa) being steeped in patriarchy (James, 2017; Moore, 2013; Moore and Govender, 2013; Naidoo, 2010). South African women are selecting to remain unmarried while continuing with having children in an attempt to avoid the challenges of living with a partner who is unwilling to acknowledge changing gendered roles. Women are also opting to remain unmarried to escape a marriage that is associated with physical abuse and alcoholism from a husband who inadequately provides emotional and financial support. Given these broader societal changes which are coherent with those identified in high-income and middle- to low-income countries, an increase in non-marital fertility is also expected within a South African context.

The South African literature has alluded to the notion that non-marital childbearing is not a new fertility behaviour in South Africa and in particular, is not associated with the upliftment and empowerment of women. Through its discriminatory policies, South Africa's past political dispensation had created the perfect environment for non-martial childbearing. Discriminatory policies like the migrant labour system had removed men from their households for long periods of time. Women were restricted from relocating to cities to live closer to/or with their

husbands. As a result, a large number of Black women became household heads as they were forced into the roles of sole decision maker and breadwinner, in the absence of their husbands. In addition to this adaptation of Black households, the semi-permanent absence of males (from their households) had eroded the value of marriage as children grew up without their fathers and women adapted to life without their husbands. The interaction between the apartheid population control policies, the need for women to have children, the migrant labour system and the restriction of the free movement of Black people had created the platform for Black women to have children outside of a marriage. Thus, compared to high-income countries, having a child outside of a marriage is not uncommon among Black people in South Africa and is associated with the political and sociocultural dispensation of the country instead of the development of women, in general.

At this point it is important to re-emphasise the need for a study on non-marital fertility within a South African context. It is well established in the literature that women in South Africa earn less than men (Casale, 2004; Casale and Posel, 2005). The growth in the availability of female labour has translated into a large number of females being employed in the informal economy. These females who are employed in low-paying jobs experience unstable working hours which negatively impact their earnings. The increase in female labour force participation has also resulted in a substantial number of unemployed females. These factors coupled with the lack of financial and emotional security and stability, that is traditionally provided in a marriage draws attention to the ‘triple burden’ faced by never-married mothers.

Never-married mothers are often the primary caregivers and household heads or live in female-headed households. In this regard, the literature has detailed how female-headed households are often poorer and are at a greater risk of poverty compared to male-headed households. Given that single parent households are often poor households, children living in these households have access to limited resources which are integral to their early development. Additionally, children within these households are exposed to the intergenerational risk of poverty as never-married motherhood is associated with economic difficulties and a low socioeconomic status.

The social and economic challenges (highlighted above) that are experienced by NMOMs (and never-married mothers) and children born to these mothers underpin the need to identify whether there has been an increase in never-married motherhood in the country and furthermore, to understand the dynamics that surround non-marital fertility within a South African context. The findings from this research are useful on a number of platforms. First, the findings offer insights into a cohort of women who should be considered by social policies as the economic difficulties that these mothers experience (which are different from those experienced by married mothers) represent a growing group of women who are marginalised in society. Second, never-married mothers (and NMOMs) are associated with female headship and therefore, contribute to the growth in female-headed households in the country. As a result, understanding the household composition and structure of never-married mothers (and NMOMs) provides insights into the access to household resources that are available to children born to these mothers. Thirdly, it would be interesting to see how South Africa compared to other contexts where increases in non-marital fertility have been explored/document. As a result, a study of this nature is required to explore in greater detail, the concept of non-marital fertility and in doing so, will provide valuable insights into the challenges faced by this group of mothers.

This thesis had set out to unpack and identify the key features of non-marital fertility in a post-apartheid South African context. The main aims were to identify whether there has been an increase in non-marital fertility in the country and in particular, among older mothers; to identify the characteristics of NMOMs and to determine whether the socioeconomic and demographic profiles of these mothers have changed over time. The thesis also set out to identify the determinants of non-marital fertility and to ascertain broadly, whether societal attitudes towards childbearing outside of a marriage and engaging in premarital sexual activity have been changing. Lastly, by exploring the life histories of NMOMs, the thesis aimed to draw attention to the cultural, financial and social challenges that are associated with never-married motherhood within a South African context.

To this end, this thesis employed a mixed methods approach to understanding the dynamics of non-marital fertility in South Africa. This is a novel approach as fertility behaviour is commonly explored using a qualitative research design. In this sense, the qualitative data

provided much needed context to understanding the empirical findings and has drawn attention to the challenges that are associated with never-married motherhood in the country. In addition, the use of the SASAS data has bolstered the value of the findings in this thesis as it has quantified South Africans beliefs and opinions on issues related to non-marital fertility. This served to bridge the gap between the findings from the GHS, the NIDS and the life histories of the NMOMs.

Furthermore, the SASAS data, in combination with the narratives shared by the research participants, drew attention to the important role of *ilobolo* in Black marriage and its effect on non-marital fertility. The nature of the GHS and the NIDS data makes it impossible to explore such a relationship in detail and therefore, underscores the value of a mixed methods approach to understanding fertility and marriage behaviours, issues that are often considered as 'sensitive' topics. In providing a comprehensive analysis of the South African survey data (or lack therefore), this thesis has drawn attention to the need for additional survey data that contains birth data and information on socioeconomic and demographic characteristics of the respondents or survey/panel data which are specifically focused on fertility and the family.

After establishing that births outside of a marriage is not a new fertility behaviour in South Africa, one of the key aims of this thesis was to identify whether there has been an increase in the levels of non-marital fertility and in particular, among older mothers. In addressing this aim, the analysis in Chapter Five presents two important sets of results. First and foremost, the results provide evidence of an increase in the levels of non-marital fertility in the country. The findings reveal that between 2002 and 2017, there has been an 18.43% (significant) increase in the percentage of never-married mothers aged 15-49. This is an important finding as it is the first piece of evidence which shows a change in non-marital fertility at a national level and begins to contribute empirical data to the study of fertility trends in South Africa. Presenting evidence of an increase in the levels of non-marital fertility in the country also begins to address a gap in the literature by unpacking the dynamics of non-marital fertility in South Africa. The second set of results demonstrate that this increase in non-marital fertility is not necessarily driven by older mothers (aged 30-49). In contrast to women aged 15-49, there has been a decrease in the number of older women who are having children outside of a marriage.

Although this change is not statistically significant it points to a possible fertility behaviour change among older women.

Another contribution of this thesis is that it has demonstrated that, within a South African context, non-martial fertility is associated with a low socioeconomic status. The results show that NMOMs and never-married mothers are more likely to be economically disadvantaged compared to other mothers. In particular, the characteristics of NMOMs, identified in Chapter Four, revealed that in 2017, never-married younger mothers (R2703.69) and NMOMs (R1873.91) belonged to households with a lower average per capita total monthly household income compared to all mothers aged 30-49 (R3428.76) and mothers aged 15-49 (2917.63). This indicates that never-married motherhood, in general, is associated with low household incomes. Further evidence provided in the trend analysis (Chapter Five) found that between 2008 and 2017, the larger share of NMOMs and never-married mothers continued to be of a low household income level. Equally as important, the regression analysis (Chapter Six) predicted that women who belong to low-income households are more likely to be NMOMs and never-married mothers compared to women living in high-income households. In providing further evidence, the results in Chapter Four showed that compared to all mothers, NMOMs are more likely to be household heads (64.22%) or to live in a female-headed household (89.52%). In summary, all of this evidence demonstrates that there is an economic component to never-married motherhood in South African, in the form of economic disadvantage.

The highest educational levels of NMOMs provides further substantiation to the claim that never-married older motherhood is associated with an economic disadvantage. The findings in Chapter Four has demonstrated that, relative to all mothers aged 15-49 and 30-49, NMOMs are more likely to have some secondary education, are less likely to have completed secondary schooling and are also less likely to have any form of tertiary education. Contributing to these findings is the trend analysis (in Chapter Five) which has shown no significant changes in the educational levels of NMOMs, except for a significant increase in the percentage of NMOMs who have a certificate or diploma. This is interesting as this increase in tertiary education has not corresponded with a significant increase in the employment status and/or the average

household income of NMOMs which further indicates the NMOMs are associated with a low socioeconomic status and are more likely to be economically disadvantaged.

These findings seem to correspond fairly closely with studies from the United States and various European countries which suggests that internationally, non-marital fertility is associated with economic disadvantage and never-married mothers are often of a lower socioeconomic status (cf: Jalovaara and Andersson, 2018; Klusener, 2015; Klusener and Goldstein, 2016; Mack, 2017; Mclanahan, 2004; South, 1999; Surkyn and Lesthaeghe, 2004). This finding is important within a South African context as it draws attention to a growing cohort of women who, because of their socioeconomic status, will be further marginalised. By identifying that there is an increase in non-marital fertility in South Africa and that it is associated with a low socioeconomic status, serves as substantiation for policymakers to consider never-married mothers in social policy that is aimed at supporting the family.

In order to address the research questions that aim to identify the key trends in non-marital fertility and the determinants of non-marital fertility in South Africa, the characteristics of NMOMs had to be identified first. The results in Chapter Four have revealed that the demographic characteristics of NMOMs are fairly different from that of other mothers. In particular, NMOMs are more likely to be household heads or to live in female-headed households. Another difference is that relative to other mothers, NMOMs are more likely to live in tribal authority areas while South African mothers, in general, are more likely to live in urban areas. This difference is noteworthy and suggests that the value of marriage, as an important social institution may have weakened in tribal authority areas, in particular. The socioeconomic characteristic indicates that relative to all mothers, NMOMs are less likely to be employed and live in a high-income household. As mentioned earlier, these factors are important to note as they confirm further, that never-married motherhood is associated with a low socioeconomic status.

Interesting and most noteworthy is that NMOMs and all mothers share a similar educational profile. This means that there are minimal differences between the educational levels of NMOMs and all mothers and indicates that in South Africa, education is not associated with

non-marital fertility. This finding is in contrast to the literature from the United States and Europe which identifies women's increasing educational opportunities as a key determinant of non-marital fertility. Besides identifying that for South African women, educational level is not associated with having children outside of a marriage, the analysis in Chapter Four has provided new information on non-marital fertility. The analysis of the characteristics of NMOMs has begun to address the gap in the literature as the existing fertility literature does not examine the characteristics of never-married mothers, at a national level.

Building on these results, the analysis in Chapter Five identified whether there had been any changes in the socioeconomic and demographic profile of NMOMs between 2002 and 2017. The results have shown a statistically significant increase (between 2002 and 2017) in the percentage of mothers aged 30-49 (an increase of 76.76%) and 15-49 (an increase of 24.96%) who are never married. Subsequently, a statistically significant decrease (between the same time period) in the percentage of mothers aged 30-49 (a decrease of 7.74%) and 15-49 (a decrease of 10.39%) who are married are also noted. These findings are important as they confirm that at a national level, there have been significant changes in the marital profile of mothers in the country. Additionally, it demonstrates that a growing share of mothers in South Africa have never been married. These results also emphasise that there is a growing cohort of mothers who are more likely to experience socioeconomic challenges which are different from those experienced by married mothers. This underpins further, the need to include never-married mothers in social policy discussions that are aimed at the family. Lastly, the lack of a statistically significant change in the educational levels and employment status of NMOMs, over time, further substantiates that never-married motherhood in South Africa is associated with a low socioeconomic status.

The logit regressions predicting the characteristics of NMOMs have confirmed the findings that are presented in Chapter Four (the characteristics chapter) and have demonstrated that, in particular, household income is correlated with being a NMOM. The analysis in Chapter Six suggests that low-income households are linked to non-marital fertility among older mothers. This negative relationship between household income and never-married older motherhood provides further evidence to the claim that there is an economic component to never-married motherhood in South Africa. Geographic location is also correlated with never-married

motherhood as women who live in tribal authority areas are less likely to become NMOMs compared to women who live in urban areas. This finding contradicts the earlier claim that marriage, as an institution is eroding in the tribal authority areas, in particular.

Interestingly and confirming the findings in Chapters Four and Five, the regression estimations in Chapter Six reveal that education is not a significant correlate of never-married motherhood. In fact, employment status is a better predictor of never-married older motherhood (compared to education) as unemployed and economically inactive women are less likely to be NMOMs compared to employed women. This finding is noteworthy as it seems to contradict the results which show that never-married motherhood is associated with a low socioeconomic status. However, the employed women who are more likely to be NMOMs are possibly those who are employed in low paying and semi-skilled employment which is characteristic of the South African feminised labour force (Casale, 2004; Casale and Posel, 2005; Floro and Komatsu, 2011; Gama and Willemse, 2015).

Identifying that education is not a determinant of never-married motherhood in South Africa firstly, is in contrast with existing South African literature which suggests that higher levels of education have influenced positively, the levels of non-marital childbearing in the country (cf: Casale, 2004; Casale and Posel, 2002; Hall and Mokomane, 2018; Ntuli, 2007; Patel et al., 2006). Secondly, these findings are also at odds with the American (cf: Martinez et al., 2012; Upchurch et al., 2002; Wildsmith et al., 2011) and European (cf: Mack, 2017; Stipkova, 2015) literature which identifies education as a determinant of non-marital fertility. This finding supports the postulation that non-marital fertility in South Africa is linked to the discriminatory apartheid policies which negatively influenced Black marriage and altered African family structure and fertility behaviour (as explained earlier in this chapter) and is not primarily associated with women empowerment and upliftment, as is the case in high-income country contexts. This would explain why education is not a determinant of non-marital fertility in South Africa.

