FACTORS INFLUENCING THE PATTERNS OF DOMINANCE IN DECISION-MAKING FOR THE USE OF FERTILITY CONTROL: EVIDENCE FROM THE 1998 SADHS

By

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Abstract

Factors influencing the patterns of dominance in decision-making for the use of fertility control: evidence from the 1998 SADHS

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Context: Although over half of married South African women of reproductive age (15-49 years) use a method of fertility control, 15 percent of them have an unmet need for family planning. Women's unmet need for family planning is often attributed to traditional norms ascribing decision-making power to men. However, rural-urban migration, exposure to western style education; constitutional guarantee of gender equity and exposure to outside influences via the internet and mass media make such an assumption untenable in contemporary society.

Method: Using logistic regression, eight models are separately fitted for the independent variables related to the background and socio-economic characteristics of the woman; the characteristics of the husband; their comparative characteristics; sexual and reproductive factors; sources of information and communication; reproductive as well as HIV/AIDS knowledge and attitudes. The final model, using backward stepwise analysis, estimates the effects of the factors associated with a joint or a male vs. a female pattern of dominance in decision-making about using fertility control.

Results: The final model shows that joint decision-making is positively correlated with fifth or higher birth order, being raised in a town, living in a household in the middle wealth quintile, having between four and five children; using fertility control to limit births getting a lot of information about HIV/AIDS from the husband, spousal discussions about family planning and not knowing whether good nutrition stops HIV transmission. Male dominance is positively associated with having only one union, having the same amount of education as the husband or not knowing how much education he has, spousal communication about family planning, first marriage occurring 5-19 years ago, not knowing if the condom was used at last intercourse, knowing that condoms are used for family planning only, not getting information about family planning from posters and irregular exposure to the radio.

Conclusions: In the era of the HIV/AIDS pandemic and emphasis on the reproductive health approach in family planning, there is a need for studies, at the local level, that include both individuals in the relationship. Qualitative studies focusing on the nature, context and content of couple communication about sexuality and reproduction can provide important information about gender relationships in the South African context. There is also a need to understand the effect of gender and community norms on sexual and reproductive decision-making. Studies on HIV discordant couples can provide important information on the impact of the epidemic on sexual and reproductive decision-making. Studies focusing on family formation can provide information on the impact of social change on intergenerational and gender relationships as well as trends in reproductive attitudes and behaviours in transitional South African society.

Key words: Patterns of dominance, joint decision-making, female dominance, male dominance, socio-economic, sexual and reproductive, knowledge and attitudes, information and communication, bivariate analysis, logistic regression.

Declaration

I declare that “Factors influencing the patterns of dominance in decision-making for the use of fertility control: Evidence from the 1998 SADHS” is my own work and that all sources that I have used or quoted have been indicated and acknowledged by means of completed references.

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(Ms. Christine Glover- Walton) Date

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Chapter 1

Introduction

1.1. Background to the study

In 1996, the population of South Africa was estimated to be 40,583,573, of which 31,127,631 (76.8%) were recorded as being Black (Statistics South Africa {SSA}, 1998). The census survey conducted in 2001 reports a figure of 44,819,778 people in South Africa. By the year 2001, 79 percent (35,416,166) of the population was recorded as Black (SSA 2004). Currently, almost 80 percent of the 47.4 million people living in South Africa are Black (SSA, 2006).[1]

Prior to the 1996 census enumeration - which was conducted two years after the first democratic election - no comprehensive set of population statistics existed for all four racial groups in the republic. This is largely due to a prolonged history of racial segregation and inequality in South Africa. Until the last decade of the twentieth century, there was a virtual paucity of demographic information on Black South Africans - to such an extent that whatever data existed were, generally, incomplete and unsatisfactory (Makiwane, 1998; SADHS, 2002; Moultrie & Timæus, 2002).

Nonetheless, in the last two decades of the twentieth century, researchers have found evidence of falling birth rates and increased prevalence in the use of modern methods of fertility control in the sub-Saharan African region (Caldwell et al, 1992; Chimera-Dan, 1996; Kaufman, 1997; Bledsoe et al, 1998; Makiwane, 1998; Westoff & Bankole, 2000). In Western Europe, the transition began with women in older groups having fewer children (Theunissen, 2002). In South Africa, and other sub-Sahara African societies, fertility is declining among women, who are of reproductive age (15-49 years), in all age groups.

Empirical evidence for the beginning of a sub-Saharan African demographic transition is most noticeable in southern African countries, where the total fertility rate (TFRs) is less than five children per woman (see Appendix 1, Table 1). This is most pronounced in South Africa, where fertility transition began as early as the 1960s (Moultrie & Timæus, 2002). Prevalence of the use of contraception is also higher in

[1] The Mid-year population estimate released by SSA in August 2006. The United Nation's estimate is 5.5 millions.

South Africa than in most other countries in the region (see Appendix1, Table 2).[2] Moultrie and Timæus (2002) found a longer interval between births among South African women than that of women in other countries. The lengthening of the birth interval from (30 to 50 months) is a significant factor in fertility decline among all racial groups in the society.

There is evidence of four separate fertility transitions in South Africa, which are associated with the four racial groups in the society. Fertility rates are higher among Blacks than among members of other racial groups. Factors such as the persistence of culturally-prescribed fertility and gender-related norms among Blacks favouring a large number of children, as well as lower levels of educational and occupational opportunities (related to various pieces of legislation in the apartheid state, which denied Blacks full economic and social participation in society), assist in explaining the higher rate of fertility among Black South African women.

Secondary data analyses, using information from the 1970 and 1996 censuses, as well as the 1998 South African Demographic and Health Survey (SADHS), found that, nationally, birth rates declined by half to 3.2 children per woman, and to 3.5 children per Black woman (Moultrie & Timæus, 2002). Between 2001 and 2006, national fertility rates fell from 2.92 to 2.73; among Blacks, the rate declined from 3.10 to 2.92 (SSA, 2006a).

Although longer intervals between births have contributed to lowering the fertility rates in South Africa, the availability and accessibility of modern methods of contraception (i.e., fertility or birth control) through state-subsidised family planning clinics (since 1963) helps to explain why fertility is relatively lower in South Africa than in the other mainland sub-Saharan African countries.

Studies conducted in the Eastern Cape Province of South Africa (Chimere-Dan, 1996; Makiwane, 1998), one of the poorest provinces, found that as many as 60 percent of Black women have ever used birth control.

[2] I.e. except in the Seychelles and Mauritius where the majority of the population can be characterised as Creole. Bongaarts & Watkins (1996, p.653) for example point out that the fertility transition in Mauritius "would fit well in the Asian region, to which it is culturally closer than to sub-Saharan Africa. The extent to which the reproductive regime of a Creole society is influenced more by the culture of one society than another (others) calls for a comparison between it and the cultures from which it emerged.

Among all sexually active South African women participating in the 1998 SADHS, the current use of contraception is highest among those between the ages of 15 and 24 years (66.4% - 68.6%) and lowest among those between the ages of 45 and 49 years (45.5%). Among non-pregnant, non-amenorrheic fecund Black women who have ever had sex (N=4477), the proportion using fertility control is significantly higher among those between 15 and 24 years than among those in older age groups (53%-69.9%).[3,4]The 1998 SADHS researchers found that, nationally, "over 80 percent of married women between the ages of 20 and 55 years have used a method of contraception" (SADHS, 2002, p.44). Approximately 62 percent of all South African women currently use some method of birth control (SADHS, 2002). Approximately 80 (79.7) percent of the women in this study have ever used some type of fertility control.[5]

Although 57.6 percent of sexually active Black South African women participating in the 1998 SADHS use fertility control, the majority of them do not begin to use contraception until after the birth of their first child (Makiwane, 1998; SADHS, 2002; Moultrie & Timæus, 2002; Theunissen, 2002). Among all Black South African women, the median age of sexual debut is 17.9 years, while the median age of the first use of a method of fertility control is 19.6 years. Researchers have found that approximately 30 percent of South African women become pregnant while they are still teenagers (SADHS, 2002, Rutenberg et al 2003). The cultural emphasis on demonstrated proof of the ability to procreate is a primary reason for early childbearing among Black South African women (Makiwane, 1998). Preston-Whyte et al (1990, p. 11) point out that: "Teen pregnancy is so prevalent [among Blacks] … that it has virtually been institutionalized".

Although efforts of family planning programmes in South Africa have been fairly successful - as is evident by the fact that only 9.7 percent of all South African women of reproductive age have an unmet need for family planning (SADHS, 2002) - there are still differences in unmet needs for family planning according to racial

[3] 80.7% of those 15-24 years, 69.9% of those 25 - 29 years, 66.7% of those 30 - 34 years, 64.2% of those 35 - 39 years, 60.5% of those 40 - 44 years and 53% of those 45 - 49 years currently use a method of fertility control.

[4] Nonetheless, among Black women who have ever had sex, the proportion who ever used birth control is lower among those between 15 and 24 years (79.7%) than among those between 25 and 29 years (88.8%), 30 and 34 years (86.5%), 35 and 39 years (83.8%) or 40 and 44 years (77.0%). Only 67.5% of those between 45 and 49 years have ever used any type of fertility control.

[5] Author's calculation from the 1998 SADHS data set.

group identification. The unmet need of Black women (18.3%) is higher than that among those who are Coloured (8.4%), Asian/Indian (5.7%) or White (4.6%). Furthermore, the unmet need for family planning among Black women living in non-urban areas is far greater than that among their urban counterparts (22.3% vs. 14.2%, respectively).

Unmet need for family planning implies a gap between the desire to control fertility and the actual contraceptive behaviour of the woman (Westoff & Ochoa, 1991; Westoff & Bankole, 1995). A number of studies have found that barriers to contraception stem from various factors, such as low perception of pregnancy risk, service-related problems, lack of information about contraceptive technology, as well as method mix. Additional obstacles are as follows: concerns with side effects and the disapproval of significant others, such as parents, in-laws and sexual partners (Schuler et al, 1994; Schuler et al, 1995; Bongaarts & Bruce, 1995; Casterline et al, 1997).

Despite the fact that over half of Black South African women are using modern methods of birth control, the high rates of STIs in South Africa suggest that most of the contraceptive technologies in use are female-controlled. The condom, which is highly effective in preventing unwanted pregnancies and STIs, including the HIV, is a male-controlled method. However, for most Black South African women, the condom is not a method of choice. Although condom use is generally low, "[u]se of the condom as a first method is highest in the youngest age group" of women (SADHS, 2002, p.44). Only 3.1 percent of women in the oldest age cohort, and 9.3 percent of those in the youngest age cohort use the condom as the first method of birth control.

Social and cultural gender-related norms surrounding condom use place the woman at risk, not only for an unwanted pregnancy, but also for HIV-infection and perinatal HIV-transmission to an unborn child. People's attitude towards who is responsible for decision-making in a given domain influences whether or not fertility control - or a method such as the condoms – is used. Manzini (2002) found that most Black South African men and women believe that the woman should be responsible for deciding about contraception, and that the man should decide about condom use. The result of holding such opinions is demonstrated by the finding that, in KwaZulu-Natal, dual-method use is explained by the coincidence of the woman's attempt to prevent conception and the man's attempt to prevent STIs, and not because of couple communication and joint decision-making (Manzini, 2002).