The results in Chapter Six also extend the value of the findings in this thesis as they provide a national overview of the determinants of non-marital fertility in the country. Race, age,

household income and employment status are all significant correlates of non-marital fertility in South Africa. In particular, Black women are more likely to be never-married mothers while interestingly younger women have higher odds of being never-married mothers compared to older mothers. These findings support the claim that for Black women, non-marital fertility is not a new concept as, compared to women of other race groups, the fertility behaviour of Black women was affected the most by apartheid era policies. Once again, employment status is found to be a better determinant of non-marital fertility compared to education and suggests that for South African women, education does not have a significant impact on non-marital fertility, in particular.

The analysis that is presented in Chapters Seven and Eight essentially reinforced the unique empirical contributions of this thesis. The SASAS data (presented in Chapter Seven), which quantifies South Africans' opinions and beliefs of a range of social issues, was used to explore further, the 'cultural' and societal views towards non-marital fertility in South Africa. While, Chapter Eight engaged with the life histories of NMOMs and provided a context rich understanding to the empirical findings on non-marital fertility (presented in Chapters Four to Seven). The results in Chapter Seven showed that, despite evidence of a recent increase in non-marital fertility in the country, the majority of South Africans believe that premarital sexual activity is wrong, and that childbearing should take place within a marriage. These findings indicate that South Africans' fertility preferences are at odds with their fertility behaviour and suggest that a number of other factors (most likely the ones identified in the determinants chapter) have a stronger influence over fertility behaviour compared to one's preference.

The sentiment that non-marital fertility is wrong was also exhibited by the research participants (in Chapter Eight), even though all of them had their children outside of a marriage. For these women, having children outside of a marriage is associated with difficulty and sacrifice as not only are they the sole breadwinner in the household, but they are also the primary caregivers. As a result of these challenges, if given the chance, the research participants indicated that they would practice better contraception and have all of their children within a marriage. These views were also shared by the research participants who were in committed relationships with supportive partners.

The relationship between *ilobolo* and marriage and its subsequent effect on non-martial fertility is explored in Chapters Seven and Eight. The type of data that was used in these chapters was perfectly suited to identify that on the one hand, South Africans find the high cost of *ilobolo* to be a barrier to marriage while on the other hand, continue to value the cultural meaning behind the practice. The SASAS data showed that 49.48% of Black South Africans agreed that *ilobolo* is a barrier to marriage while 50.52% disagreed with this statement. The value of a mixed methods study was emphasised as the qualitative findings were able to add context to these varying opinions on *ilobolo* and marriage. The research participants explained that while they believe that practicing *ilobolo* is important and should continue, the high cost of *ilobolo* was partly the reason that they had never married. In this regard, the research participants shared that it is important for their future sons-in-law to pay *ilobolo* however they will request a nominal amount and in doing so, will honour the cultural meaning behind the practice. Two of the research participants, who are in stable and committed relationships mentioned that they began having children outside of a marriage because they knew that their partners would not be able to pay *ilobolo* for them. These women have since given up any hope of marrying because their partners (due to limited employment opportunities) are barely able to provide financial assistance for their children and in turn, are unable to save up and pay for *ilobolo*. Consequentially, the effects of increasing male unemployment and poor job opportunities on marriage and childbearing are evident in these narratives. Overall, the findings from the qualitative data were instrumental in providing a context from which to understand the empirical results. Moreover, the financial and parenting difficulties that are associated with being a NMOM and never-married motherhood in general, highlights the paramount need for additional research on non-marital fertility in the country.

In conclusion, this thesis has contributed to the broader social science literature as it has provided, for the first time, an empirical account of non-marital fertility in South Africa. The main findings of this thesis point to an increase in non-marital fertility in South Africa and an association between non-marital fertility and a low socioeconomic status. In doing so, the findings have provided support for the hypothesis that was outlined at the beginning of this thesis by demonstrating that there is a socio-economic component which influences the levels of non-marital fertility in South Africa. These findings are linked broadly, to similar findings in high-income countries. Unexpectedly, the results show no evidence of an increase in non-marital fertility among older mothers however NMOMs consistently make up between 30-49%

of mothers in their age group, over time. Besides addressing the gap in the literature by providing a multifaceted investigation of non-marital fertility in South Africa, this thesis has demonstrated the suitability of a mixed methods approach in addressing a topic that is often shrouded by concerns of sensitivity and confidentiality. Based on the findings that are presented in this thesis, a need for including never-married mothers in social policies that are aimed at supporting the family, has been identified. It is also suggested that additional research on non-marital fertility within a South African context is required. In particular, future research should examine the economic challenges faced by never-married mothers and the effect that these challenges have on children who grow up in single-mother households. Future research can also focus specifically on never-married mothers who had their first child before the age of 30 and those who had their first child after the age of 29. This will allow for a comparison of the socioeconomic and demographic characteristics of these two groups of mothers and aid in determining whether there are differences in their characteristics. Such research will also assist in identifying groups of never-married mothers who may be exposed to a greater risk of poverty. Lastly, it is recommended that these research projects be conducted at a national level which will provide national insights into non-martial fertility in South Africa.

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Appendix A

Table 1A: The various educational categories used to capture highest educational level in the GHS and NIDS surveys

	GHS								NIDS	
	2002	**2004**	**2006**	**2008**	**2010**	**2012**	**2014**	**2017**	**W 1-4**	**W5**
Grade R/0	*	*	*	*	*	*	*	*	*	*
Grade 1/ Sub A/Class 1	*	*	*	*	*	*	*	*	*	*
Grade 2 / Sub B/Class 2	*	*	*	*	*	*	*	*	*	*
Grade 3/Standard 1/ABET 1	*	*	*	*	*	*	*	*	*	*
Grade 4/ Standard 2	*	*	*	*	*	*	*	*	*	*
Grade 5/ Standard 3/ABET 2	*	*	*	*	*	*	*	*	*	*
Grade 6/Standard 4	*	*	*	*	*	*	*	*	*	*
Grade 7/Standard 5/ABET 3	*	*	*	*	*	*	*	*	*	*
Grade 8/Standard 6/Form 1	*	*	*	*	*	*	*	*	*	*
Grade 9/Standard 7/Form 2/ABET 4	*	*	*	*	*	*	*	*	*	*
Grade 10/ Standard 8/ Form 3	*	*	*	*	*	*	*	*	*	*
Grade 11/ Standard 9/ Form 4	*	*	*	*	*	*	*	*	*	*
Grade 12/Standard 10/Form 5/Matric	*	*	*	*				*	*	*
Grade 12/Standard 10/Form 5/Matric (No exemption)					*	*	*			
Grade 12/Standard 10/Form 5/Matric (Exemption)					*	*	*			
NTC 1/ N1/NC (V) Level 2	*	*	*	*	*	*	*	*	*	*
NTC 2/ N2/ NC (V) Level 3	*	*	*	*	*	*	*	*	*	*
NTC 3/ N3/NC (V)/Level 4	*	*	*	*	*	*	*	*	*	*
N4/NTC 4					*	*	*	*		*
N5/NTC 5					*	*	*	*		*
N6/NTC 6					*	*	*	*		*

Certificate with less than Grade 12/Std 10	*	*	*	*	*	*	*	*	*	*
Diploma with less than Grade 12/Std 10	*	*	*	*	*	*	*	*	*	*
Certificate with Grade 12/Std 10	*	*	*	*	*	*	*		*	*
Higher/National/ Advanced certificate with grade 12								*		
Diploma with Grade 12/Std 10	*	*	*	*	*	*	*	*	*	*
Higher Diploma (Technikon/ University of Technikon)					*	*	*	*		
Post Higher Diploma (Technikon/ University of Technology Master's, Doctoral)					*	*	*	*		
Post Higher Diploma (Master's Diploma and Master's degree)								*		
Degree	*									
Bachelor's Degree		*	*	*	*	*	*	*	*	*
Bachelor's degree and diploma		*	*	*					*	*
Bachelor's degree and post-graduate diploma					*	*	*			
Honours Degree		*	*	*	*	*	*		*	*
Honours Degree/ Postgraduate diploma/ Occupational Certificate								*		
Postgraduate degree or diploma	*									
Higher degree (Master's; Doctorate)		*	*	*	*	*	*		*	*
Doctoral Degrees (Doctoral Diploma and Doctorate)								*		

Other (specify in the box below)	*	*	*	*	*	*	*	*	*	*
Do not know	*	*	*	*	*	*	*	*		
No schooling	*	*	*	*	*	*	*	*	*	*
Unspecified	*	*			*					

Source: The 2002-2017 GHS questionnaires and the 2008-2017 NIDS questionnaires

Appendix B

Table 1B: Selected demographic characteristics of all mothers aged 15-49 and never-married older mothers, 2017

	All mothers (15-49)	NMOMs
% of mothers who are household heads	29.78 (0.420)	77.13 (1.793)
% of mothers living in a female-headed household	46.19 (0.472)	87.04 (1.486)

Source: Own calculations from the 2017 GHS

Notes: The data are weighted

Column percentages are presented for age at last birth

Standard errors in parentheses

The sample includes all mothers aged 15-49 years and NMOMs

Table 2B: Household characteristics of mothers aged 15-49, 30-49 and NMOMs, 2017

	Mothers aged 15-49	Mothers aged 30-49	NMOMs
Household composition			
Average number of household members	4.53 (0.027)	4.31 (0.030)	5.06 (0.040)
Average number of children*	1.34 (0.024)	1.43 (0.028)	2.23 (0.039)
Average number of working age people†	2.12 (0.022)	2.24 (0.025)	2.50 (0.039)
Average number of employed people††	0.88 (0.014)	0.95 (0.015)	0.87 (0.025)
Average number of pensioners**	0.00 (0.001)	0.01 (0.001)	0.01 (0.002)
Average number of females	2.23 (0.023)	2.31 (0.027)	2.84 (0.041)
Average number of adult males	0.57 (0.014)	0.65 (0.017)	0.78 (0.026)
Percentage of households with at least one employed member	51.99 (0.813)	54.58 (0.907)	47.35 (1.041)
Percentage of households without an adult male	58.92 (0.809)	54.17 (0.910)	45.86 (1.393)

Source: Own calculations from the 2017 GHS

Notes: The data are weighted

Standard errors in parentheses

The sample includes mothers aged 15-49, 30-49 and never-married mothers aged 30-49

* Children refer to household members younger than the age of 15

†Working age refers to individuals who are aged 15 to 65

††Employed people refer to individuals who are aged 15 to 65

** Pensioners refer to household members who are aged 66 and older

†††Adult males are aged 15 and older

Table 3B: Marital status of all mothers aged 15-49 and 30-49 and older mothers, 2017

	All mothers (15-49)	Older mothers (30-49)	All mothers (30-49)
Marital Status			
Married	33.24 (0.46)	53.79 (0.91)	43.92 (0.60)
Cohabiting	18.36 (0.38)	16.58 (0.69)	17.41 (0.46)
Widow	2.14 (0.12)	4.00 (0.32)	3.36 (0.19)
Divorced	2.22 (0.14)	3.35 (0.33)	3.38 (0.21)
Never Married	44.05 (0.47)	22.29 (0.73)	31.92 (0.55)
Total	**100**	**100**	**100**

Source: Own calculations from the 2017 GHS

Notes: The data are weighted

Column percentage presented

Standard errors in parentheses

The sample includes all mothers aged 15-49 and 30-49 and older mothers

Table 4B: Educational distribution of all mothers aged 15-49, 30-49, never-married older mothers and never-married younger mothers, 2017

	All mothers (15-49)	All mothers (30-49)	NMOMs	Never-married young mothers[209]
Highest educational level				
No schooling	1.64 (0.11)	2.34 (0.17)	3.00 (0.660)	2.30 (0.556)
Some primary schooling	4.72 (0.19)	6.14 (0.27)	8.60 (1.073)	5.18 (0.958)
Completed primary schooling	3.83 (0.18)	4.06 (0.23)	6.04 (0.954)	4.232 (0.856)
Some secondary schooling	42.37 (0.47)	38.15 (0.58)	46.30 (2.012)	47.26 (2.011)
Completed secondary schooling	31.05 (0.45)	30.04 (0.56)	24.03 (1.732)	31.37 (1.857)
NTC/NCV – all levels[210]	2.38 (0.15)	2.01 (0.17)	1.00 (0.386)	1.15 (0.401)
Certificates/diplomas with/out matric	5.44 (0.22)	6.57 (0.31)	4.55 (0.810)	5.20 (0.864)
Undergraduate degree or diploma	7.14 (0.27)	8.92 (0.38)	5.02 (0.940)	2.74 (0.631)
Postgraduate degree or diploma	1.43 (0.13)	1.78 (0.18)	1.45 (0.588)	0.57 (0.289)
Total	**100**	**100**	**100**	**100**

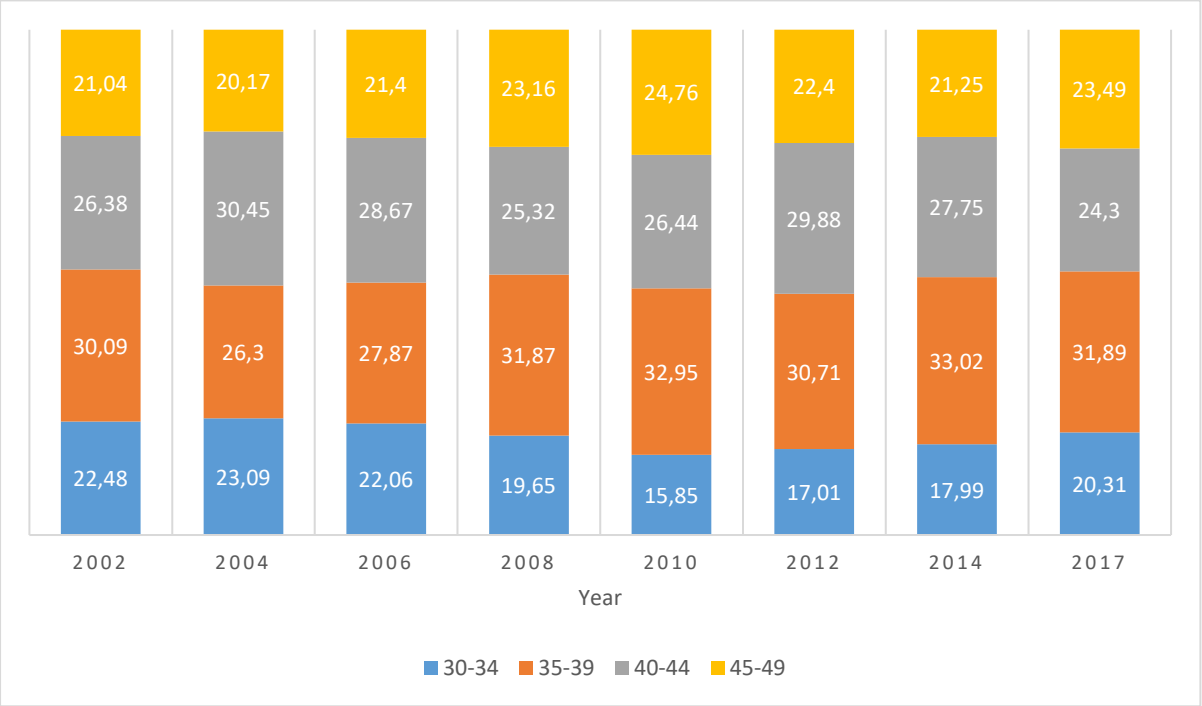
Source: Own calculations from the 2017 GHS
Note: The data are weighted
Column percentage presented
Standard errors in parentheses
The sample includes all mothers aged 15-49 and 30-49, NMOMs and never-married younger mothers

[209] Younger mothers are women who had at least one child between aged 16-29 and are aged 30-49 at the time of enumeration. This means that a mother could have had one child whilst aged 16-29 and possibly a subsequent child/ren whilst aged 30-49.

[210] All levels of National training certificates (NTC) and national certificate vocational (NCV).

Appendix C

Figure 1C: Percentage of never-married older mothers by age categories, 2002-2017



Source: Own calculations from the 2002-2017 GHS
Notes: The data are weighted
The sample includes NMOMs

Table 2C: Racial distribution of never-married older mothers, 2008-2017

	2008	2010	2012	2014	2017	Difference
Black	94.29 (1.625)	95.15 (1.166)	93.68 (1.191)	94.28 (1.014)	93.59 (1.177)	-0.74
Coloured	5.71 (1.625)	4.85 (1.166)	5.81 (1.087)	5.72 (1.014)	5.22 (0.965)	-8.58
Indian	0.00	0.00	0.51 (0.511)	0.00	0.37 (0.244)	0
White	0.00	0.00	0.00	0.00	0.82 (0.660)	0
Total	**100**	**100**	**100**	**100**	**100**	**--**

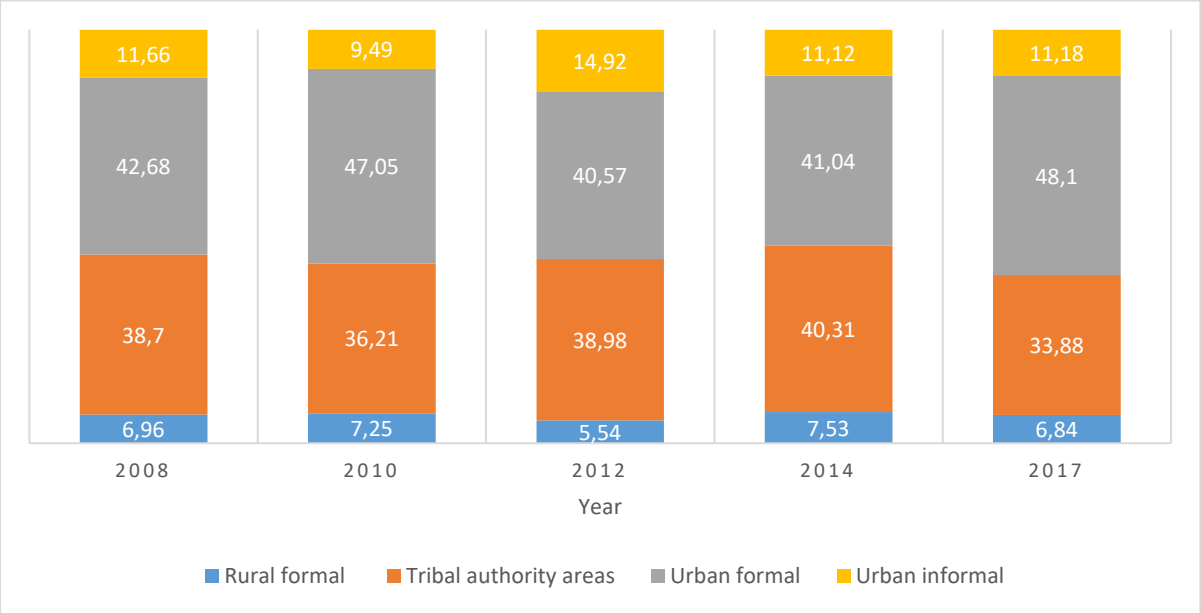
Source: Own calculations from 2008-2017 NIDS
Notes: The data are weighted
* Denotes a significant change at the 95 percent level of confidence
(-) Denotes a decrease in percentage
The sample includes NMOMs

Table 3C: Percentage of never-married older mothers within each race group, 2008-2017

	2008	2010	2012	2014	2017	Difference
Black	40.13 (2.242)	36.15 (2.080)	43.65 (2.063)	33.67 (1.635)	33.57 (1.645)	-16.35
Coloured	39.82 (8.175)	25.85 (6.104)	27.35 (4.892)	24.14 (4.250)	31.90 (4.986)	-19.89
Indian	0.00	0.00	31.62 (26.800)	0.00	17.70 (10.994)	0
White	0.00	0.00	0.00	0.00	20.49 (14.065)	0
Absolute difference: African - White	0	--	--	--	13.08	--

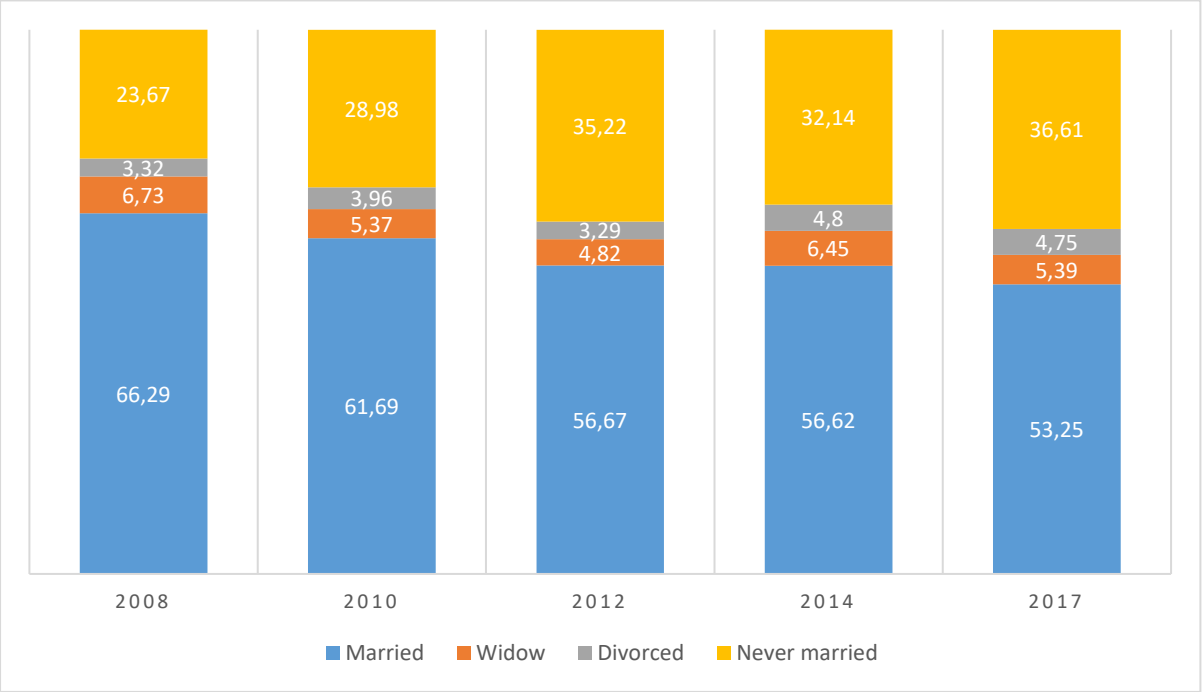
Source: Own calculations from 2008-2017 NIDS
Notes: The data are weighted
* Denotes a significant change at the 95 percent level of confidence
(-) Denotes a decrease in percentage
The sample includes NMOMs

Figure 4C: Geographic distribution of never-married older mothers, 2008-2017



Source: Own calculations from the 2008-2017 NIDS
Notes: The data are weighted
The sample includes NMOMs

Figure 5C: Marital status of older mothers aged 30-49, 2008-2017



Source: Own calculations from the 2002-2017 GHS
Notes: The data are weighted
The sample includes women aged 30-49

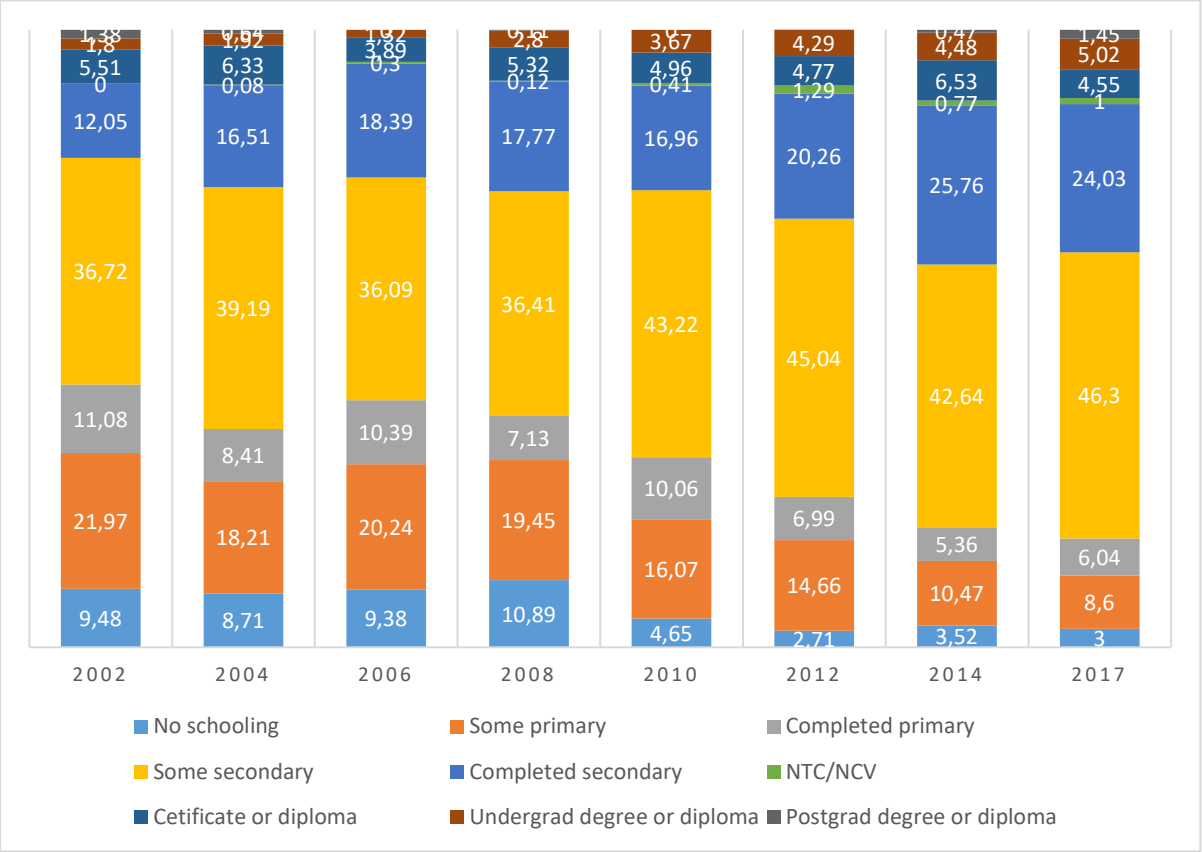
Table 6C: Household composition of mothers aged 30-49 and never-married older mothers, 2008-2017