Globally, the female-oriented nature of family planning minimises the participation of men in family planning. For example, although the condom is freely available at any government hospital clinic (as well as other distribution points, such as schools and offices) in South Africa, it is promoted mainly as a method for disease prevention, and not for pregnancy prevention at family planning clinics.

Among Black South Africans, traditional cultural gender-related norms and attitudes undermines the participation of men in reproductive decision-making. Luke (2003), for example, found that, in sub-Sahara Africa, adolescent females are able to negotiate with older partners over the status of the relationship but not about sexual intercourse or condom use. Several studies point to differences in ages between the woman and her partner as a possible reason for the woman's failure to negotiate contraceptive or condom use (Males & Chew, 1996; Dhlamini & Cameroon, 1997; Luke, 2003). Other researchers have found a relationship between a women's inability to negotiate condom use and a lack of self-efficacy in the relationship (Worth, 1989; et al, 1990; Osmond et al, 1993).

A number of studies have found that those who are sexually initiated at an early age (i.e. 16 years or younger) are less likely to negotiate contraception with partners than older women (Mosher & McNally, 1991; Mauldon & Luker, 1996; Abma et al, 1998; Eggleston et al, 1999; Ford et al, 2001; Manning et al, 2000; Manzini, 2001; Stone & Ingham, 2002; Svare et al, 2004). Women who are incapable of negotiating use of a method of fertility control with sexual partners at the time of sexual debut, generally, experience a sense of powerlessness in future relationships (Saewyc et al, 2004). Women who give birth at a relative young age seem less likely to be involved in decision-making for the use of fertility control. Glover-Walton (1995), for example, found that among low-income inner city women, in New York City, preference is given to a male-controlled method.

Over time, the proportion of South African women using contraception prior to the birth of the first child has increased. In the oldest cohort (45-49 years) 18 percent use birth control before the first child, compared to 52 percent in the youngest cohort (SADHS, 2002). Among the women participating in the 1998-SADHS, the proportion of women using fertility control before the age of 19 years is significantly higher

among those in the 20-24 year age bracket than among those in the 45 - 49 year age bracket (55% vs. 13%).[6]

Although there has been an increase in the proportion of Black South African women using birth control before giving birth to their first child, most are exposed to the risk of pregnancy at sexual debut, and remain so until after the birth of the first child. Among those between the ages of 25 and 49 years, the median age at sexual debut is 18 years. There are slight decreases in a Black woman's age at sexual debut, with medians of 18 to 18.4 years among those who are 35 to 49 years old, and medians of 17.6 to 17.8 years among those who are between 20 and 34 years old. [7]

Although there are variations in medians, a woman's age at the birth of her first child varies according to socio-economic factors, such as place and region of residence, age and education. The SADHS Final Report (2002) shows the following statistics: among women aged 40-44 and 45-49 years old, the median age at first birth is 21 years; among those aged 25-29, the median is 20.9 years; for those who are 30-34 years, the median is 20.2 years, and for those who are 35-39 years, it is 20.7 years.

Family size norms, as well as actual fertility, have also changed over time. Among older South African women (45-49 years), the average ideal number of children is 3.8, while among the youngest group of women (15-19 years), it is 2.2. In general, those who are 30 years or older, the average is 3 children compared to an average of 2.2 to 2.7 among women who are 29 years or younger (SADHS, 2002). The desire of younger women to have fewer children can be seen by the fact that 66.4 percent of those in the youngest age group currently use a method of birth control (SADHS, 2002, pp. 72-73).

Among Black South Africans, the emphasis on the individual's ability to demonstrate procreative ability, in addition to the community's support in providing assistance for out-of-wedlock births, are both barriers to contraceptive use and continuation thereof. The cultural emphasis on procreative ability is problematic not only because of early childbearing, but also because of the likelihood of perinatal HIV transmission. Rutenberg et al (2000, p. 124) state the following: "Whether women

[6] Here, the 1998 SADHS researchers exclude women between 15 and 19 years due to the limited number of women in this age category who have given birth.
[7] Author's calculation from the 1998 SADHS data set.

know (or suspect) they are infected with HIV or fear becoming infected through unprotected sexual intercourse with their partners, a pregnancy can affirm a woman's own health, or at least her capacity to bear a child". Many women of reproductive age (15-49 years) must, therefore, choose between becoming pregnant while being at risk of becoming infected with HIV, and the possibility of perinatally transmitting the virus to an unborn child.

Although use of modern methods of fertility control has effectively reduced birth rates in South Africa, the methods that are currently in use are ineffective in stopping the transmission of STIs, including HIV. HIV-infection is most prevalent among South Africans between the ages of 30 and 34 years (Dorrington et al, 2001). Approximately 5.2 million South Africans are known to be HIV infected (SSA, 2006a). Unlike the United States, and other developed countries, in South Africa, HIV/AIDS is not a notifiable disease; this makes it difficult to estimate the 'true' extent of the epidemic.

In South Africa, most of the available information on the HIV epidemic is acquired from seroprevalence surveys conducted by the Department of Health at antenatal clinics. Between 1990 and 2002, HIV infection among antenatal clinic attendees increased from 0.7 percent to 26.5 percent (Department of Health, 2003). In 2003, the national HIV-seroprevalence rate among female antenatal clinic attendees was 27.9 percent (Department of Health, 2004). In 2004, HIV prevalence among females of a reproductive age (15-49 years), attending public clinics in South Africa, was 29.5 percent (UNAIDS, 2006). A minimal increase in HIV-infection is indicated in the most recent surveillance report (Department of Health, 2006). It shows that, in 2005, the prevalence of HIV infection among female antenatal clinic attendees was 30.2 percent. Nonetheless, it is difficult to generalise about the prevalence of infection to other groups of individuals, as these rates are based on analyses of unlinked blood samples obtained from pregnant women at public clinics who agree to take the test.

A community-based survey, conducted by the Human Science Research Council (HSRC) in 2002, found an infection rate of 24 percent. Projection modelling on HIV antenatal surveys, conducted by the Actuarial Society of South Africa (ASSA) estimated a national rate of 12 percent in 2002. The UNAIDS Report on the Global AIDS Epidemic (2006) estimated that, in 2005, the national prevalence was 18.6 percent. The 2006 mid-year population estimate is 11 percent (SSA, 2006a). Black

women aged 20-24 (29% - 32%) and 25-29 (37.7% - 41%) have the highest HIV prevalence rates (Department of Health, 2006).

Despite the risk of perinatal HIV-transmission - in addition to AIDS-related morbidity and mortality - individual strategies to prevent HIV/AIDS are minimal. The 1998-SADHS researchers found that 96.7 percent of women surveyed are aware of the route of HIV infection, but only 2.3 percent of them use the condom as a method of fertility control. It is, however, evident that condom use is increasing among sexually active South Africans. In 1998, Makiwane found that only one percent of Black women in the Eastern Cape used the condom as a method of fertility control. In a subsequent study (Glover-Walton, 2001a), conducted among a small sample Cape (N=64), of clinic attendees in the Eastern, approximately 7.8 percent of them report always using the condom with their main sexual partners. Shisana et al (2005) found that, nationally, 13 percent of sexually active South African women, aged between 15 and 49, use the condom as a method of birth control. This increase is attributed to a growing awareness of the ill effects of HIV/AIDS, and to the free availability of condoms at public hospital clinics and other distribution points.

The HIV/AIDS pandemic is of particular interest because of the financial burden it poses to private and public institutions, as well as its detrimental effects on reproductive and child health. The long-term consequences of the pandemic on growth and development of a country's population is of great concern. Large proportions of South Africa's labour force are living with HIV. Glover-Walton and Smith (2002) found that 46.5 percent of workers on a coalmine, who volunteered to be tested, were HIV-positive. A 2001-2002 survey, conducted by the International Labour Organisation (ILO, 2004) among South Africa's mine workers (N=28,509) in 26 firms, found that between 15 and 16.1 percent of the workers (average 15) were HIV positive. According to this study, approximately one-fifth of South Africa's agricultural sector will diminish by 2020, due to the epidemic. Decreases in population growth, as well as increases in HIV/AIDS-related morbidity and mortality are expected, with women and children most adversely affected (UN Population Division, 2003; ILO 2004).

1.2. Research problem

In South Africa, large proportions of family planning and antenatal clinic attendees have contracted at least one sexually transmitted infection (Wilkinson et al, 1998;

Wilkinson et al, 1999; Pham-Kanter et al, 1999). One study found that 27 percent of women attending antenatal clinics had contracted an STI, and 10 percent had been infected multiple times (Wilkinson et al, 1999). According to the researchers, half of these cases are symptomatic. For physiological reasons, women are often unaware of a STI, which often has a negative impact on reproductive health. It is a well-known fact that a history of STIs is a co-factor in the HIV/AIDS pandemic.

The high rates of unprotected sex, contraceptive discontinuance and pregnancies among Black South African women are of special concern, because of the burden of financial costs to parents, relatives, and/or the state. The Labour Force Survey, conducted in 2005, found that the overall rate of unemployment in South Africa is 26.7 percent. The highest rate is among Black South Africans (31.5%): the estimated rate of unemployment among Black South African women is 37.1 percent, compared to a 26.6 percent rate among their male counterparts (Labour Force Survey, 2005).

Due to the high rate of unemployment in the country, individuals entering the commercial sex industry (for economic survival) and their clients (as well as the clients' families) are at an increased risk of contracting STIs, including HIV. Adult and infant HIV/AIDS-related morbidity and mortality rates are on the increase. AIDS-related illnesses are one of the leading causes of deaths among Black South African women of reproductive age. HIV/AIDS-related illnesses were the tenth highest underlying cause of deaths among Black South Africans in 2003; in 2004 they were the seventh highest (SSA, 2006a).

The pandemic appears to be reversing demographic trends witnessed during the last decades of the previous century. It is estimated that "[b]y the year 2010, the child mortality rate in South Africa will be more than twice as high as it would have been without AIDS..." and that life expectancy is 20 years shorter than it would have been without the epidemic (US Census Bureau 1999, p. 59).

Use of the female condom and microbicides (relatively recent developments in contraceptive technology) may help stem the spread of disease, and may also contribute to an increase in couple communication and joint decision-making about contraceptive method use. Studies have found that the female condom is no less effective than the male condom in preventing pregnancy and STIs (Trussell, 1998; Hoffman et al, 2004; Masters & Everett, 2004). However, in 2002, the South African government provided only one million female condoms at selected distribution points,

as oppose to two hundred and twenty million male condoms (Garbus, 2002). This discrepancy is probably due to the fact that the condom is, generally, perceived more as a method of preventing transmission of diseases, rather than pregnancy.

1.3. Factors influencing use of and the decision about using fertility control

The literature points to a variety of factors that influence the decision about using fertility control. Noone (2000, 2002) classifies these factors as follows: individual or personal characteristics of the woman, the characteristics of her sexual partner, the dynamics (or context) of the relationship, and external factors.