	2008	2017	Difference
Mothers 30-49			
Household composition			
Mean household size	3.64 (0.101)	3.27 (0.096)	-0.37
Mean number of children under the age of 15	1.17 (0.064)	1.02 (0.054)	-0.15
Mean number of employed people	0.94 (0.042)	1.05 (0.037)	0.11
Mean number of people of working age	2.32 (0.065)	2.12 (0.058)	-0.20
Mean number of pensioners[211]	1.05 (0.032)	1.56 (0.055)	0.51
Mean number of females	2.12 (0.067)	1.98 (0.051)	-0.14
Mean number of males	1.51 (0.067)	1.29 (0.060)	-0.22
NMOMs			
Household composition			
Mean household size	5.91 (0.231)	5.45 (0.189)	-0.46
Mean number of children under the age of 15	1.41 (0.168)	1.45 (0.162)	0.04
Mean number of employed people	0.68 (0.089)	1.11 (0.073)	0.42
Mean number of people of working age	2.52 (0.233)	1.97 (0.118)	-0.55
Mean number of pensioners	1.03 (0.027)	1.19 (0.124)	0.16
Mean number of females	2.80 (0.230)	2.30 (0.135)	-0.50
Mean number of males	1.34 (0.172)	1.36 (0.151)	0.02

Source: Own calculations from the 2008 and 2017 NIDS
Notes: The data are weighted
Standard errors in parenthesis
* Denotes a significant change at the 95 percent level of confidence
(-) Denotes a decrease in the absolute values
The sample includes mothers aged 30-49 and NMOMs

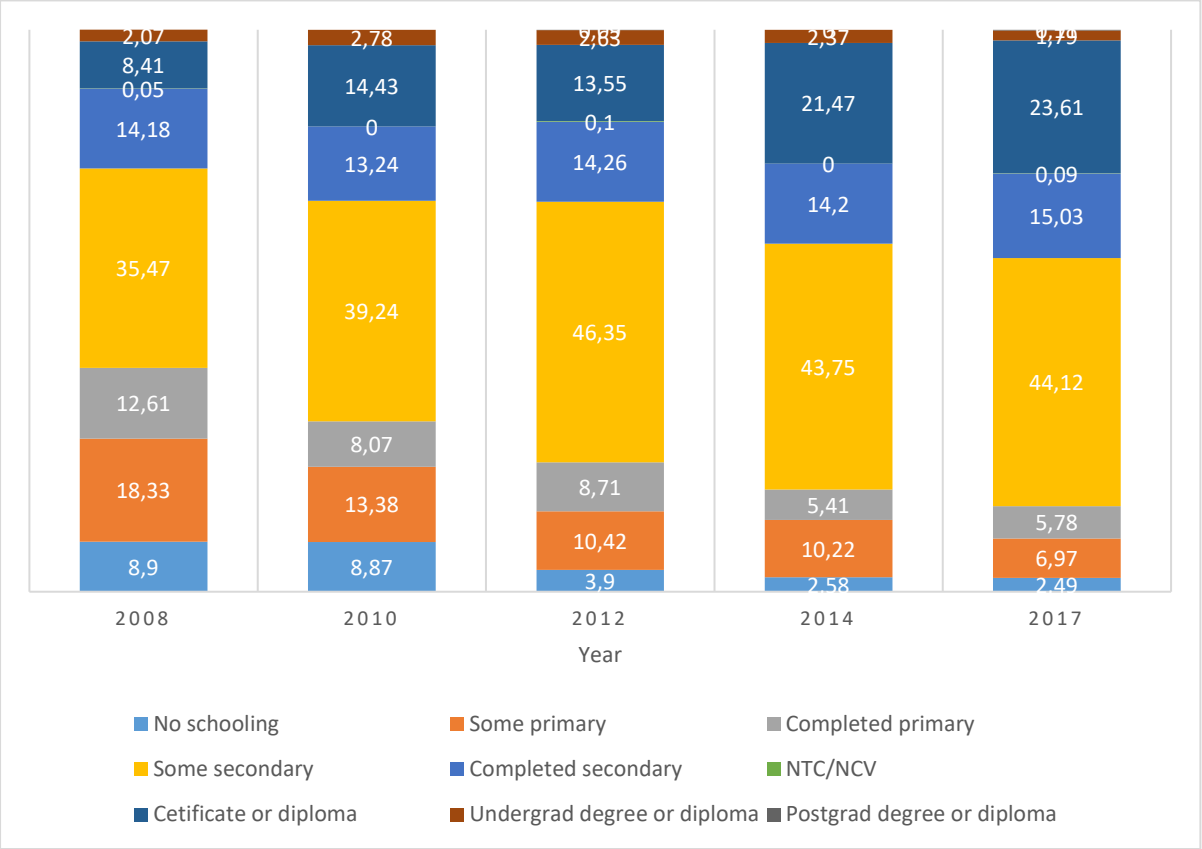
[211] The NIDS estimates on the average number of pensioners in the household includes at least one pensioner in the household.

Figure 7C: Distribution of never-married older mothers by educational level, 2002-2017



Source: Own calculations from the 2002-2017 GHS
Notes: The data are weighted
The sample includes NMOMS

Figure 8C: Distribution of never-married older mothers by educational level, 2008-2007



Source: Own calculations from the 2008-2017 NIDS
Notes: The data are weighted
The sample includes NMOMs

Table 9C: Percentage difference in the educational levels of women (30-49), mothers (30-49) and never-married older mothers, 2002-2017

	All women (30-49)	All mothers (30-49)	NMOMs
Highest educational level			
No schooling	-75.79*	-75.65*	-68.36*
Some primary	-69.82*	-67.95*	-60.86*
Completed primary	-54.49*	-50.49*	-45.49*
Some secondary	18.96*	19.29*	26.09
Completed secondary	67.34*	65.97*	99.42*
NTC/NCV[212]	478.79*	443.24*	--
Certificate/diploma	14.06	-15.88	-17.42
Undergraduate degree or diploma	192.44*	204.44*	178.89
Postgraduate degree or diploma	-2.92	-3.26	5.07

Source: Own calculations from the 2002-2017 NIDS

Notes: The data are weighted

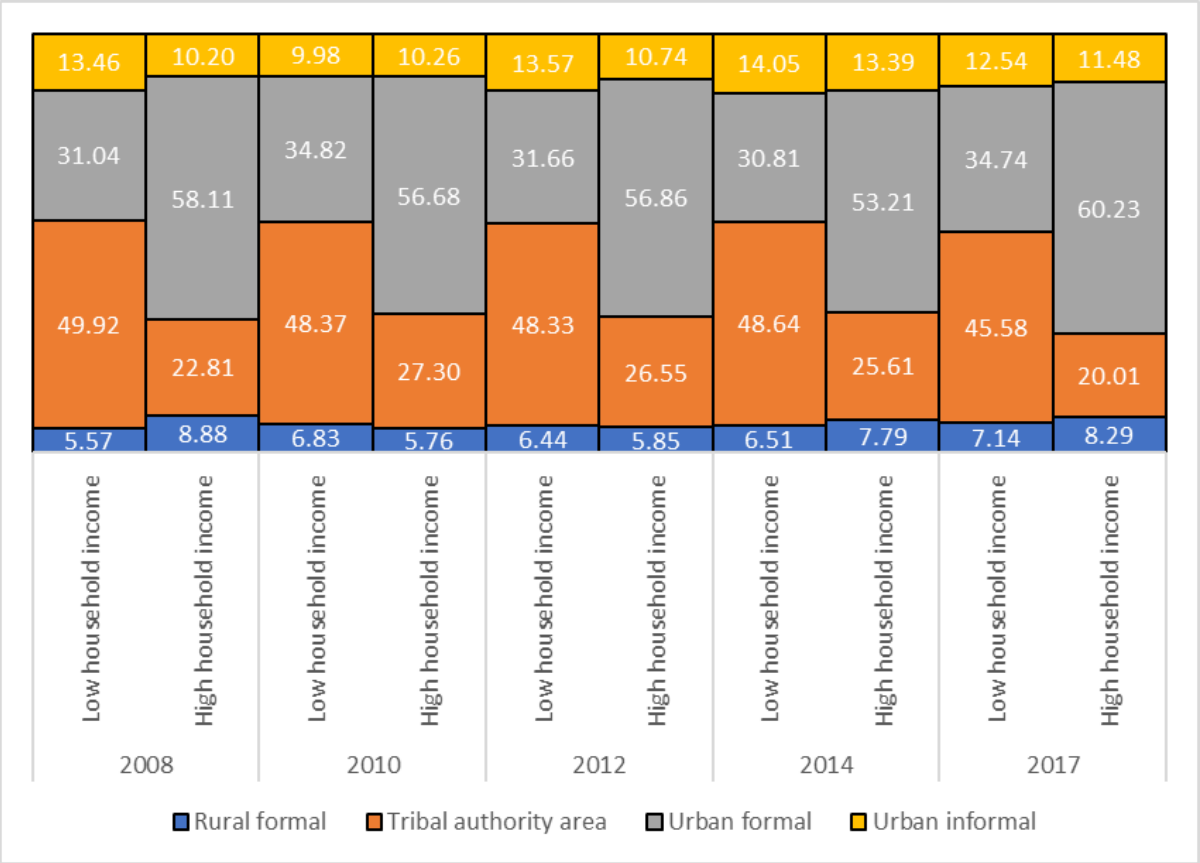
* Denotes a significant change at the 95 percent level of confidence

(-) Denotes a decrease in percentage

The sample includes all women aged 30-49, all mothers aged 30-49 and NMOMs

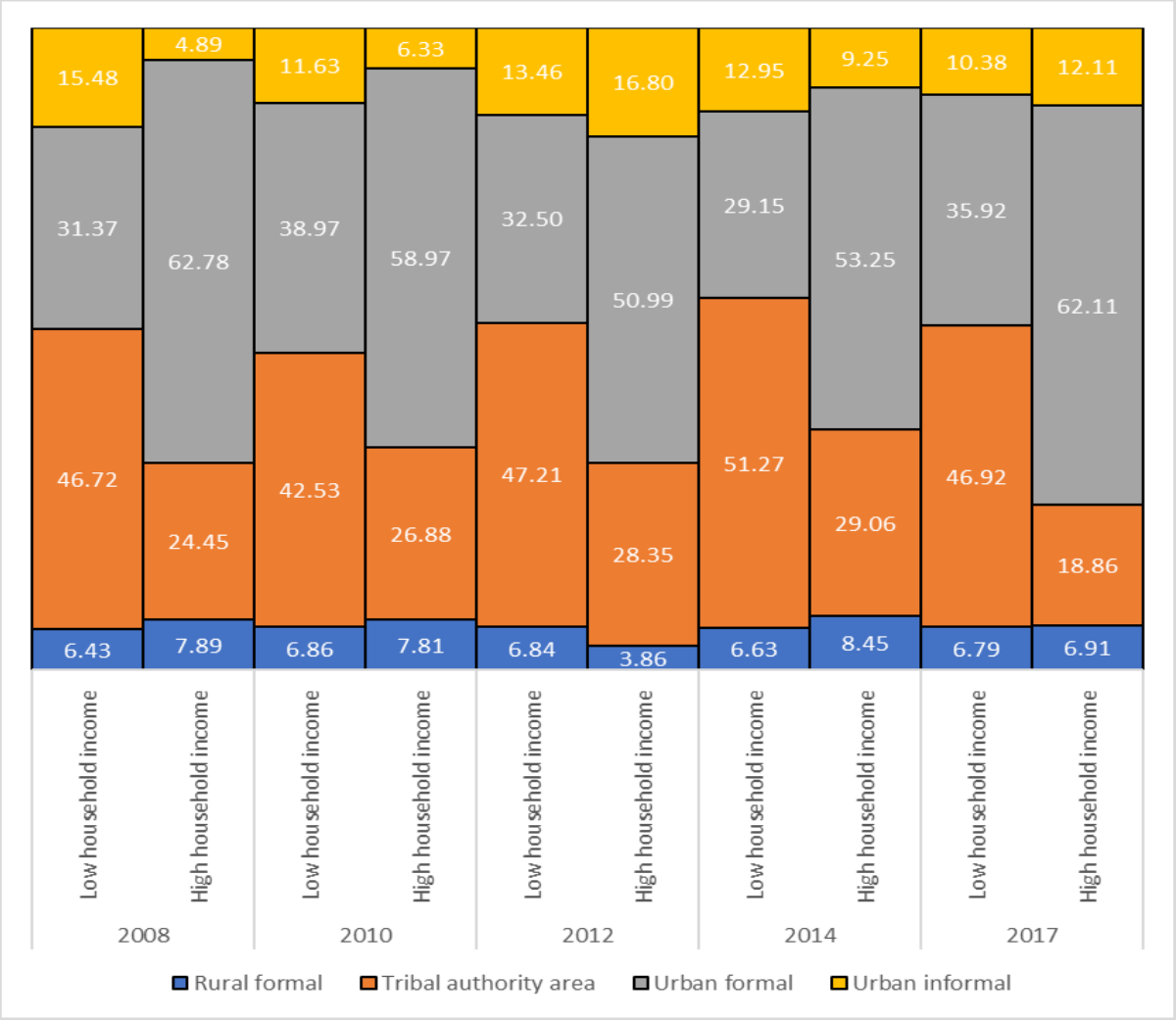
[212] No difference is presented for NMOMs because there are no observations in the 2002 GHS estimate of NTC/NCV.