Personal characteristics refer to the demographic, socio-economic (including living environment) and attitudinal factors associated with the woman. The characteristics of the partner include the demographic, socio-economic and attitudinal characteristics of the partner (spouse, husband, main or steady partner). Relationship dynamics (context of the relationship) refer to the type, nature and the duration of the relationship, as well as demographic, socio-economic and attitudinal differences or similarities between the couple. External influences refer to various factors, such as: the media, family planning and HIV/AIDS-related factors.

Although all of these factors are considered in this study, broadly speaking, they are classified as follows: (1) Background and socio-economic characteristics of the woman, (2) Partner-related characteristics, (3) Household characteristics, (4) Sexual and reproductive characteristics, (5) Sources of information and communication and (6) Attitude and knowledge. [8]

Before and during the Apartheid rule, population policy in South Africa was primarily concerned with controlling non-Whites: indirectly, through land - and labour-related legislation, or, directly, through the provision of contraceptive services. Consistent with the United Nations Programme of Action - adopted at the 1994 Conference on Population Development, in Cairo - the emphasis in the family planning policy in South Africa has shifted from simply reducing births to reproductive health. The current emphasis is on provision of adequate information and gender equality. The shift from birth reduction to reproductive health includes the early identification and treatment of STIs, including HIV. The new approach in family planning also seeks to involve men in reproductive health decision-making.

[8] These are discussed in Chapter 4, the methods section.

The 1996-Choice of Termination of Pregnancy Act, the 1998-Sterilisation Act, as well as free access of condoms at distribution points, are all efforts by the South African government to "empower people to make informed choices about sexual relations, pregnancy and childbearing" (SADHS, 2002, p. 3). Realisation of these goals would, therefore, not only mean a sharp reduction in the rate of new cases of HIV infection, but also a lack of unmet need for family planning and joint agreement about fertility control. The goals of the reproductive health approach in family planning are realisable only to the extent to which barriers to family planning are removed. In order to bring about the desired goals, programmes should implement effective strategies, based on information about the factors underlying the decision to use - or not use - methods of fertility control.

Given the early ages at sexual initiation and first birth among Black South African women, a very low rate of condom use and the high rate of contraceptive discontinuance (in addition to high rates of STIs, including HIV), identifying the factors influencing the patterns of dominance in contraceptive decision-making among Black South African women is of utmost importance. This study, therefore, evaluates the factors influencing the patterns of dominance in decision-making for the use of fertility control among married Black South African women of reproductive age (15 to 49 years). Such knowledge and information will assist family planning programme personnel, as well as policy makers, to design and implement educational and informational programmes suitable for given groups (and sub-groups) of individuals.

This study investigates the ways in which the socio-economic characteristics of the woman and her husband, the sexual and reproductive factors, the sources of information, as well as reproductive and HIV/AIDS-related attitudes and knowledge, affect the patterns of dominance in contraceptive decision-making among currently married Black South African women of reproductive age.

1.4. Specific objectives of this study

The specific objectives of this study are as follows: firstly, to separately fit models into variables associated with the background and socio-economic characteristics of the woman, the characteristics of the husband, husband-wife's comparative characteristics, sexual and reproductive factors, exposure to sources of information and communication (RE: family planning and HIV/AIDS), reproductive knowledge and attitudes and HIV/AIDS knowledge and attitudes. Each of them identifies which

variables are significantly associated with a male versus a female; with a joint versus a female one, or other versus a female pattern of dominance in decision-making for the use of fertility control among currently married Black South African women of reproductive age (15-49 years). Secondly, this study constructs a parsimonious model identifying the variables that are associated with a joint versus a female or a male versus a female pattern of dominance in decision-making for the use of fertility control among the study's participants.

Chapter 2

Literature review

2. Introduction

This chapter examines some of the factors affecting a woman's use of, and the pattern of decision-making about, contraception, which are relevant to the study. The first part of the review (2.1) discusses the context in which sexual initiation takes place and the timing of the first use of a method of fertility control is discussed in the next section (2.2). The effects of the background and socio-economic characteristics of the women are discussed in the second part (2.3). The impact of partner-related factors on contraceptive behaviour and outcome is discussed in part (2.4) of the review. The fifth (2.5) part of the review looks at the effects of the characteristics of the household (living arrangements) on the dependent variable. In the next section (2.6), the role of the man in the use of and the decision about using fertility control is discussed. The sixth part of the review (2.7) focuses on the role of external factors in the use of and patterns of dominance in decision-making about the use of fertility control. The summary of the review of the literature is in the seventh (2.8) and final part of the review.

2.1. Sexual initiation

Although contraception is freely available at government-run hospital clinics and other service points, many Black South African women do not use birth control at the time of sexual debut. Jewkes et al (2001) found that less than one-fifth of the women in their study used birth control at the time of their sexual debut. Manzini (2001) found that, in KwaZulu-Natal, one-fifth or fewer (14.1% to 20.2%) of women in the youngest age groups used a method of birth control at sexual debut, compared with approximately 48 percent of those in the 18 years or older age group.

Information from the South African Demographic and Health Survey (SADHS) Final Report shows that, nationally, the age of sexual debut has declined by, approximately, one year for women who are currently between the ages of 20 and 49 years. For Black women of the same ages, it is less pronounced (0.4-0.7 years). Among all South African women, the median age at sexual debut drops from between

18.1 and 18.7 years (for those who are 25-49 years old) to 17.8 years (for those who are between 20 and 24 years). The median age at sexual initiation is between 17.6 and 17.8 for Black women who are between 20 and 34 years old, and between 18.0 and 18.5 for those 35 to 49 years old (SADHS, 2002).

The context and circumstances of a young woman's first sexual experience is thought to affect subsequent contraceptive attitudes and behaviours (Coker & Richter 1998; Adih & Alexander, 1999; Gueye et al, 2002; Svare, Krüger Kjaer, Thomsen & Bock, 2002; Shafii et al, 2003). Factors such as age, education and place of residence, the sexual partner's age and education, as well as the female's ability to negotiate contraceptive (including condom) use with the partner, are all thought to determine whether or not fertility control is used at sexual debut.

There has been a general decrease, worldwide, in a woman's age at the time of her first sexual experience. A woman's age at sexual initiation is related to socio-economic factors, such as level of educational attainment and place of residence (Tountas et al, 2004). In South Africa, women between the ages of 20 and 49 years, who have 1 to 7 years of education, first had sexual intercourse when they were younger than 18 (17.3 -17.6) years. Among those with no education or 8 to 11 years of schooling, the median age is somewhat higher - 18.0 and 18.3 years, respectively. Those with the 12 or more years of education, generally, have their first sexual experience between the ages of 19.2 and 20 (SADHS, 2002). It should be pointed out that the relationship between the two variables could be spurious, as the 1998 SADHS does not include an item that assesses the amount of education that the woman had at the time of the event. Nonetheless, worldwide, women who become sexually active at an early age are less likely to complete high school (Pettifor et al, 2004). Such women are socially and economically disadvantaged, relative to those with more education. It is, generally, believed that females who live in urban areas are more likely to delay their sexual debut, because of perceived educational and employment opportunities available in urban areas.

The older a woman is at the time of her first sexual experience, the more likely it is that fertility control will be used (Mosher & McNally, 1991; Mauldon & Luker, 1996; Abma et al, 1999; Ford, Sohn & Lepkowski, 2001; Manzini, 2001; Stone & Ingham, 2002, Svare et al, 2002). Stone and Ingham (2002, p. 195), for example, found that, among British teenagers, "[t]he odds of method use increased by 76 percent with each year older a young woman was when she first had intercourse". In South Africa,

contraception is more likely to be used at sexual debut when the woman is 16 years or older (Manzini, 2001).

Moreover, discussions between a parent and child about sex and reproductive health issues tend to delay the age at which the individual becomes sexually active (Pick & Palos, 1995; Whitaker et al, 1999). The likelihood that contraception (or the condom) is used at sexual initiation increases if parents provide information on family planning and STI transmission to children. Such information can be used as a basis for power that allows the individual to be self-confident in discussing sexuality and reproduction with others, as well as negotiating contraceptive use (including condom use) with a sexual partner. These discussions are infrequent among Black South Africans (Jewkes et al, 2001). Intergenerational and gender-related cultural and social norms are a barrier to effective communication about sexuality and reproduction between the majority of young Black South Africans and their parents, or any individual from an older generation.

A woman's failure to use contraception is thought to stem from lack of communication between sexual partners. However, sexual power dynamics help to explain why some women do not use contraception (including the condom) when they have sex for the first time (Wood, et l, 1998; Jewkes et al, 2001; Manzini, 2001; Saewyc et al, 2004). The age gap between women and their sexual partners is, generally, wider for those who have their first sexual experience at an earlier age, than for those who delay the age of sexual debut. Because their sexual initiation sometimes occurs through violent means (or coercion), young girls are often unable to decide if they should have sex, and whether or not contraception is used. In South Africa, rape and coerced or forced sex, occur less frequently among females who become sexually active at 16 years or older (Buga et al, 1996; Manzini, 2001; Jewkes & Abrahams, 2002). Women who are unable to negotiate contraceptive or condom use at sexual debut often feel "a sense of powerlessness in relationships and [are generally unable] to negotiate contraceptive use" later on (Saewyc et al, 2004).

2.2. Timing of first use of a method of fertility control

Among Black South Africans, the cultural emphasis on the woman to show proof of ability to procreate, and the community's support in assisting with out-of-wedlock pregnancies, are barriers to the use of fertility control before the first pregnancy. However, there is evidence that the proportion of Black women who use birth control before having the first child has increased over time.

The proportion of women in the youngest cohort (15 -19 years) using birth control before having their first child is higher than the proportions in older cohorts. Eighteen percent of South African women in the oldest cohort (45-49 years) used contraception before having their first child, compared to 52 percent in the youngest cohort (15-19 years). Increases, over time, in the proportion of women using fertility control before having their first child is related to changes in family size norms (SADHS, 2002, p. 72). Among Blacks, the ideal number of children has decreased from between 3.1 and 4.2 (among women aged 30-49) to 2.2 (among those aged 15-19). The desire of younger women to have fewer children can be seen by the fact that 66.4 percent of sexually active South African adolescent females (15-19 years) currently use some form of birth control, compared to less than one-half of those aged between 45 and 49 (SADHS, 2002).

2.3. Background and socio-economic characteristics of the woman

The background and socio-economic characteristics of the woman that are relevant to the study, and for which data are available, are as follows: mother's children, place of residence during childhood, current place of residence and the woman's order of birth. The socio-economic characteristics examined are age, education, employment and occupation, region and place of residence, and composition of the household.[9]

2.3.1. Childhood place of residence, mother's children and birth order

Sexual and reproductive behaviour is assumed to be influenced by the background characteristics of the individual, such as the parents' education level and income; the role of parent-child (or mother-daughter) communication about sex and reproduction, and environmental factors (e.g. type of neighbourhood or place of residence – urban vs. rural).

Studies on the effects of parent-child or mother-daughter communication on sexual and reproductive risk-taking behaviours do, however, yield mixed findings. Odimegwu et al (2002), for example, found that, in Nigeria, adolescents who do not discuss reproductive health matters with their parents are more likely to be sexually active than those who have had such a discussion. Among American teenagers, effective

[9] For the purpose of this study, household characteristics are considered separately.

communication between parent and child has led to increases in knowledge about condoms and HIV/AIDS (Miller & Whitaker, 2001).