Figure 10C: Geographic distribution of never-married mothers aged 15-49 by household income level, 2008-2017



Source: Own calculations from the 2008 to 2017 NIDS
Notes: The data are weighted
The sample includes never-married mothers aged 15-49

Figure 11C: Geographic distribution of never-married older mothers by household income level, 2008-2017



Source: Own calculations from the 2008 to 2017 NIDS
Notes: The data are weighted
The sample includes NMOMs

Table 12C: Percentage change in the share of never-married mothers aged 15-49 and never-married older mothers within each race group by household income level, 2008 and 2017

	NMOMs		Difference	Never-married mothers aged 15-49		Difference
Low household income						
	2008	**2017**	**2008-2017**	**2008**	**2017**	**2008-2017**
Black	65.63 (3.242)	53.78 (2.826)	-18.05	62.21 (1.546)	52.39 (1.342)	-15.78
Coloured	36.79 (11.878)	44.70 (9.379)	21.49	38.88 (5.255)	41.66 (4.662)	7.15
Indian	0.00	56.32 (31.686)	0.00	0.00	27.61 (15.980)	0.00
White	0.00	77.40 (24.74)	0.00	48.28 (23.434)	42.19 (18.509)	-12.62
High household income level						
Black	34.37 (3.242)	46.22 (2.826)	34.46	37.79 (1.546)	47.61 (1.342)	25.99
Coloured	63.21 (11.878)	55.30 (9.379)	-12.51	61.12 (5.255)	58.34 (4.662)	-4.55
Indian	0.00	43.68 (31.686)	0.00	100.00 (0.00)	72.39 (15.980)	-27.61
White	0.00	22.60 (24.740)	0.00	51.72 (23.434)	57.81 (18.509)	11.78

Source: Own calculations from the 2008 and 2017 NIDS

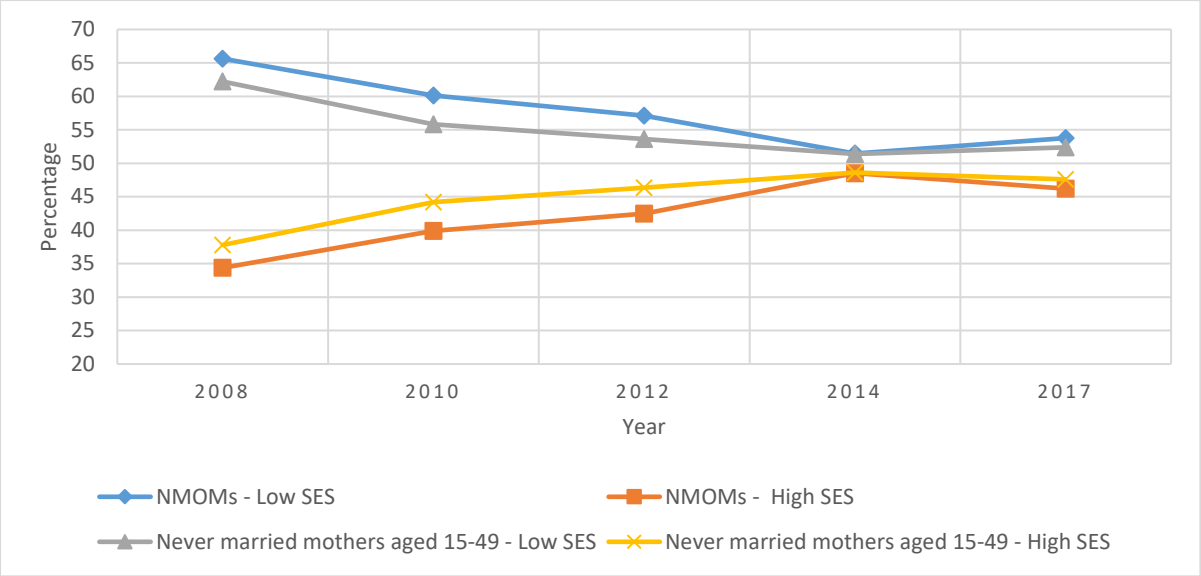
Notes: The data are weighted

* Denotes a significant change at the 95 percent level of confidence

(-) Denotes a decrease in percentage

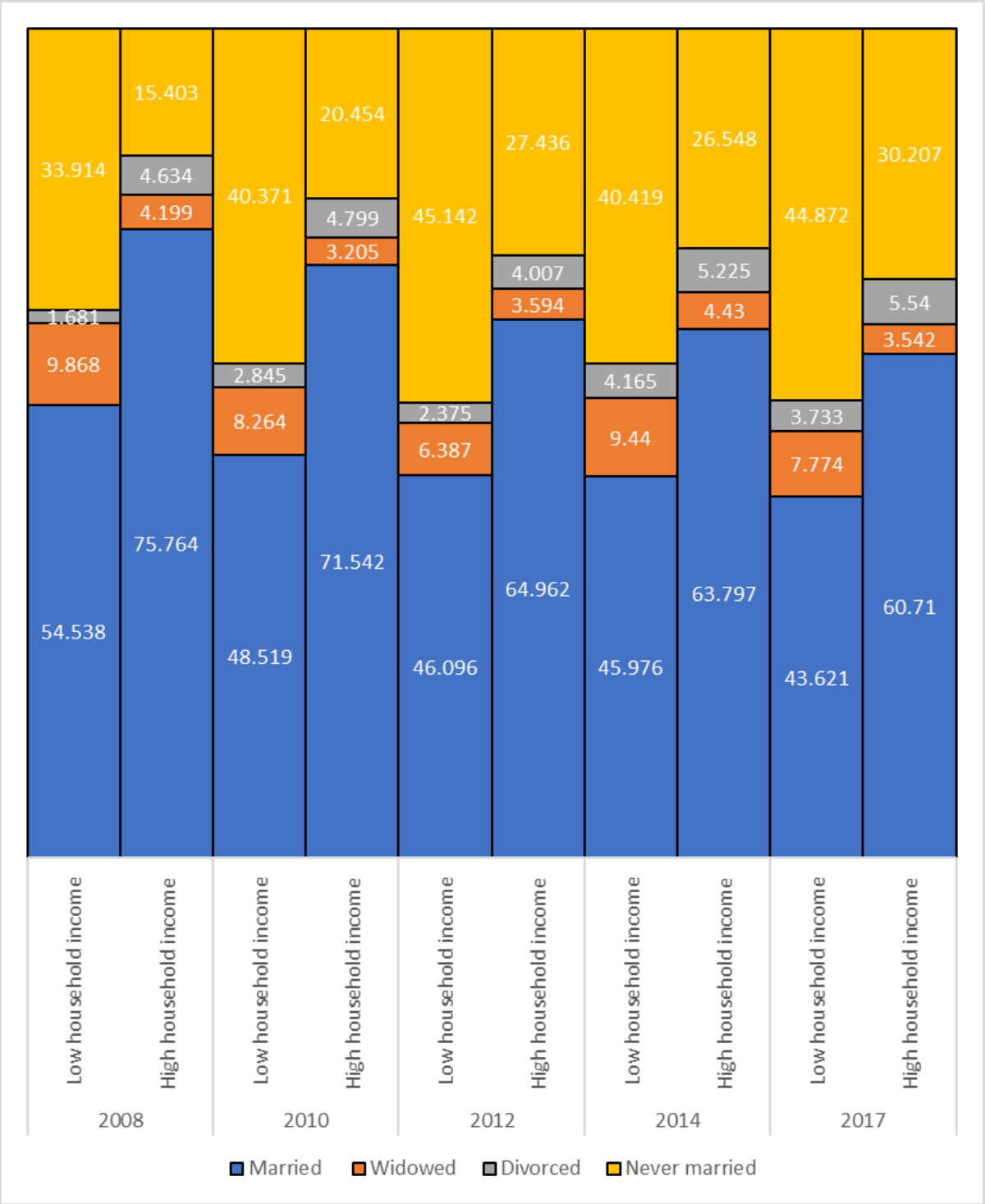
The sample includes never-married women aged 15-49 and NMOMs

Table 13C: Household income level of Black never-married older mothers and never-married mothers aged 15-49, 2008-2017



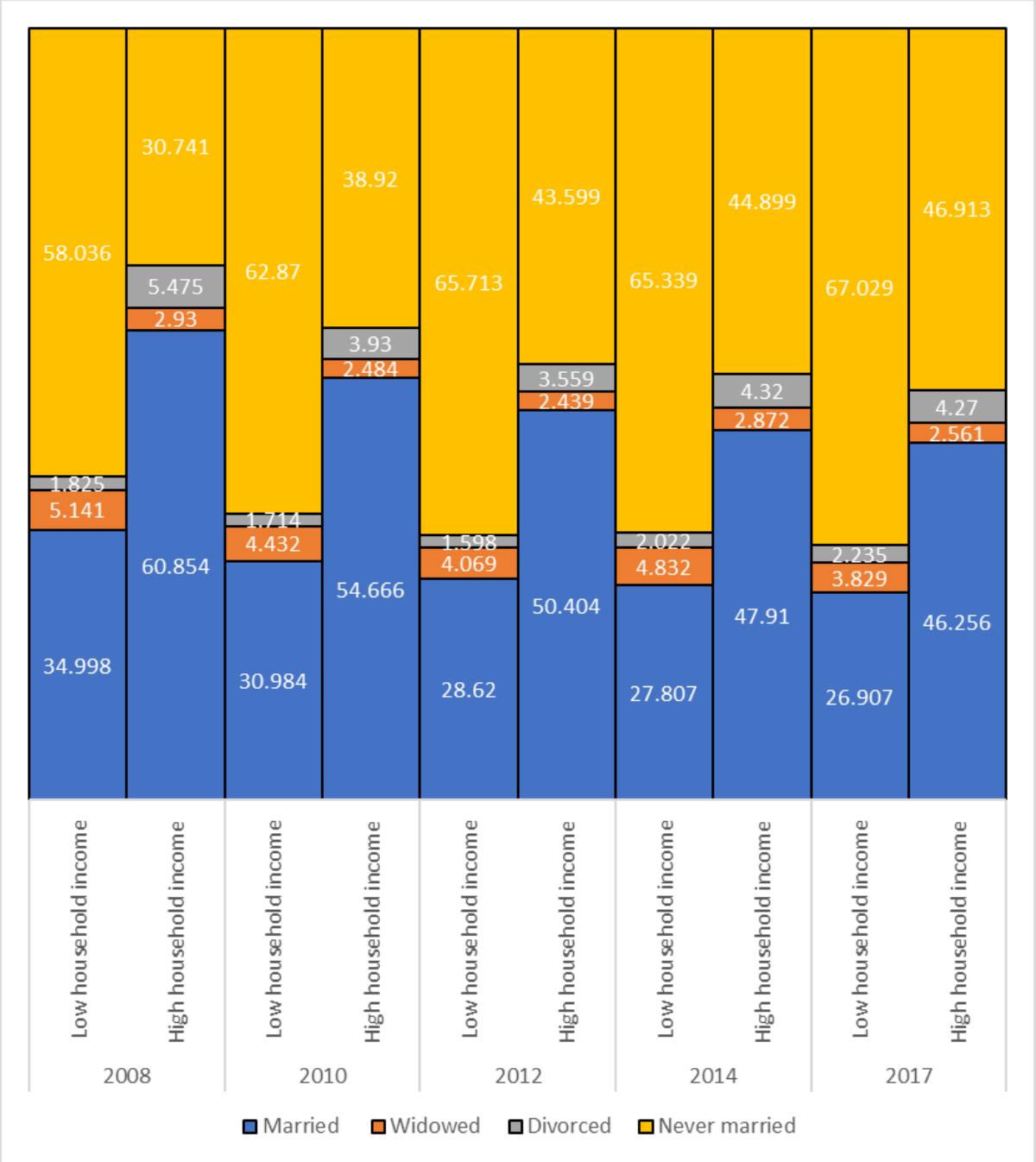
Source: Own calculations from the 2008 to 2017 NIDS
Notes: The data are weighted
The sample includes never-married mothers aged 15-49 and NMOMs

Figure 14C: Marital distribution of mothers aged 30-49 by household income level, 2008-2017



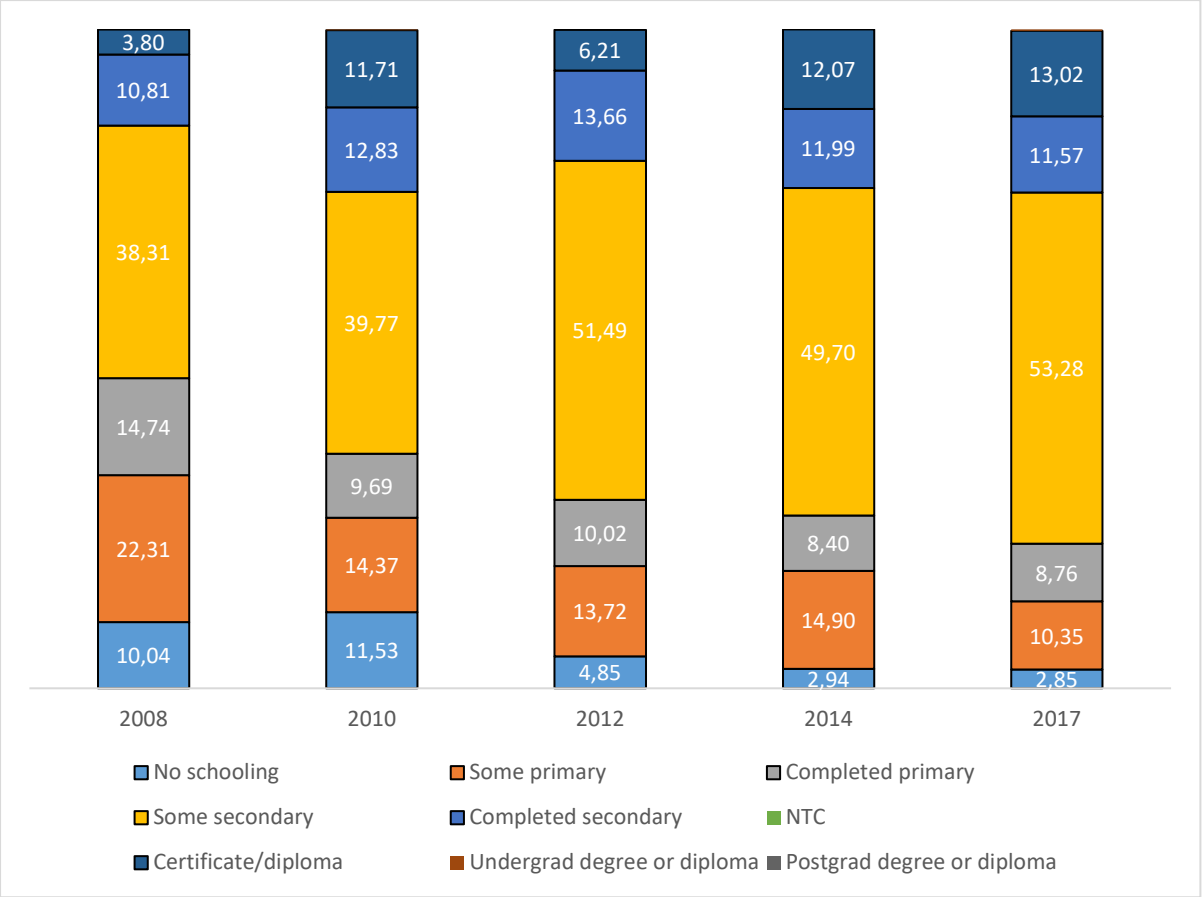
Source: Own calculations from the 2008 to 2017 NIDS
Notes: The data are weighted
The sample includes mothers aged 30-49

Figure 15C: Marital status of mothers aged 15-49 by household income level, 2008-2017



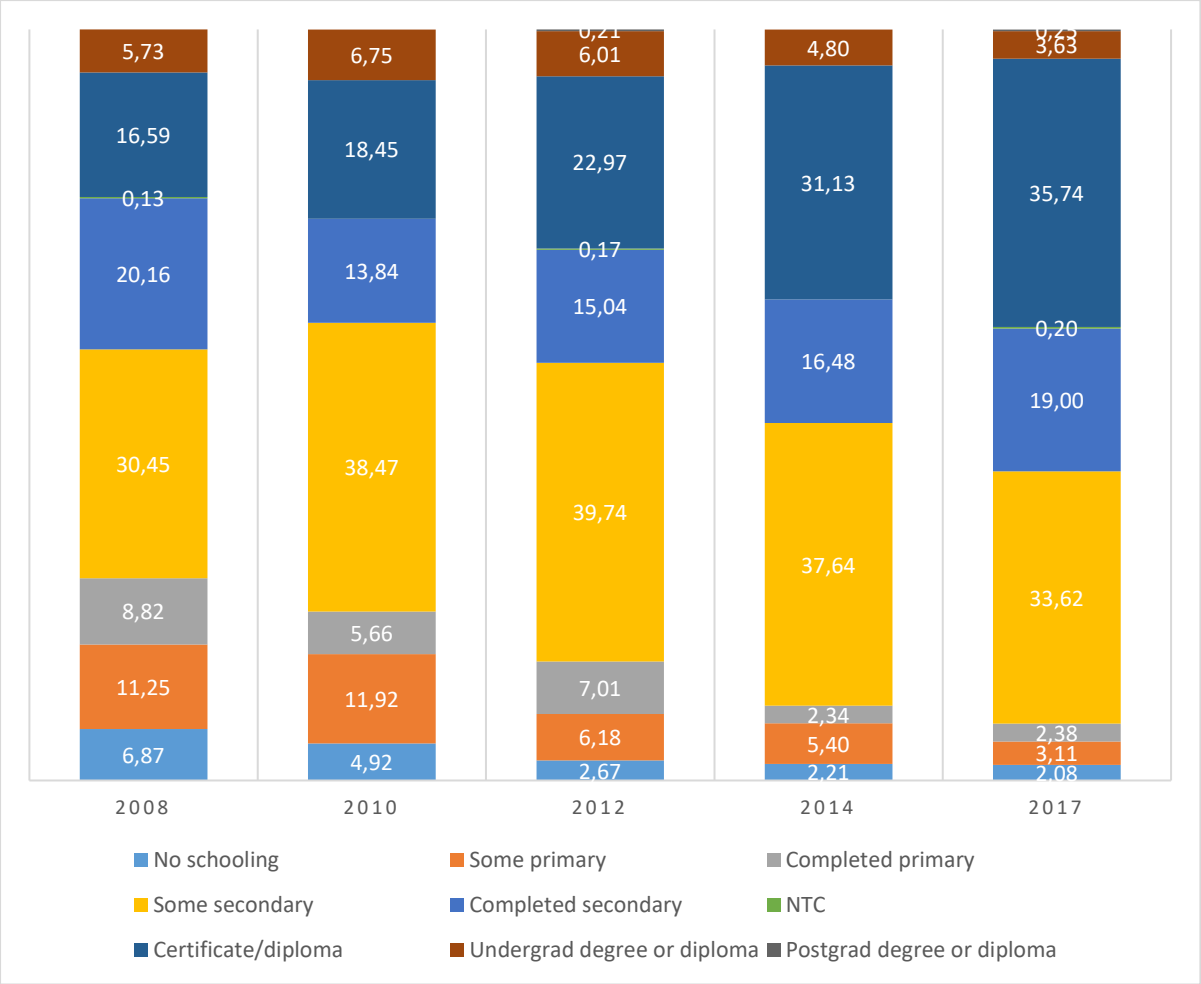
Source: Own calculations from the 2008 to 2017 NIDS
Notes: The data are weighted
The sample includes mothers aged 15-49

Figure 16C: Educational levels of never-married older mothers of a low household income status, 2008-2017



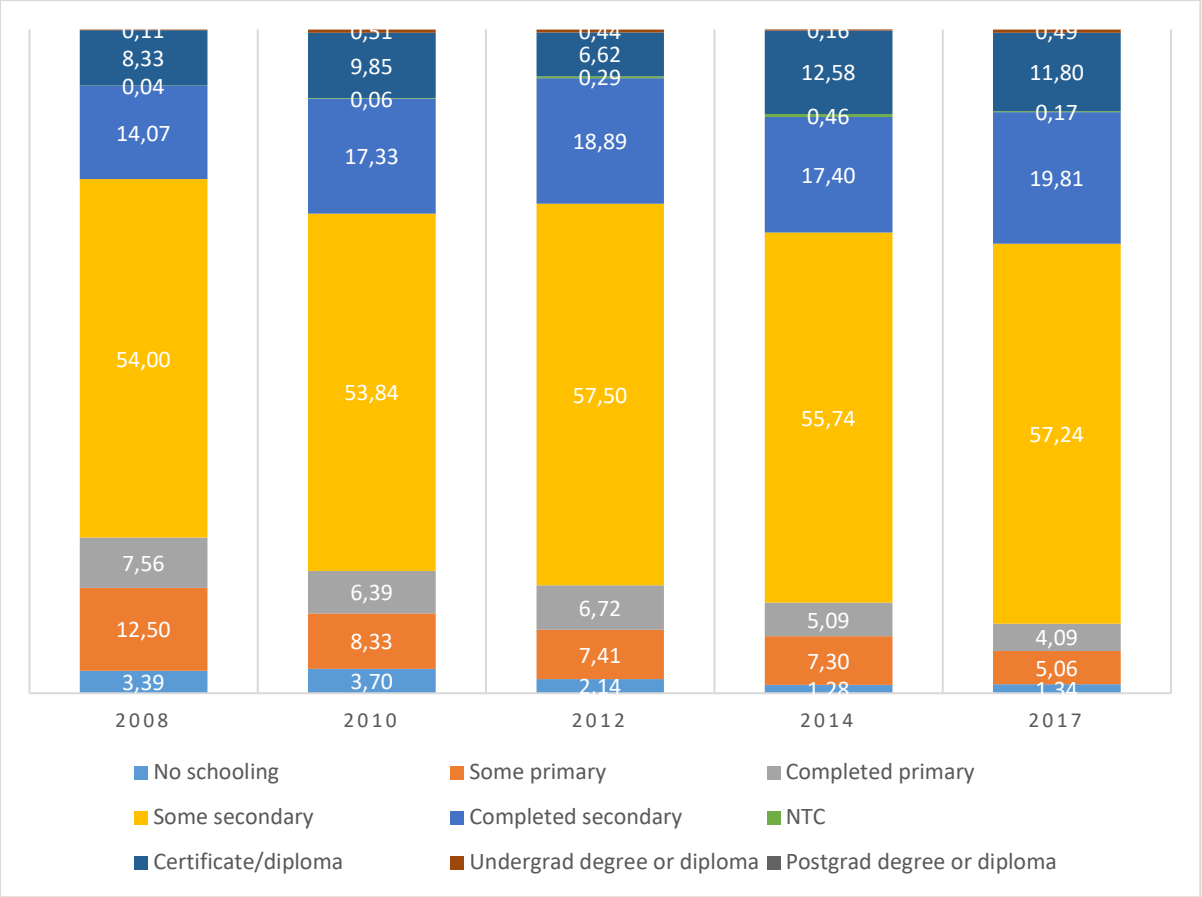
Source: Own calculations from the 2008 to 2017 NIDS
Notes: The data are weighted
The sample includes NMOMs

Figure 17C: Educational levels of never-married older mothers of a high household income level, 2008-2017