Some studies have, however, found a negative relationship between the frequency of such discussions between a mother and daughter and early sexual initiation, as well as non-use of fertility control at sexual debut (Pick & Palos, 1995). Miller et al (1998) found that the quality of such discussions is strongly predictive of such behaviour, while Whitaker et al (1999) found that the quality of mother-daughter communication is a significant predictor of age at sexual debut.

Other studies have observed a relationship between the background characteristics of the individual and the age at sexual debut (as well as use of fertility control) (Flewelling & Bauman, 1990; Miller & Moore, 1990; Rwenge, 2000; Bakken & Winter, 2002; Stone & Ingham, 2002). For example, Stone and Ingham found an association between the decision to use fertility control at sexual debut and the amount of education that the parents have. Bakken and Winter (2002) found that the use of fertility control is most strongly correlated with the amount of time that the mother spends in the labour force. [10]

An intergenerational transfer of fertility norms is hypothesised and empirically demonstrated in the literature. A number of studies have shown that the intergenerational transfer of fertility norms is stronger among lower ordinal born individuals than among higher ordinal born ones (Hendershot, 1969; Tomeh 1972; Gustavus & Nam, 1970, Gustavus, 1973; Johnson & Stokes, 1976; Booth & Kee, 2006).[11]

2.3.2. Current place of residence

Use of fertility control is, generally, higher among women in urban areas and in provinces that are economically better off than among their counterparts in non-urban areas or relatively impoverished provinces. Overall, people living in urban areas, or in financially well-off provinces, generally have greater educational and employment opportunities than their counterparts in rural areas or financially less well-off

[10] The number of children that the individual's mother had is generally related to her education and employment.
[11] Unfortunately, information on the contraceptive behaviour of the mother is not included in the 1998 SADHS. The available information permits only tests of association between the number of children that the woman has or the number of children considered ideal and her mother's children.

provinces. In some areas of South Africa, certain tribal (language, cultural or ethnic) groups are more likely to be living in urban areas or to be more concentrated in one province than in any other. For example, in their analyses of data from the South African Standard of Living Survey, Moultrie and Timæus (2001) found that the birth rate is higher among Nguni speakers than members of other linguistic groups. [12] They, however, point out that this is not a function of cultural group identification, but rather a function of place of residence: They found that the Xhosas and the Zulus (who are Nguni speakers) are, generally, less exposed to the urban environment than individuals belonging to other ethnic/linguistic groups.

2.3.3. The woman's age

The prevalence in use of fertility control generally varies with the woman's age. In South Africa, knowledge about, and use of fertility control is negatively associated with the woman's age (Gready et al, 1996). Researchers found that among all sexually active South African women participating in the 1998 SDAHS, current use of contraception is lowest among those between 45 and 49 years old (SADHS 2002, p. 50). Chimere-Dan (1996) found that in the Transkei (Eastern Cape) contraceptive knowledge is higher among women under 30 years old than among others and that the prevalence in the use of fertility control is highest among women between 30 and 34 years (Chimere-Dan, 1996).

2.3.4. Education, employment and occupation

In general, an inverse relationship exists between use of fertility control and socio-economic status, measured in terms of education, employment or occupation, and the use of birth control (Becker, 1960). Fertility is, generally, lower among women or couples who have high social status (Goldscheider & Uhlenberg, 1979; Espenshade & Ye, 1994). In South Africa, a positive association is found to exist between socio-economic status and use of fertility control. However, this relationship may not apply to some groups or individuals whose decisions about reproduction are based on a different set of criteria such as religious or cultural values, for example. In some circumstances, a negative relationship may exist between the use of fertility control and social status. For example, people in polygamous unions are more likely not to want to control fertility until after having many children, due to the fact that, for them,

[12] Nguni dialects are IsiZulu, IsiXhosa, SiSwati and IsiNdebela.

their standing in the relationship and in the community is linked to the number of children that they have (Isiugo-Abanihe, 1994).

Nonetheless, women who have high socio-economic status are perceived to be more autonomous, and are able to obtain information that is used as a basis for decision-making (Dyson & Moore, 1993). They are seen as being more competent in communicating and negotiating with sexual partners about contraception (including condom use), and are more egalitarian than the less educated. Gready et al (1998), for example, found that joint decision-making about use of fertility control is higher among South African women with a university education than among those without one. Joint approval for family planning is also more common among women who have more than a high school education than among other women (SADHS, 2002). The findings are explained by the fact that people with higher levels of education are, generally, more exposed to the urban environment, have greater access to information about family planning and participate in social networks promoting communication between sexual partners.

The use of fertility control is, commonly, higher among women who are employed than among those who are not. The prevalence in use of contraception is generally related to the woman's place of work and occupation. Black South African women who work away from home, use contraception more often than those who work at home or are unemployed (Chimere-Dan, 1996). Working women are thought to be more empowered than their non-working counterparts. They are more likely to be exposed to the urban environment, to have more freedom of movement and to be exposed to more information, (including information about family planning) than women who do not work. South African women who work are more involved in deciding about contraception (Gready et al, 1998). However, this relationship may not result simply from the fact that the woman is employed. Since occupation is generally related to the amount of education that the individual has, it is inferred that decision-making autonomy is generally higher among those working in high status occupations (e.g., professional technical or managerial) than among those working in lower occupational positions.

However, for some individuals, socio-cultural norms about responsibility for decision-making might be the single most important factor that determines who makes the decision in a given domain. For example, LaLiberte-Richmond (1976) found that, among Hispanics in the U.S.A., power (i.e. influence) in household decision-making is

unrelated to whether or not the woman works, but is rather associated with gender-related norms, which ascribe decision-making dominance to the man. It is inferred that this may occur because, in many societies, the institution of marriage, as well as the family and living arrangements, are organised around patriarchal norms and principles.

2.3.5. Marriage and cohabitation

The institution of marriage and the family has undergone (and continues to undergo) dramatic changes. Some scholars feel that this is the result of processes that began with industrialisation. This perspective is applicable to the context of South Africa since, the Black South African family and household formation has - in various ways - evolved from the socio-economic and political changes resulting from external hegemony (Dutch, British and apartheid) and, most recently, from the democratisation of society. The predominantly male migrant labour system was instrumental in the disorganisation of the traditional systems of marriage, living arrangements and norms governing reproduction and male-female relationships. Although there are discontinuities, today, continuities with the past are reflected in the system of marriage (lobola and polygyny) and intergenerational living arrangements and traditional cultural norms prohibiting discussions about sexuality or reproductive issues between parent and child or between man and woman.

Today, whether a Black woman gets married in a church, a civil or in a traditional ceremony, her family must still be paid lobola (bridewealth). Ramphele (1989, p. 400) observes that "[t]he cornerstone of traditional control of women by men among Africans is the system of bridewealth… used to secure control of the reproductive power of women". The lobola is a transaction between two families - the bride and groom's. It transfers the rights over the woman's productive and reproductive functions to the marital family. Traditionally, this exchange of dominance was accomplished through the giving of cattle (symbolic of social status), by the man's kin, to that of the female.

Although, for many, marriage is the preferred context for sex and reproduction to take place, approximately half (48.3%) of all Black South African women of reproductive age have never been married, and only one-third (33.7%) are currently married (SADHS, 2002). Women who have been married at some point tend to be 30 years old or older. Over three-quarters (75.4% - 95.9%) of those who are 24 years or

younger, and less than one-fifth (11.5% - 18.5%) of those 35 years or older have never been married (SADHS, 2000, p. 127).

In most parts of the world, there is an increase in a woman's age at the time of her first marriage. The declining importance of marriage is evident by the fact that slightly more than one-half (51.7%) of all women of reproductive age interviewed for the 1998-SADHS have never been married. Among Black South African women who had, at some stage, been married, the median age at the time of the first marriage has increased from 22.8 years for the oldest cohort (45-49 years) to 25.3 years for the cohort of women aged 30-34 years. As would be expected, Black women living in urban areas (median ages: 23.7 - 27.5 years) marry at later ages than do their non-urban counterparts (Median ages: 21.8 -22.6 years).

The earlier ages at first marriage among Black women in non-urban areas is most likely related to the relative paucity of educational and economic opportunities that are available in non-urban environments. In general, women living in non-urban areas are more likely to be in polygynous unions than those in urban areas (16.8% vs. 9.6%). The fewer the years of schooling that a woman has, the greater is the likelihood of her being in a polygynous marriage.

Women living in non-urban environments or those with low educational attainment are at a disadvantage relative to other women, and are, generally, bereft of socio-economic resources. Ramphele (1989, p. 407) points out that "…marriage presents dilemmas for women the world over, but more especially for those living on the edge of survival. On the one hand, marriage is seen as a passport to social respectability. On the other hand, some women choose to remain single in spite of social sentiment against them". She concludes that cohabitation is often a survival strategy that poor women use. Black women, without any children, are less likely to be in a cohabiting relationship than those who have children.

Cohabiting women with little or no resources and those who wish to get married are likely to be vulnerable and, due to economic and emotional dependence, are more likely to be subjected to the partner's desires. Obbo (1987, p. 265), found that that in East Africa, "…premarital pregnancies …occur among uneducated girls who yield to male pressures, as well as among educated girls and women who may be living together with boyfriends and want to speed up matrimony".

Highly-educated, career-oriented women might delay the age at which they first marry, or even forego marriage altogether, because of the educational and employment opportunities that are now available to Black South Africans. Instead, they may opt for cohabitation. Such women are autonomous because of the amount of resources they posses (education, employment and information), and are more likely to be similar to their partners; they are, therefore, also more likely than less educated women to jointly decide about use of fertility control. Hypergamy (i.e. higher in age, education, occupation or income than their partners) might also be found among some of these women: this is likely if there is a high demand for males (in the marriage, cohabitation or partnership market) with similar socio-economic status.

Approximately 16 (16.3) percent of Black women participating in the 1998 SADHS are in a polygynous union than other women, and the rate of polygyny is higher among non-urban Blacks (18.5%) than among their urban counterparts (14 percent). Among Black women living in non-urban areas, polygyny is highest among those who are 40 to 44 years (27.8%) and 45 to 49 years old (20%). It is lowest among those aged 20 to 24 years and 25 to 29 years (13% and11.5%, respectively).

Commonly held views about polygyny are as follows: polygyny is related to adherence to patriarchal norms (Amankawa, 1996; Fapounda & Todaro, 1988; Pebely & Mbunga, 1989). Polygynous unions are more likely to occur in non-urban areas (Bongaarts et al, 1984; Caldwell & Caldwell, 1987; Dodoo & Seal, 1994). Monogamous couples are, generally, more educated than polygynous ones. In addition, polygynous people are more pronatalist than monogamous ones (Caldwell, 1980) and would, therefore, desire and have larger families. It is assumed that the prevalence in use of fertility control is lower among women in a polygynous relationship than those in a monogamous one.

Women in a polygynous marriage are assumed to be less autonomous in decision-making than their counterparts in a monogamous relationship. Hollos and Larsen (1997, p. 363) explain that this is because "…men in a less patriarchal family system get less of a benefit and assume a greater share of responsibility for the support of children, they will desire fewer children. In a more egalitarian, conjugal family, the voice of women in determining whether to practice fertility limitation should also be greater". Because a woman in a polygynous union derives status through her reproductive capacity, it, therefore, follows that such a woman uses contraception less

often than one in a monogamous relationship, due to the need to enhance her status through demonstrated proof of procreative ability.

2.4. Characteristics of the household

Moultrie and Timæus (2001) point out that among Black South African women, household "living arrangements mediate between their socio-economic and cultural characteristics and the number of children that they have borne" Although, in many countries, the nuclear form of living arrangement is replacing the extended intergenerational form (Wusu & Isiugo-Abanihe, 2003), research has shown that in South Africa, a variety of household types are emerging alongside the traditional extended and nuclear forms (Pick & Obermeyer , 1996).[13]

Some Black South African women begin their married lives at the home of their in-laws and do not use birth control, as they are expected to commence childbearing immediately. This expectation to show proof of fertility is related to the cultural practice of ***ilobola*** (commonly known as 'lobola'). This is the payment of bridewealth, whereby the bride's family transfers the rights over her productive and reproductive functions, after being paid by the groom's family to do so.[14] Upon marriage, the bride is expected to move into the home of her husband's family (for at least one year).

In the extended familial arrangement, women are expected to obey their mother-in-laws in all things, and, due to the fact that her primary role is producing the future generation, she is expected to bear a child as soon as possible. In one study, (Harrison & Montgomery, 2001,p. 318), an informant (an older woman) explains that, "It's expected that within a few months, or even the first month, you shouldn't stay in that house and not get pregnant, so that people will see that… you were not supported by contraceptives." Today, some women think that the practice of lobola reinforces traditional patriarchal rule (Jewkes et al, 1999). Even so, older women claim that they are able to negotiate with their spouses after they have at least five living children (Harrison & Montgomery, 2001). This is substantiated by findings from

[13] Pick and Obermeyer examined four household forms, viz., nuclear (husband and wife), extended (husband and wife plus extended members of the family), woman-headed (a woman living alone or with her children) and alliance (a variety of individuals who may be related or unrelated or a combination of these). The majority of individuals living in alliance households are women, new arrivals to the urban area, who provide networks of mutual support (i.e. economic, social or moral) for each other. These women are, generally, older and independent of males.

[14] Traditionally, payment was made in cows, symbolic of wealth and social status. Today, this has shifted to cash payment. However, factors - such as education, labour force participation and/or employment opportunities - are factored into the equation in the negotiation process.

other studies conducted elsewhere, showing that the woman is likely to be influential in contraceptive decision-making if the desired family size has been attained (Bankole & Singh, 1998).

Hondroyiannis (2004) found that household fertility decisions are negatively associated with the amount of education that the woman has, the time that she spends at work, as well as household income. Women employed outside the home, generally, have greater autonomy than other women, thus suggesting that contraception is used more frequently when the woman works away from home (Al Riyami et al, 2004). This is corroborated by the finding that, in the Eastern Cape (South Africa), prevalence in the use of fertility control is higher among women who work away from home than among those who either work at home or who are unemployed (Chimere-Dan, 1996).

Due to the long-established view that African men are pronatalist and hold unfavourable attitudes toward the use of birth control, it is commonly assumed that contraception use is higher among women living in male-headed households than among their counterparts. However, Moultrie and Timæus found that the lifetime fertility of Black women is higher among those living in households where the husband is present, but is unrelated to whether the woman or her husband is the head of the household. Previous studies (Chimere-Dan, 1996; Makiwane, 1996; Makiwane, 1998) have found that, currently, married Black South African women have a higher birth rate, and use contraception less often, than their unmarried counterparts. This may occur because married men, generally, want more children than women do. Although Makiwane (1998) attributes the lower prevalence of contraception to pressure from husbands, the basis for his conclusion is unclear. Nonetheless, husbands and wives may have similar fertility intentions, and may jointly agree whether (or not) to use birth control.

Moultrie and Timæus (2001, p. 21) found that "[w]omen's schooling, household income and region of residence… affect the lifetime fertility of black South African women". They also found that the generation of the household's occupants is a significant factor in fertility. Black South African women living in households with relatives of their parents' generation, generally, have more children than those who live with relatives of the same generation. Black women without any children are more likely to be living with a relative - parent(s), relatives of their parents' generation or

relatives of their own generation - and less likely to be living with a sexual partner (Moultrie & Timæus, 2001).

Pick and Obermeyer (1996) found that both the type and head of the household have an influence on contraception. They found that use of fertility control is, generally, higher among women living in nuclear and extended forms of households than among others. The relationship between the type of household and the prevalence of contraception is explained by the fact that fertility is, usually, higher among women in nuclear and extended households. These women are probably using birth control in order to space or to limit births.

Although women in childless households are, generally, better educated and work in occupations that are considered to be of relative high status (i.e. nursing, teaching, or managerial positions), they have the lowest rate of contraception. This is not what is generally predicted, as the conventional view assumes a positive association between socio-economic status and the use of fertility control. The finding is, however, not at all surprising, given the cultural emphasis on the ability of the woman to demonstrate proof of fertility. In line with the theory of opportunity costs, it is inferred that women in childless households, who are generally older, might have delayed childbearing, in order to succeed, and are now in a hurry to begin childbearing – to 'catch-up', so to speak.

A study conducted in Lesotho (Makatjane, 1997) shows that the assumed relationship between the gender of the head of the household and contraception is not straightforward. Makatjane found that the use of modern methods of birth control is highest among married women living in male-headed households, as well as never-married women living in female-headed households. Never-married women are more likely to be younger, and are probably using fertility control in order to prevent an unwanted (out-of-wedlock) pregnancy. The lower level of contraception among married Basotho women in female headed-households is related to the cultural practice of the woman giving birth at the home of her parents, where the man must have permission to visit his in-laws (Makatjane, 1997).

In Lesotho, levels of contraception among married women are related to the woman's employment status and the husband's involvement in labour migrancy. Basotho women living in male-headed households are more likely to be working than are those in female-headed ones. Among Basotho women living in male-headed households,

contraception is higher among those whose husbands are migrant labourers than among others. However, in the Eastern Cape of South Africa, the husband's migrancy status has no effect on whether or not the woman uses a modern or traditional method of birth control (Makiwane, 1998).

Observation of everyday-life in contemporary South Africa suggests that a mother or mother-in-law is, increasingly, less likely to be influential in the contraceptive behaviour of a young Black woman. This is probably related to the fact that younger women are receiving more education. Younger Black South African women are more likely to participate in a variety of social networks beyond the local community and are more exposed to information through the mass media than older women are. They are also likely to weigh the cost of early childbearing against higher education and/or employment.

In the context of the New South Africa, couples are opting to begin married life in a nuclear household rather than in an extended familial setting. In addition, unmarried women of reproductive age appear to be choosing to live on their own or in an alliance-type setting. No doubt, this is leading to, or has already led to, changes in contraceptive behaviours, including changes in the man's role in contraceptive decision-making.

2.5. Partner-related factors

2.5.1 Context of the relationship

Findings from studies conducted among young people (Thornton, 1990; Inazu, 1987) and adults (Thompson & Spanier, 1978; Landry & Camelo, 1994; Forste & Morgan, 1998; Manning et al, 2000) show that contraceptive behaviour is related to the type of relationship between sexual partners. Landry and Camelo (1994), for example, found that a woman in a long-term relationship is more likely to receive support from her partner, with regards to contraception, than a woman who is in a relationship for a shorter time.

In general, an association is assumed to exist between contraceptive decision-making and the dynamics of the relationship. Couples who are married, cohabiting or in a long-term relationship are assumed to be more egalitarian in decision-making than their counterparts (Marsiglio, 1985; Bachrach 1987; Marsiglio & Menaghan, 1987). Such individuals are assumed to be more committed to the relationship and have a

high degree of communication. Use and effectiveness of birth control is related to discussion about contraception and fertility between sexual partners (Oni & McCarthy, 1991; Salway, 1994; Lasee & Becker, 1997; Mahmood & Ringheim, 1997; Kamal, 1999; Kimuna, 2001; Salem, 2004). Although an individual(s) may hold favourable attitudes toward family planning, this is not, and cannot, always be articulated. Matshidze et al. (1999) found that most (69%) Black South African men claim that it is not difficult to speak to sexual partners about contraception or family planning. However, during the year prior to the interview, less than two thirds (55% – 56%) discussed birth control, spacing out of the births or how many children they would like to have with their partners. "Lack of communication about family planning may be associated with misperceptions about a spouse's views on family planning, which, in turn, may inhibit mutual decision-making" (Sharan & Valente, 2002, p. 16). Socio-economic factors, such as age and education, are often a barrier to such discussions. Among women participating in the 1998 SADHS, those who are between 40 and 49 years of age are less likely to discuss family planning with their sexual partners than younger women are. This can be seen by the fact that older women are less likely to report joint approval for family planning than younger ones (SADHS, 2002). Sexual partners are probably less involved in the contraceptive decisions of older Black women because these women are more likely to use birth control without their partner's knowledge than younger women (Manzini, 2001). This is probably because older couples are more likely to be influenced by traditional gender norms that prohibit male-female discussions about sexuality and reproduction.

Although an increase in contraception is associated with discussions about contraception, they do not necessarily enhance knowledge of a partner's attitude or intentions (Lasee & Becker, 1997; Dodoo et al, 2000; Ezeh & Owuor, 2001; et al, 2004). Lasee and Becker (1997, p. 15) found that, in Kenya, although 82 percent of couples discussed contraception, "only 67 percent of wives and 75 percent of husbands correctly predicted their spouse's approval of family planning". Wolff et al (2000, p. 126) found that, in Uganda, "men and women tend to underestimate their partners' desire to stop childbearing". Gender-related norms, values and attitudes can sometimes create barriers between a couple communicating about sexuality and the use of contraception. A man or woman often does not discuss condom use with his/her partner, as this implies a lack of trust (Wingood & DiClemente, 1998). Perceptions about who should take responsibility for contraception, or a particular method, might also be a barrier to effective communication between partners. In couples where the man is perceived to have the final word on fertility decision-making,

couple communication is minimal (Wolff et al, 2000). Furthermore, in some couples, women do not negotiate condom use with sexual partners because they perceive themselves to have less power and control than men (Buysee & Van Oost, 1997).

Due to the historically female-oriented nature of family planning, decisions about contraception are, generally, seen as the woman's responsibility. Myer et al (2002) for example found that, in South Africa, most Black men and women believe that it is, ultimately, up to the woman to decide about contraception, and up to the man to decide about condom use. A female-controlled method, such as the contraceptive injection (Depo-Provera or Nur-Isterate) - which can be used without the man's knowledge or approval - as well as the condom (which is the man's prerogative), can diminish communication and joint agreement about the use of fertility control.