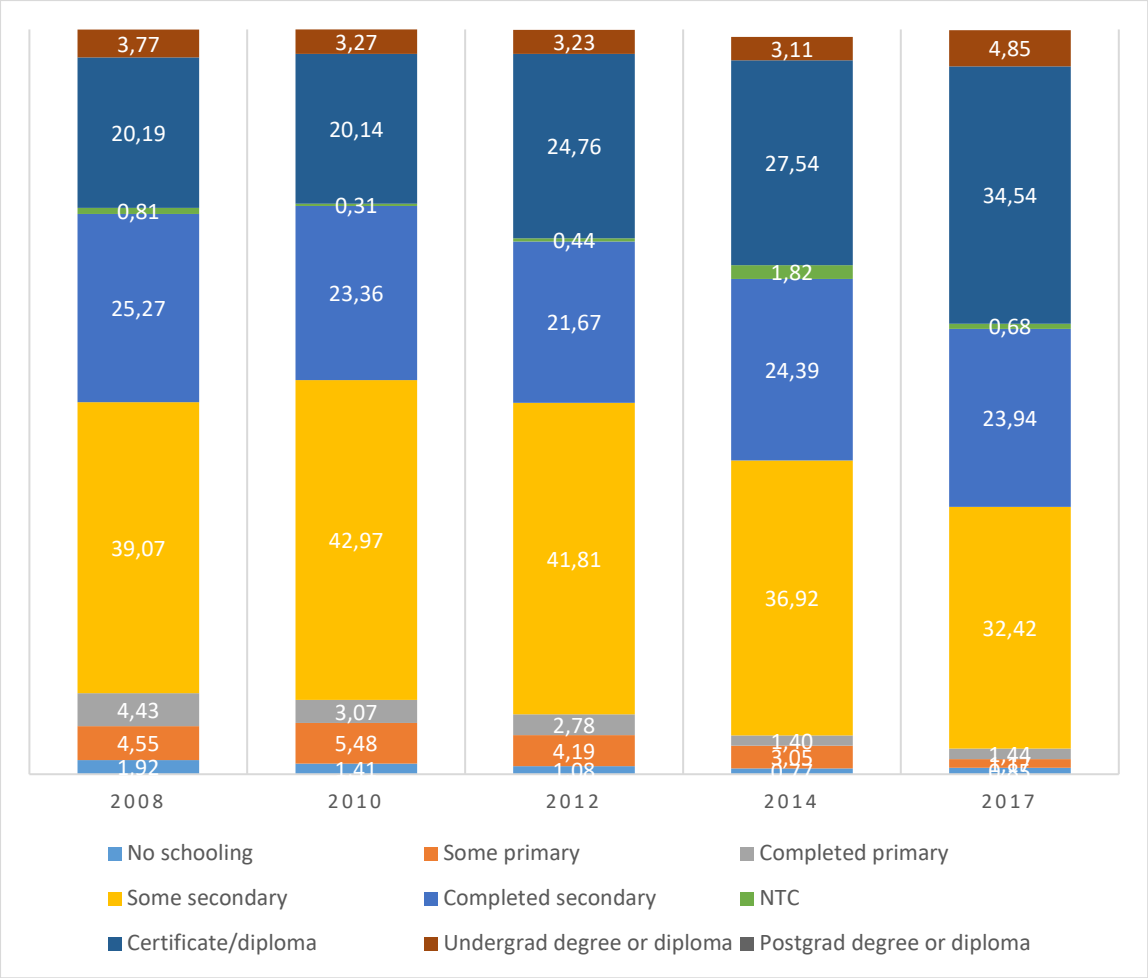
Source: Own calculations from the 2008 to 2017 NIDS
Notes: The data are weighted
The sample includes NMOMs

Figure 18C: Educational levels of never-married mothers aged 15-49 of a low household income level, 2008-2017



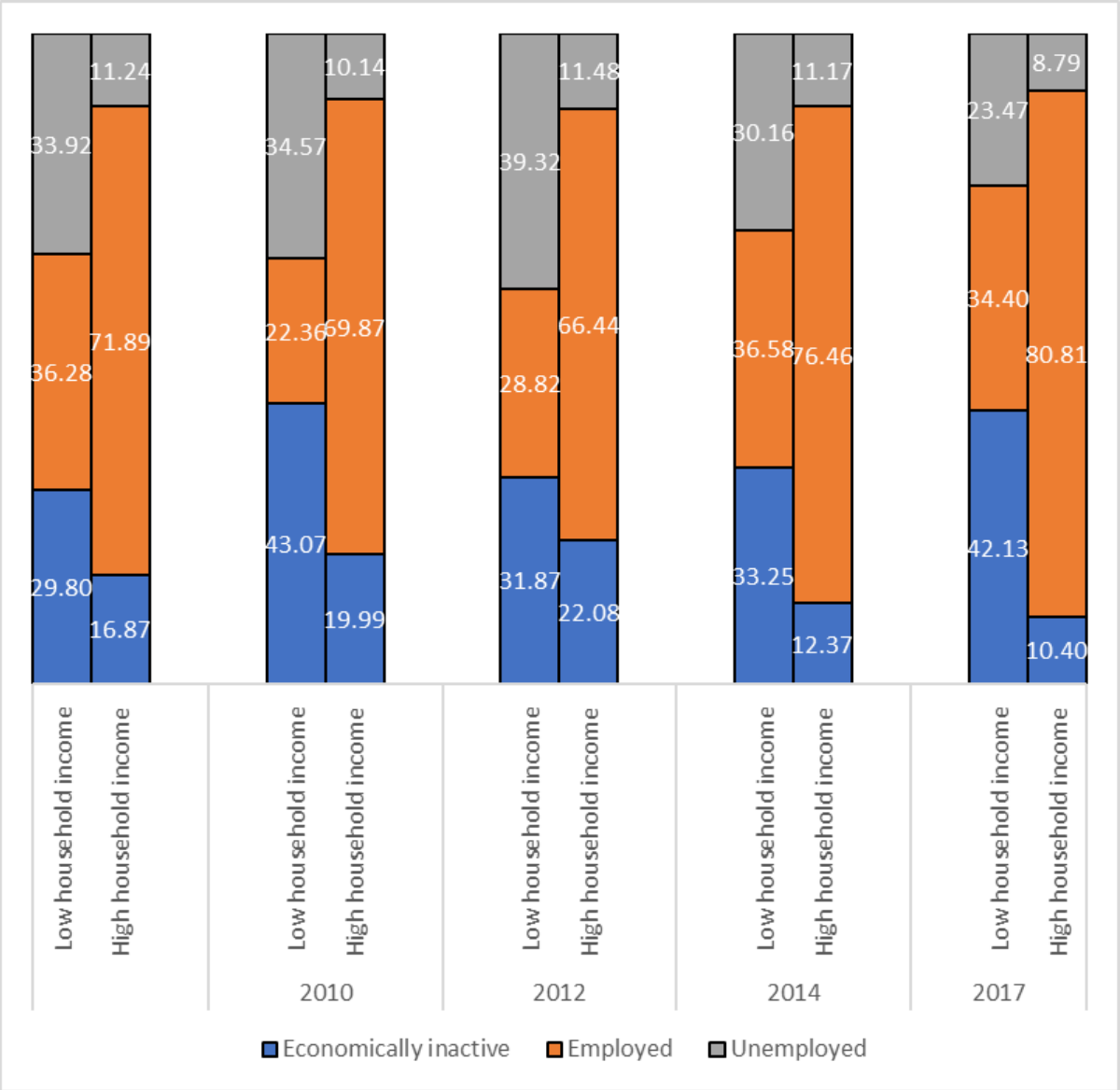
Source: Own calculations from the 2008 to 2017 NIDS
Notes: The data are weighted
The sample includes never-married mothers aged 15-49

Figure 19C: Educational levels of never-married mothers aged 15-49 of a high household income level, 2008-2017



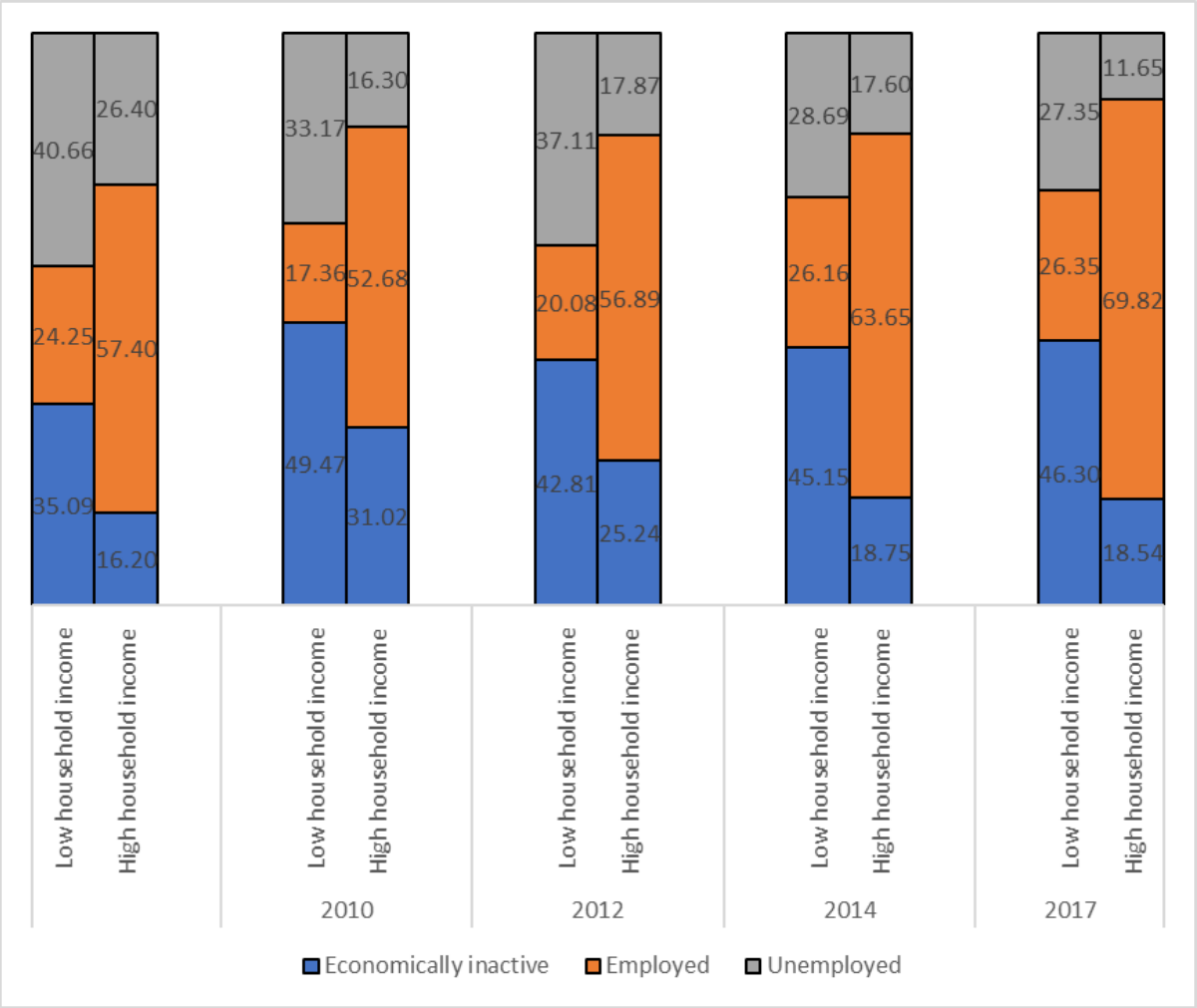
Source: Own calculations from the 2008 to 2017 NIDS
Notes: The data are weighted
The sample includes never-married mothers aged 15-49

Figure 20C: Employment status of never-married older mothers by household income level, 2008-2017



Source: Own calculations from the 2008 to 2017 NIDS
Notes: The data are weighted
The sample includes NMOMs

Figure 21C: Employment status of never-married mothers aged 15-49 by household income level, 2008-2017



Source: Own calculations from the 2008 to 2017 NIDS
Notes: The data are weighted
The sample includes never-married others aged 15-49

Appendix D

Table 1D: Logit estimations predicting the likelihood of being a never-married older mother for Black women, 2017

	I	II	III	IV	V
Age 35-39	0.785***	0.786***	0.843***	0.952***	0.894***
	(-0.181)	(0.180)	(0.185)	(0.189)	(0.254)
Age 40-44	1.014***	1.017***	1.016***	1.109***	0.946***
	(-0.18)	(0.179)	(0.188)	(0.192)	(0.251)
Age 45-49	0.367	0.392**	0.366*	0.472**	0.436*
	(-0.198)	(0.197)	(0.209)	(0.213)	(0.263)
Traditional areas		0.003	-0.255	-0.363**	-0.492**
		(0.156)	(0.162)	(0.172)	(0.226)
Farm areas		-0.313	-0.374	-0.337	-0.508
		(0.296)	(0.299)	(0.299)	(0.419)
Western Cape		-0.127	-0.144	0.032	-0.164
		(0.333)	(0.351)	(0.370)	(0.458)
Eastern Cape		-0.402*	-0.519**	-0.397*	-0.722**
		(0.212)	(0.213)	(0.223)	(0.290)
Northern Cape		-0.268	-0.238	-0.040	-0.204
		(0.273)	(0.272)	(0.288)	(0.381)
Free-State		-0.308	-0.275	-0.068	-0.226
		(0.288)	(0.300)	(0.310)	(0.397)
North West		-0.176	-0.132	0.243	0.111
		(0.213)	(0.209)	(0.217)	(0.290)
Gauteng		-0.528**	-0.493**	-0.317	-0.527*
		(0.242)	(0.246)	(0.259)	(0.307)
Mpumalanga		-0.078	-0.037	0.123	-0.209
		(0.220)	(0.222)	(0.233)	(0.298)
Limpopo		-0.085	-0.040	0.217	-0.074
		(0.205)	(0.204)	(0.214)	(0.302)
Some/completed primary school			0.536*	0.611**	0.610
			(0.307)	(0.312)	(0.395)
Some/completed secondary school			0.543**	0.562**	0.716**
			(0.272)	(0.277)	(0.357)
Tertiary education			0.628**	0.561*	0.745*
			(0.303)	(0.309)	(0.417)
Economically inactive			-0.270*	-0.175	-0.294
			(0.144)	(0.151)	(0.194)
Unemployed			-0.321*	-0.221	-0.494*
			(0.181)	(0.186)	(0.260)
log per capita total monthly household income			-0.521***	-0.348***	-0.396***
			(0.086)	(0.093)	(0.116)
Male-headed household				-1.354***	-1.595***
				(0.197)	(0.265)
Household size				0.081***	0.070**
				(0.020)	(0.032)
Mother has no tertiary education					0.004

					(0.555)
Religious activities are important					-0.212
					(0.463)
Christian					-0.677*
					(0.402)
Jewish					0.615
					(0.953)
Muslim					--
Hindu					--
Black traditional spiritual beliefs					-0.501
					(0.496)
Constant	-2.096***	-1.858***	1.571**	-0.039	1.352
	(0.131)	(0.226)	(0.630)	(0.718)	(1.185)
F stat	11.9	3.83	4.72	7.97	4.89
Prob > F	0.000	0.000	0.000	0.000	0.000
N	7762403	6206273	6065565	5987103	4224532

Source: Own calculations from the 2017 NIDS
Notes: The data are weighted
Standard errors in parenthesis
Significance levels: *** p<0.01, ** p<0.05, * p<0.1
The omitted categories are: 30-34, Urban areas, KwaZulu-Natal, no education, employed, female-headed household, mother has tertiary education, religious activities are not important and no religion

Table 2D: Logit estimations predicting the likelihood of being a never-married older mother for Black women, 2017

	I	II	III	IV
Age 35-39	0.745***	0.760***	0.746***	0.755***
	(0.128)	(0.128)	(0.130)	(0.133)
Age 40-44	0.739***	0.757***	0.720***	0.696***
	(0.131)	(0.132)	(0.134)	(0.137)
Age 45-49	0.888***	0.906***	0.878***	0.798***
	(0.132)	(0.133)	(0.138)	(0.141)
Traditional areas		-0.112	-0.294***	-0.392***
		(0.108)	(0.113)	(0.119)
Farm areas		0.117	-0.003	0.090
		(0.228)	(0.233)	(0.236)
Western Cape		-0.323	-0.147	0.102
		(0.224)	(0.227)	(0.233)
Eastern Cape		-0.029	-0.012	0.018
		(0.148)	(0.151)	(0.155)
Northern Cape		-0.000	0.094	0.236
		(0.243)	(0.245)	(0.252)
Free-State		-0.648***	-0.703***	-0.487**
		(0.223)	(0.230)	(0.238)
North West		0.125	0.133	0.329*
		(0.172)	(0.178)	(0.185)
Gauteng		-0.484***	-0.431***	-0.209
		(0.139)	(0.142)	(0.148)
Mpumalanga		-0.369**	-0.361**	-0.132
		(0.178)	(0.182)	(0.190)
Limpopo		-0.250	-0.302*	-0.157
		(0.164)	(0.167)	(0.172)
Some/completed primary school			0.200	0.251
			(0.266)	(0.269)
Some/completed secondary school			0.131	0.144
			(0.252)	(0.254)
Tertiary education			0.366	0.416
			(0.282)	(0.285)
Economically inactive			-0.202	-0.091
			(0.125)	(0.131)
Unemployed			-0.247**	-0.094
			(0.106)	(0.112)
log per capita total monthly household income			-0.470***	-0.353***
			(0.049)	(0.059)
Male-headed household				-1.857***
				(0.146)
Household size				0.030*
				(0.016)
Constant	-3.051***	-2.802***	0.333	-0.249
	(0.101)	(0.134)	(0.432)	(0.531)
F stat	17.38	6.00	8.08	15.16
Prob > F	0.000	0.000	0.000	0.000
N	6266097	6266097	6087220	6087220

Source: Own calculations from the 2017 GHS
Notes: The data are weighted
Standard errors in parenthesis
Significance levels: *** p<0.01, ** p<0.05, * p<0.1
The omitted categories are: 30-34, Urban areas, KwaZulu-Natal, no education, employed, female-headed household, mother has tertiary education, religious activities are not important and no religion

Table 3D: Logit estimations predicting the likelihood of being a never-married older mother, 2017

	I	II	III	IV
Age 35-39	0.739***	0.753***	0.741***	0.749***
	(0.125)	(0.125)	(0.127)	(0.130)
Age 40-44	0.744***	0.760***	0.722***	0.692***
	(0.128)	(0.128)	(0.131)	(0.133)
Age 45-49	0.917***	0.935***	0.911***	0.829***
	(0.128)	(0.129)	(0.133)	(0.136)
Coloured	-0.678***	-0.691***	-0.602***	-0.529**
	(0.172)	(0.206)	(0.215)	(0.220)
Indian	--	--	--	--
White	-3.776***	-3.723***	-3.131***	-2.846***
	(0.776)	(0.774)	(0.783)	(0.784)
Traditional areas		-0.090	-0.273**	-0.360***
		(0.107)	(0.112)	(0.119)
Farm areas		0.166	0.043	0.177
		(0.214)	(0.218)	(0.225)
Western Cape		-0.272	-0.118	0.129
		(0.197)	(0.203)	(0.209)
Eastern Cape		-0.044	-0.023	0.009
		(0.147)	(0.149)	(0.153)
Northern cape		-0.046	-0.004	0.133
		(0.219)	(0.224)	(0.229)
Free-State		-0.646***	-0.704***	-0.492**
		(0.222)	(0.229)	(0.236)
North West		0.138	0.149	0.341*
		(0.171)	(0.177)	(0.184)
Gauteng		-0.438***	-0.385***	-0.165
		(0.138)	(0.141)	(0.147)
Mpumalanga		-0.365**	-0.361**	-0.136
		(0.178)	(0.182)	(0.190)
Limpopo		-0.241	-0.292*	-0.155
		(0.163)	(0.166)	(0.172)
Some/completed primary school			0.276	0.327
			(0.262)	(0.265)
Some/completed secondary school			0.180	0.196
			(0.250)	(0.251)
Tertiary education			0.407	0.463*
			(0.279)	(0.281)
Economically inactive			-0.183	-0.071
			(0.121)	(0.127)
Unemployed			-0.273***	-0.121
			(0.103)	(0.108)
log per capita total monthly household income			-0.479***	-0.361***
			(0.048)	(0.058)
Male-headed household				-1.863***
				(0.140)
Household size				0.026*

				(0.015)
Constant	-3.057***	-2.831***	0.315	-0.252
	(0.099)	(0.133)	(0.424)	(0.518)
F stat	18.56	7.64	9.83	16.58
Prob > F	0.000	0.000	0.000	0.000
N	7601090	7601090	7368372	7368372

Source: Own calculations from the 2017 GHS

Notes: The data are weighted

Standard errors in parenthesis

Significance levels: *** p<0.01, ** p<0.05, * p<0.1

The omitted categories are: 30-34, Black, Urban areas, KwaZulu-Natal, no education, employed, female-headed household, mother has tertiary education, religious activities are not important and no religion

Table 4D: Logit estimations predicting the likelihood of being an older mother, 2017

	I	II	III	IV
Age 35-39	1.125***	1.128***	1.129***	1.140***
	(0.070)	(0.070)	(0.072)	(0.072)
Age 40-44	1.280***	1.281***	1.293***	1.305***
	(0.072)	(0.072)	(0.075)	(0.075)
Age 45-49	1.362***	1.360***	1.403***	1.399***
	(0.075)	(0.075)	(0.079)	(0.080)
Coloured	-0.199**	-0.169*	-0.145	-0.208*
	(0.085)	(0.102)	(0.107)	(0.108)
Indian	-0.688***	-0.503**	-0.322	-0.311
	(0.193)	(0.198)	(0.206)	(0.204)
White	-0.593***	-0.521***	-0.329***	-0.366***
	(0.103)	(0.106)	(0.119)	(0.119)
Cohabiting	-0.358***	-0.328***	-0.361***	-0.300***
	(0.074)	(0.074)	(0.077)	(0.077)
Widow	-0.845***	-0.842***	-0.943***	-0.976***
	(0.130)	(0.129)	(0.136)	(0.142)
Divorced	-0.467***	-0.491***	-0.620***	-0.630***
	(0.119)	(0.119)	(0.123)	(0.129)
Never married	-1.379***	-1.365***	-1.480***	-1.574***
	(0.058)	(0.058)	(0.062)	(0.073)
Traditional areas		0.212***	0.004	-0.064
		(0.068)	(0.071)	(0.073)
Farm areas		0.051	-0.016	-0.002
		(0.139)	(0.142)	(0.141)
Western Cape		0.231**	0.322***	0.379***
		(0.113)	(0.117)	(0.119)
Eastern Cape		0.254***	0.222**	0.288***
		(0.096)	(0.098)	(0.100)
Northern Cape		0.291**	0.287**	0.355**
		(0.134)	(0.137)	(0.139)
Free-State		0.228*	0.180	0.287**
		(0.120)	(0.123)	(0.124)
North West		0.411***	0.376***	0.480***
		(0.117)	(0.119)	(0.120)
Gauteng		0.146*	0.167*	0.236***
		(0.088)	(0.090)	(0.091)
Mpumalanga		0.230**	0.256**	0.356***
		(0.105)	(0.108)	(0.109)
Limpopo		0.273***	0.186*	0.304***
		(0.098)	(0.100)	(0.102)
Some/completed primary school			-0.063	-0.050
			(0.173)	(0.174)
Some/completed secondary school			0.012	0.020
			(0.161)	(0.162)
Tertiary education			0.564***	0.547***
			(0.177)	(0.178)
Economically inactive			-0.173**	-0.189**

			(0.077)	(0.077)
Unemployed			0.162***	0.139**
			(0.063)	(0.063)
log per capita total monthly household income			-0.379***	-0.297***
			(0.031)	(0.033)
Male-headed household				-0.100
				(0.066)
Household size				0.085***
				(0.011)
Constant	-0.857***	-1.123***	1.479***	0.531
	(0.063)	(0.096)	(0.291)	(0.325)
F stat	107.08	55.17	45.02	42.96
Prob > F	0.000	0.000	0.000	0.000
N	7818573	7818573	7572182	7572182

Source: Own calculations from the 2017 GHS

Notes: The data are weighted

Standard errors in parenthesis

Significance levels: *** p<0.01, ** p<0.05, * p<0.1

The omitted categories are: age 30-34, Black, married, Urban areas, KwaZulu-Natal, no education, employed, female-headed household, mother has tertiary education, religious activities are not important and no religion

Table 5D: Logit estimation predicting the likelihood of being a never-married mother aged 15-49, 2017

	I	II	III	IV
Age 35-39	-0.194***	-0.179***	-0.208***	-0.313***
	(0.066)	(0.066)	(0.067)	(0.074)
Age 40-44	-0.326***	-0.302***	-0.354***	-0.528***
	(0.070)	(0.070)	(0.072)	(0.077)
Age 45-49	-0.363***	-0.328***	-0.402***	-0.635***
	(0.073)	(0.074)	(0.077)	(0.085)
Coloured	-0.813***	-0.889***	-0.847***	-0.730***
	(0.100)	(0.118)	(0.119)	(0.125)
Indian	-2.484***	-2.830***	-2.575***	-2.228***
	(0.509)	(0.523)	(0.526)	(0.539)
White	-1.883***	-1.923***	-1.759***	-1.526***
	(0.180)	(0.182)	(0.188)	(0.194)
Traditional areas		-0.453***	-0.422***	-0.549***
		(0.068)	(0.071)	(0.081)
Farm areas		-0.116	-0.158	-0.016
		(0.134)	(0.138)	(0.149)
Western Cape		-0.526***	-0.525***	-0.409***
		(0.118)	(0.119)	(0.127)
Eastern Cape		-0.297***	-0.265***	-0.362***
		(0.091)	(0.093)	(0.101)
Northern Cape		-0.428***	-0.430***	-0.445***
		(0.142)	(0.145)	(0.153)
Free-State		-1.015***	-0.979***	-1.091***
		(0.126)	(0.127)	(0.139)
North West		-0.404***	-0.388***	-0.358***
		(0.115)	(0.118)	(0.136)
Gauteng		-0.655***	-0.643***	-0.562***
		(0.083)	(0.085)	(0.095)
Mpumalanga		-0.439***	-0.478***	-0.410***
		(0.103)	(0.105)	(0.117)
Limpopo		-0.556***	-0.562***	-0.664***
		(0.100)	(0.103)	(0.113)
Some/completed primary school			0.097	0.155
			(0.182)	(0.193)
Some/completed secondary school			-0.032	0.019
			(0.170)	(0.179)
Tertiary education			-0.080	0.021
			(0.186)	(0.195)
Economically inactive			-0.257***	-0.057
			(0.075)	(0.085)
Unemployed			-0.552***	-0.306***
			(0.066)	(0.075)
log per capita total monthly household income			-0.133***	-0.127***
			(0.031)	(0.037)
Male-headed household				-2.065***
				(0.075)
Household size				-0.104***

				(0.015)
Constant	-0.796***	-0.233***	0.908***	2.052***
	(0.044)	(0.074)	(0.281)	(0.348)
F stat	38.43	20.73	17.57	47.8
Prob > F	0.000	0.000	0.000	0.000
N	7818573	7818573	7572182	7572182

Source: Own calculations from the 2017 NIDS

Notes: The data are weighted

Standard errors in parenthesis

Significance levels: *** p<0.01, ** p<0.05, * p<0.1

The omitted categories are: age 30-34, Black, Urban areas, KwaZulu-Natal, no education, employed, female-headed household, mother has tertiary education, religious activities are not important and no religion