2.5.2. Husband-wife's comparative characteristics

Although, independently, the characteristics of the man or the woman are found to have an impact on decision-making, several studies show that the crucial factor in dominance in decision-making is not the man or woman's characteristics, per se, but their joint or comparative characteristics (Yamaguchi & Kandel, 1987; Oheneba-Sakyi & Takyi 1997; Darroch et al, 1999;). For example, Oheneba-Sakyi and Takyi (1997) found a negative association between use of contraception and the difference in the husband and wife's ages, among married couples in Ghana.

As previously discussed, contraception is less likely to be used at sexual debut if the woman is younger than the man (Abma et al, 1998; Leitenberg & Saltzman, 2000; Manning et al, 2000; Ford et al, 2001). Darroch et al. (1999) point out that "when adolescents younger than 18 are involved with men who are substantially older than they are, differences between partners, in such factors as maturity, life experience, social position, financial resources and physical size, may make such relationships inherently unequal". Among teenage women (aged 15-17 years) contraception is less likely to be used if the male is six or more years older than the woman.

Comparisons of the effects of husband and wife's fertility desire on contraceptive decision-making show that the husband's desires are not always more important the wife's. Researchers have found that, in some countries, husbands are more dominant than wives; in other settings, husbands and wives are equally important, while, in some cases, the wife has more say in decision-making. In Sudan (Khalifa, 1988) and

Ghana (Ezeh, 1993), for example, the husbands' fertility desires are more important than those of their wives'. Bankole (1995) found that, in Nigeria, both husbands' and wives' desires are crucial to the decision-making process. Bankole found that, among the Yoruba in Nigeria, the husband's desires are more important if the couple has few children, whereas the wife's desires are more important if it has many children.

Based on their examination of data from 18 developing countries - mostly from sub-Saharan Africa - Bankole and Singh (1998) found that, in cases of disagreement, there are mixed effects of the husbands' and wives' desires, with regards to fertility, on contraception. In Kenya, Mali, Malawi and Uganda the wife's desires are more important than her husband's. In five countries in the region (Burkina Faso, Côte d'Ivoire, Ghana, Tanzania and Zimbabwe), no significant association exists between contraception and either the husband's or the wife's fertility desires. In Nigeria, both the husband's and the wife's fertility goals significantly affect contraception, while, among the Yoruba, the husband's wishes are fulfilled when the couple has few children, and, conversely, the wife is the dominant decision-maker when the couple has many children.

2.6. Contraceptive behaviour of the man and his role in decision-making for the use of fertility control

Up until the last two decades of the previous century, women have been the primary focus of research on family planning, due to the female-oriented nature of family planning programmes. As a result of the HIV/AIDS pandemic, as well as the post-Cairo Conference developments, there is an increased awareness of the need to understand the contraceptive behaviour of males. Most information about males' contraceptive behaviour is based on analyses of interviews conducted with women, and not from men themselves. This study is no exception. Nonetheless, there is a growing body of literature on contraception among males. Salem (2004) points out that since the 1990s, in developing countries, close to 50 studies have been conducted as Demographic and Health Surveys (DHS) or Reproductive Health Surveys (RHS).

In 1999, the Reproductive Health Research Unit (RHRU) conducted the Male Involvement Project, on behalf of the Planned Parenthood Association of South Africa (PPSA). The survey was conducted in all nine provinces, and included 2 141 urban (45 percent) and non-urban males (aged 16 - 60, 33 percent of whom were married at the time). Information was collected on background characteristics, sexual behaviour,

contraception and attitude towards family planning, media exposure, partner-communication and decision-making (re: family size, contraception and method use). The South African Male Survey, initiated by Macro International (DHS) in 2003, on behalf of the Department of Health, is currently unavailable for public use.

2.6.1. Males' contraceptive behaviour and attitudes: What is known?

Worldwide, the knowledge and use of contraception among males is higher than is commonly believed (Salem, 2004). Beksinska et al (999) found that a high proportion of Black South African males (70%) knows at least three methods of contraception: the condom (76%), injectables (75%) and the pill (69%). However, Salem (2004) found that, although most men participating in Demographic and Health Surveys are aware of different methods of birth control, they do not actually rely on them. Matshidze et al (1999) found that most Black South African males participating in the National Male and Sexual Reproductive Health Survey report current use of the pill (10%), injectables (22%) or the condom (32%).[15]

Findings from the National Male Reproductive and Health Survey (Matshidze et al, 1999) show that, in South Africa, use of contraception is, generally, higher among males who are young, unmarried, educated, or who live in an urban environment. Black South African males who are married use contraception less often (50%) than unmarried ones (64%), and those living in urban areas are more likely to use the condom than their rural counterparts (36% vs. 28%). Among Black males, the use of the condom is higher among those between the ages of 21 and 40 years (39%) than among those who are younger (29%) or older (24%). Black males who have the most education (secondary or higher) use condoms more often (42%) than those who have primary (23%) or no education (13%).

The proportion of Black males reporting condom use (Matshidze et al, 1999) is higher than the proportion of women who do so (SADHS, 2002). The difference reflects the fact that men are more likely to use the condom for protection against STIs, and they, often, do so outside the primary relationship, where fertility (increase/decrease) would

[15] Black males and females obviously differ in their report on current use of contraception. A possible source of the discrepancy might stem from the fact that some men are often unaware of the contraceptive behaviour of their partners, especially when the use is covert and/or if the couple are not cohabiting. In this study, information on the prevalence in use of fertility control among Black South African females are primarily taken from the 1998 SADHS while the information on the prevalence in use among Black males is taken from the National Male Reproductive and Health Survey.

be the main concern. Matshidze et al (1999, p. 41) found that, in South Africa, "[a]lmost three times as many men who used condoms did so with their girlfriends rather than with their wives".

2.6.2. Socio-economic characteristics of the man

Studies examining the relationship between reproduction and the characteristics of sexual partners have found that the socio-economic characteristics of the male have a significant influence on the reproductive behaviour of females (Males & Chew, 1993; Landry & Forrest, 1995; Dudgeon & Inhorn, 2004).

Findings from the DHS conducted in 17 countries (Ezeh et al, 1996) show that, among males, approval for family planning varies by place of residence, socio-economic status and educational attainment. Researchers (Matshidze et al, 199) found that, among Black South African males, levels of approval for contraception are highest among those living in the urban area (49%); between 16 and 20 years of age (68%), and those who have at least 12 years of education (57%). Those who live in the rural environment (45%); those between the ages of 41 and 60 years (35%), and those with no education (26%) are least approving. Matshidze et al (1999) found that 53 percent of Black South African males report joint decision-making for the use of fertility control. This statistic is higher (56%) among those in the urban area than among others (49%). Although the researchers did not provide any other information on factors influencing decision-making among the respondents in the study, findings from studies conducted in South Africa and elsewhere, nonetheless, furnish knowledge of some of the factors affecting males' contraceptive behaviour.

Some researchers have found that the higher the level of education of the man, the greater the probability that he will influence the process of reproductive decision-making (Saflios-Rothschild, 1970; Grady et al, 1996; Forste & Morgan, 1998; Gready et al, 1998). Zavodny (2001), for example, found that the likelihood that a teen pregnancy ends in an abortion increases with the level of education of the male. Gready et al 1998 have, however, found that, in South Africa, a man is likely to feel that the woman should decide about contraception if she is highly educated. Researchers found that, in the U.S.A, older and more educated males are less egalitarian in contraceptive decision-making (Marsiglio & Menaghan, 1987).

Men who are employed are assumed to have more powerful in decision-making than the woman. However, the type of occupation in which the man is involved should make a significant difference. For example, in Lesotho (Makatjane, 1997), contraception is higher among women whose husbands are involved in labour migrancy than among those whose husbands are not. A high rate of contraception among women whose husbands are migrant labourers is hypothesised to result from infrequent, but sporadic, visits by the husbands. On the other hand, Makiwane (1998) found that 8.8 percent of non-contracepting women (in the Transkei, Eastern Cape) are not using birth control, due to male absenteeism. It is assumed that this occurs because husbands are likely to be at home only for a few months at a time. It is also likely that visits to the Transkei by migrant male labourers are scheduled, whereas in Lesotho, they are not. However, in an earlier study, Makiwane (1996) found an association between extramarital sexual relationships among wives of male labour migrants in the Eastern Cape and frequent use of contraception.

2.6.3. Males' approval for family planning

A woman's decision about using birth control (or any particular contraceptive method) is hypothesised to be related to the actual or perceived attitude of the sexual partner (Salway, 1994; Lasee & Becker, 1997; Salem, 2004; Dudgeon & Inhorn, 2004). The man's involvement in reproductive decision-making in developing countries has been analysed in a number of studies (Breda & Gibbons, 1990; Dixon-Mueller, 1993; Ezeh, 1993a; Williams, 1994; Bankole, 1995; Grady et al, 1996; Bankole & Singh, 1998; Drennan, 1998; Schwab et al, 2000; Dudgeon & Inhorn, 2004; Salem, 2004). Some researches cite the sexual partners' disapproval of family planning as a reason why some women do not use birth control (Duncan et al, 1997; Ezeh, 1993a; Susu et al, 1996). Erasmus (1984), for example, found that the man's attitude towards the use of fertility control is the most significant factor affecting the use of contraception among Black South African women. Nevertheless, as late as the 1990s, Chimere-Dan (1996) found that only 14 percent of married Black South African women attributed non-use of fertility control to the disapproval of their partners.

Analyses based on DHS data from 46 countries found that men are more approving of family planning than is commonly believed. This is because "wives do not know or misperceive their husbands' attitudes towards family planning" (Salem, 2004, p. 10). Misapprehensions of the sexual partner's attitudes stem from gender-related socio-

cultural norms about appropriate behaviours for males and females. Therefore, an individual who approves of contraception, in general, may believe that the other partner should be responsible for making the decision about the use of a given method. Myer et al (2002) found that, in KwaZulu-Natal, most Black males and females believe that the woman should decide about contraception and the man should decide about condom use. They found that, among Black South Africans, dual method use does not result from communication or joint agreement between partners, but rather from the coincidence of the woman's attempt to prevent pregnancy and the man's attempt to prevent contraction of STIs, including HIV.

Despite the conventional view that African males hold negative attitudes towards family planning, a larger than expected proportion of Black South African males (75 %) approve of contraception, in general. However, 64 percent of Black South African men participating in the national survey say that they disapprove of their partners using birth control. Fifty-three percent of them object to the idea of a woman suggesting the use of fertility control. Despite a high level of approval for family planning, 77 percent of Black males "find it unacceptable for their partners to use birth control without first consulting them" (Matshidze et al, 1999, p. 26). Matshidze et al (1999) found that most (80%) Black South African men, who disapproved of their partners' using birth control without their knowledge, said that they their partners should first speak to them before deciding on a method of contraception. [16]

2.6.4. Fertility desires of the man

Much of the unmet need for contraception among women is often attributed to pronatalist attitudes among males. In most - if not all - developing countries, although males approve of family planning, in general, they usually desire to have more children than women. Examination of DHS data from sub-Sahara African countries (Salem, 2004) found that married men, generally, want two more children than their wives, and, when both partners desire another child, men generally want to have the child sooner than women (Bankole & Singh, 1998). It is commonly assumed that contraceptive decision-making is influenced more by the male's attitude toward family planning and fertility, rather than the woman's attitude (Erasmus, 1984; Isiugo-Abanihe, 1994; Libbus & Kridli, 1997). Harrison and Montgomery (2001) found that, among married Zulu women in South Africa, the ability of the wife to negotiate fertility

control depends on the number of children that the couple has. Married Zulu women who have five or more living children say that they can negotiate the use of birth control with their husbands. Nonetheless, some who have fewer children subvert the wishes of their husbands by engaging in covert use of contraception; this is easy to believe, given the widespread use of Depo-Provera (effective for three months), as well as and the importance of male labour migrancy. Although Erasmus (1984) found that the male's attitude is a significant factor in contraceptive decision-making among black South African women, more recently, Maharaj and Cleland (2005) found that the desire of the woman to cease bearing children is more significant than the man's attitude [17]

Although gender-related norms and expectations may give men greater autonomy in decision-making, this does not mean that males have unlimited power. The decision about fertility reduction (or family size) is related, not only to norms and expectations, but also to socio-economic factors, such as education, urban residence and income, as well as social change. Culture is not static, and men and women continually re-negotiate and re-interpret socially constructed norms from the particular situation wherein they are located.

2.7. External factors

External factors found to have an impact on contraceptive decision-making, and that are also relevant to this study are as follows: (1) family planning programme, (2) informational sources (via media exposure and communication), and (3) reproductive- and HIV/AIDS knowledge and attitudes.

2.7.1. Family planning programme

In a number of countries – China, India, South Africa and Zimbabwe, for example – fertility decline has occurred primarily because of the diffusion of ideas and the spread of information and knowledge about modern methods of fertility control through state-operated family planning programmes. The quality of family planning programmes and the type of service received are crucial factors in contraceptive behaviour (Pariani et al, 1991; RamaRao et al, 2003).

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[16] Contrary to conventional wisdom, the finding indicates that many men want to participate in the process of reproductive decision-making.

[17] This finding is most likely related to ongoing changes in contemporary society, and suggests the need for further studies.

Women are more likely to adopt, and continue using, contraception if service providers supply adequate information about the side effects or contra-indications of a given method. Gready et al (1998) found that South African women who frequent public clinics do not often receive adequate information about the contraceptive method that they are given. In general, Black women in South Africa do not have a great deal to say about what method they should use. This is due to the fact that the majority of Black women go to public clinics where the pill and the injection (Depo-Provera and Nur-Isterate) are, commonly, promoted as methods for pregnancy prevention. On the initial visit, women with two or more children are motivated to take Depo-Provera, while those with fewer children are encouraged to take Nur-Isterate. The use of the pill is encouraged when women experience side effects from the injections.

Joint decision-making is more likely if the relationship between the family planning service provider and client is positive. Pariani et al (1991) found that joint decision-making is highest if the husband (or male partner) is involved in family planning, and if both partners receive counselling together. Despite the official emphasis on reproductive health concerns, family planning remains female-oriented. Most, if not all, family planning service providers at public clinics in South Africa are women; this, therefore, minimises the possibility of the male's involvement in reproductive decision-making.

2.7.2. Sources of information

Information from significant others and their actual or perceived contraceptive attitudes and behaviours are also found to have an influence on fertility control (Shah & Zelnik, 1981; Nathason & Becker, 1986; Thompson & Spanier, 1987; Jaccard et al, 1999; Evans, 2001; Leigh & Andrews 2002, Harper et al, 2004; Sieving et al., 2006).[18] Generally, it is through interpersonal communication that received ideas and information are eventually put into action. Information obtained through interpersonal channels of communication, such as the media is a significant influence in dominance in decision-making about the use of fertility control (Piotrow 1990; Payn et al, 1997; Brader et al, 1999; Rogers et al; 1999; Jato et al 2000; Valente et al, 1994, 2002).[19]

[18] A high proportion of such studies have, however, been conducted among teenagers/adolescents.
[19] Exposure to information about family planning from the media is hypothesised to enhance spousal communication and joint decision-making.

A positive association has been found to exist between exposure to family planning and HIV/AIDS-related information received from the media and prevalence in the use of fertility control: Furthermore, the higher the level of media exposure, whereby the individual receives such information, the greater the likelihood that birth control will be used (Bankole & Adewuyi, 1995; Jato et al, 1999). Such exposure is also found to affect the sphere of influence in decision-making about contraception. For instance, a longitudinal study, conducted in Nepal, showed increases in joint agreement with concomitant decreases in the influence of the man in contraceptive decision-making, after programme exposure (Sharan & Valente, 2002). Media exposure to family planning information might have an indirect affect on contraceptive decision-making, through its capacity to increase spousal communication.

2.7.3. Knowledge and attitudes

In sub-Saharan Africa, increases in the use of contraception are correlated with exposure to information about family planning and HIV/AIDS (Bankole & Adewuyi, 1995; Westoff & Rodríguez, 1995; Kim & Marangwanda, 1997; Kane et al, 1998; Jato et al, 1999; Sunmola et al, 2002; Agha, 2002; Agha & Van Rossem, 2002; Oyediran & Isiugo-Abanihe, 2002). However, the possibility exists that certain factors may prevent this from happening (Bongaarts & Watkins, 1996). Social or community norms, as well as expectations about desired family size, may become obstacles in communication about fertility control between sexual partners, especially when the couple does not have the number of children considered to be acceptable. Norms about trust and fidelity, as well as perception of disease, are major obstacles to partner communication and joint decision-making about using a method, such as the condom.

Evidence from studies conducted in the U.S.A. indicates that, nowadays, more males view contraception as a joint responsibility. For example, in the 1970s, only one third of American males endorsed the idea that both partners should be responsible for deciding about birth control (Pleck, Sonenstein & Swain, 1975). By the end of the 1980s, this idea was endorsed by over two thirds of men interviewed (Clark et al, 1988). The HIV/AIDS epidemic is, undoubtedly, a factor accounting for this increase. Among those wishing to engage in risk-reducing behaviour, joint decision-making is more likely to occur, as condom use is a male-controlled method, which, ideally speaking, requires negotiation and cooperation between sexual partners.

Svare et al. (2002) found that, in Denmark, the use of birth control at sexual debut is related to the age cohort of the woman and her partner, and that, over time, the use of contraception has increased at the time of sexual debut. They hypothesised that the HIV/AIDS epidemic is a factor accounting for this increase. Even though the majority of South African women are aware of the high risk of HIV infection - including perinatal transmission - only 2.3 percent of sexually active women between the ages of 15 and 49 years use the condom as a method of birth control (SADHS, 2002). Although condom use is relatively low, "[u]se of the condom as a first method is highest in the youngest age group" of women SADHS (2002, p. 44). Due to the fact that younger people are keenly aware that they are at a high risk of being infected with HIV, they are more likely to discuss contraception and condom use with their sexual partners.

Fewer than two (1.8) percent of Black South African women surveyed in the 1998 SADHS use the condom as a method of fertility control; yet, 32 percent of the males participating in the National Male Survey use the condom as a method of birth control (Matshidze et al, 1999). Even though low levels, or lack of, condom use among women are commonly attributed to negative attitudes and behaviours of husbands and partners, Matshidze et al. (1999) found that 58 percent of Black men thought it "acceptable for their sexual partners to suggest condom use". Although the information on condom use among Black South African women and men is taken from two different studies, there are several possible sources of this discrepancy. Firstly, the frequency of condom use is related to the relationship category of a sexual partner: Men use the condom less often with their wives and steady girlfriends than with other categories of sexual partners. Secondly, (and related to the first factor), raising the issue of using condoms in an ongoing, steady relationship is considered to be a violation of the foundation whereon the relationship is meant to be built: in other words, it is a violation of trust, commitment and fidelity (Worth 1989; Matshidze et al 1999; Meekers, 2000; Feldman & Maposhere, 2003; Maharaj & Cleland, 2005).

Studies have also shown that, even with the knowledge of the risk of transmission of disease, some individuals fail to use a preventative method (such as the condom) that provides dual protection against both pregnancy and STIs, including HIV transmission. The lack of contraception, or non-use of the condom, is sometimes attributed to an unawareness of the amount of risk ensuing from unprotected sexual intercourse (Drake, 1996). The theory of reasoned action (Ajzen & Fishbein, 1980) can be used as an explanation for this: it postulates that an individual's intention to

behave in a given manner is predicated on his/her attitude towards acting in that particular manner, as well as on the subjective understanding of the norms about the given behaviour. This paradigm is supported by findings from several studies showing that people evaluate the risk involved in a specific situation (Luker, 1967, Zabin et al, 1993; Kirby, 1999; Spear, 2004). The decision about using birth control or a condom is determined, not only by the desire of the individual, but also by his/her perception of the attitudes, norms and values, as well as of significant others, such as parents, peers and partners (Ramos et al, 1992).). Therefore, whether or not the man, the woman, both or neither attempts to negotiate or initiate contraceptive or condom use, depends on actual or perceived costs attached to his/her//their behaviour.

The community's norms and expectations about a given behaviour also influence sexual and reproductive decision-making. Feldman and Maposhere (2003), for example, found that, in Zimbabwe, it is considered inappropriate to use condoms in the context of the marriage. Even when the possibility of risk of infection is high, men and women often find it difficult to discuss or negotiate condom use. If a woman attempts to negotiate condom use, she is likely to be condemned and viewed with suspicion and horror.

To a considerable extent, attitudes about responsibility in decision-making for the use of fertility control or condom are determined by gender-specific, social and cultural norms. This is evident by the finding that among Black South Africans, the dual use of contraception is explained by the coincidence of the woman's attempt to stop conception and the man's attempt to prevent STIs (Meyer et al, 2002). Among Black South Africans, dual method use is also associated with the perception that the woman is responsible for deciding about contraception and that the man is responsible for deciding about condom use.[20]

Fertility is a factor determining the individual's attitude toward and actual use of fertility control. In most societies, either the man or the woman or both often use children as a resource in decision-making about fertility control. Some studies show that, even with knowledge and awareness of the possibility of infection or when a person is HIV-seropositive, a woman or a couple often risks infection (of themselves or the foetus) in order to have a child (Aka-Dago-Akribi et al, 1999; Feldman & Maposhere, 2003). The

[20] Since condom is a male-controlled contraceptive method, its use facilitates male dominance or joint decision-making. On the other hand, because family planning is female-oriented, it is expected and accepted that the woman decides about birth control.

statement of an HIV-positive woman in Zimbabwe illustrates this occurrence: “At the moment I am six months pregnant. I had to have a child to please my husband. It is not my choice. My husband paid lobola and he must have a child. I know that if I did not get pregnant he would look for another wife. I also want another child, despite the fact that I lost a child to AIDS, I still want to be a mother” (Feldman & Maposhere, 2003, pp. 169-170). In diverse settings, research has shown that whether a person is HIV-positive or HIV-negative, fertility is a primary factor influencing women’s decision about the use of fertility control. In other words, fertility norms and attitudes are used as a resource for decision-making about having (or not having) children. Meyer et al (2002), for example, found that older South African women are able to negotiate use of birth control with their husbands when they have five living children

Gender-related norms and attitudes are often used as a resource in reproductive decision-making as well. The use of gender-related norms and attitudes as a resource in decision-making is illustrated by the finding that in Tanzania, HIV transmission is more likely not to occur in couples where the man is HIV-negative and the woman is HIV-positive, than in couples where the man is HIV-positive and the woman is HIV-negative (Hugonnet et al 2003). Due to the existence of cultural norms ascribing sexual decision-making dominance to the man, he can easily do something to prevent being infected (Mantell et al, 1993). On the other hand, women who are poor or who are in a traditional setting, often find it difficult to negotiate condom or contraceptive use with husbands or main sexual partners. Wives and steady girlfriends are supposed to be respectable: this means that women are expected not to be assertive about sexually-related issues. The attempt to introduce the use of condoms to a marriage or to a long-term relationship raises questions about trust and fidelity, as well as issues about the individual’s health status. Over a decade ago, Abdool Karim et al (1992) found that, in South Africa, the prevailing attitude is that the individual uses condoms only if he/she already has a STI or is HIV positive. [21]

Worldwide, young people who lack educational and occupational mobility often view having a child as an alternative to social success (Geronimus, 2003). In the past century, Preston-Whyte and Zondi (1998) found that, among Black South Africans, having a child out-of-wedlock does not reverberate in a social stigma attached to the

[21] Non-use of contraception or the condom among fertile women who know that they are at risk for HIV infection, those who suspect infection or are diagnosed HIV-positive is an attempt to prove one’s worth as a woman. It is also an attempt to confirm one’s status as a healthy person.

mother or child.[22] They explain high fertility among young South African Blacks as the result of social norms emphasising the woman's demonstration of the ability to procreate, as well as the community's acceptance and support of children born out-of-wedlock. More recently, Rutenberg et al (2003) found that, even though education and economic opportunities are factors influencing reproductive decision-making among young Black South Africans, knowledge and awareness of HIV/AIDS affect their attitudes towards pregnancy.

Society is not static, and there is evidence to indicate changes in individual behaviour as a consequence of the HIV/AIDS pandemic. In Brazil, for example, researchers have found increases in dual method contraceptive use among women after having received a positive diagnosis for HIV (Magalhães et al, 2002). Among adolescents in South Africa, the perception of being at risk of falling pregnant is a function of the community wherein the individual lives. Adolescents living in communities where young people are perceived or known to be at risk of HIV infection are more likely than others to be concerned about the risk of pregnancy.

2.8. Summary of the review of the literature

The review of the literature has considered the background and socio-economic characteristics of the woman. Studies have for example found that use of and influence in decision-making for fertility control is generally higher among women with more education, those who are employed and those working away from home than among others. Women's use of fertility control is also related to the approval of the husband for family planning. Erasmus for example found that among Black South African women the attitude of the husband toward contraception is the most important factor determining use of fertility control. The husband's education is found to have a stronger influence on decision-making for use of fertility control than that of the woman. Some researchers have found that the husband's fertility desires have a greater effect on decision-making about using fertility control than the desires of the woman while others have shown that the decision is more influenced by the wife's fertility goals. Still, others have shown that neither husband nor wife's desires is more important than the other.

[22] Female education is almost universal in South Africa, yet over 40% of youths between the ages of 15 and 24 are unemployed (UN Common Database, 2006). Worldwide, the lack of educational and employment opportunities are two of the factors accounting for pregnancy among teenagers.

Studies conducted in various settings have however shown that women lack ability to negotiate use of a method of fertility control such as the condom with their husbands. Researchers have found that among Black South Africans, the woman's ability to negotiate use of fertility control is enhanced when she has many children. Socio-cultural gender-related norms and attitudes are found to be a barrier in couple communication about sexuality and reproductive-related matters. Several studies have shown that joint decision-making and the influence of the woman in decision-making for the use of fertility control is enhanced through exposure to information about family planning and HIV/AIDS. Researchers have also found an association between couple communication and exposure to such information.

There is a growing body of literature on contraceptive behaviour among women in South Africa. However, there is no known study that provides information about the factors affecting the decision to use or not to use fertility control among South African women. The goal of this study is to partly fill the void in existing knowledge. This is done through an assessment of the relative effects of background and socio-economic, partner- related, reproductive-related as well as exposure to sources of information about family planning and spousal communication about family planning among married Black South African women of reproductive age.

Chapter 3

3. Theoretical considerations

3.1. Brief overview of some paradigms on family size limitation

The demographic transition thesis, which emphasises the role of socio-economic changes resulting from industrialisation in fertility transition, holds that in pre-industrial societies high fertility exists because mortality is high. The motivation for smaller families - to control fertility - emerges as a result of declining mortality that results from improvement in factors such as nutrition, health, education, etc., so that the demand for larger families is unnecessary.

The demographic transition thesis is questioned on the grounds that it overemphasises the role of socio-economic development in fertility decline. Today, social and population scientists use a variety of explanations in order to explain the factors underlying the desire for smaller families: more precisely, the desire to control fertility. The wealth flow hypothesis, micro-economic approach, modernisation thesis, as well as the thesis of opportunity costs, minority status hypothesis and diffusion thesis are among the many approaches that might be used to help explain the use of – as well as explain the decision to use - fertility control among Black women in the context of the transitional South African society.

3.1.1. The wealth flow hypothesis

The wealth flow hypothesis offers an explanation for the persistence of high fertility in non-industrialised societies (Caldwell 1978, Caldwell et al 1992). Its major assumption is that in the developing countries, it is desirable to have a large number of children, as the flow of family wealth moves from children to parents. The reverse is true in developed societies because parents are the sole economic supporters of children. This suggests that the nucleation of the family, caused by economic development, leads to the reversal of the intergenerational flow of wealth. Therefore, as a society moves from a less developed state to a developing (or developed) one, a limitation in family size is the rational response to economic development.

One apparent weakness of this thesis is linking nucleation of the household to economic development. Although not the norm, intergenerational households have existed - and

continue to exist - in developed societies (Pezzin & Schone, 1999; Spillman & Pezzin, 2000; Grundy, 2006). For example, in a study on intergenerational caregiving conducted in the U.S.A. and Great Britain, Grundy and Henretta (2006) found that one third of the participants were caring for their adolescent children, in addition to a parent (s). Often, the relationship between these relatives is one of interdependence. This thesis is not applicable to the contemporary South African situation. In contemporary South Africa, one often finds intergenerational households where the grandparents (usually the grandmother) are the sole supporters of the entire family (Makiwane 1998; 2006). The current high rate of AIDS-related mortality in South Africa further exacerbates this situation.

3.1.2. Becker's micro-economic thesis

Drawing on classical microeconomic principles, Becker (1960) attempts to explain why couples are motivated to have smaller families. The micro-economic approach stipulates that couples in the higher social strata desire fewer children, as they are exposed to greater opportunities and advantages that, consequently, lead them to value quality, rather than quantity, of children. In this formulation, a couple is perceived to exercise perfect rationality in reproductive decision-making: it is assumed that the couple's desire for fewer children is based on the rational choice between having a child and possessing consumer items - such as a car, a house or a vacation - that would conflict with time and financial expenditure on children.

Empirical evidence exists in support of the hypothesised relationship between declining birth rates and socio-economic status, as measured by education and employment. One criticism of Becker's micro-economic approach is that it negates the fact that high social status might lead to high fertility in the presence of cultural, social or ideological pressures. In developed societies, economic considerations are often the motivating force in reproductive decision-making; other factors might be equal or more important. For example, historically, in the United States, among members of the Church of Jesus Christ of Latter-day Saints, the highest fertility rate is among those who are in the highest socio-economic stratum and who are, simultaneously, highly integrated in the religious community (Spicer & Gustavus1974; Thornton, 1979; McQuillan, 2004).

By giving primacy to the economic dimension, this approach fails to account for the socio-cultural and/or socio-psychological context in which reproductive decisions are

made (Blake, 1968). In the sub-Saharan African context, higher rates of fertility are often found among individuals who are exposed to the influence of modernisation, such as exposure to print and electronic media, education, participation in the wage labour force and western style of living (Nag, 1979). This is because, traditionally, the individual or the family gains social, political and economic prestige from having a large number of children. Thus, despite exposure to westernisation, culture plays a vital role in people's lives.

3.1.3. Thesis of opportunity costs and the minority status hypothesis

In Becker's (1960) micro-explanation, the demand for smaller-sized families is linked to household economics, whereas the opportunity costs paradigm attempts to connect fertility decline to women's education and labour force participation.[23] According to this perspective, the decision to control fertility is hypothesised to be associated with education and employment through the perceived opportunity costs associated with having children. Implicit in this model is the notion that the time devoted to childcare competes with time spent in the workforce.

According to the minority status hypothesis, upwardly mobile social economic minorities will decide to limit or forego childbearing in order to achieve social success. In America, upwardly mobile Black, Jewish (Goldscheider & Uhlenberg 1971) and Chinese women (Espenshade & Ye, 1994) have lower rates of fertility than the socioeconomic majority and their less upwardly mobile minority counterparts. In studies conducted among Black women in the Eastern Cape, South Africa Both Makiwane (1998) and Chimere-Dan (1996) found a positive correlation between contraceptive use and the level of education a woman has attained.

Chimere-Dan's (1996) study show that in the Eastern Cape, Black women with more education and those who work away from home generally have a higher rate of fertility than other women. This is unexpected as a negative relationship, generally, exists between the rate of fertility and the level of education.[24] Due to the fact that,

[23] This does not appear to negate the relevance of female labour force participation for household economics, as women's labour force participation is seen to contribute to the economic welfare of the household. As such, it is an extension of Becker's micro-economic economic approach, as well as similar demand theories.

[24] Analysis of the data of the 1960 American census data showed that, in Southern states - characterised by a high rate of racial discrimination - among women without a tertiary education the fertility of non-Whites is higher than Whites. However, among those with a tertiary education, the fertility of non-Whites is lower than that of Whites (Sly, 1970).

until recently, most Black South Africans could not participate in the socio-economic development of the country, the finding appears to be related to the existence of structural discrimination in society. “The degree of structural assimilation is indicative of the extent of discrimination to which minority members are subject, and to the degree of social distance maintained between minority and majority groups (Ritchey, 1975, p.252). [25] The finding is seen as a race-education interaction effect stemming from structural discrimination, whereby cultural norms favouring a large family are reinforced by the social benefits that result from having more education. The finding that fertility is generally higher among women who have more education and work away from home is probably related to the fact that, in the traditional context, reproductive decision-making is determined by cultural norms associated with family size, kinship and gender relationships (Oyeaka 1989, Faour 1989, Gadella et al 1985, Isiugo-Abanihe 1994, Johnson et al 1996, Karki 1988, Libbus and Kridli 1997, Obermyer 1996).

Even though Chimere-Dan (1996) found that Black South African women with more education, generally, have a higher fertility rate than those with less education, his study also reveals that highly educated, career-oriented women have the lowest rate of fertility. This finding appears to be consistent with both the thesis of opportunity costs and the minority status hypothesis. This might be because highly- educated, career-oriented Black women are more assimilated into the dominant society and /or adhere to values and attitudes that are congruent to the dominant culture.

Although studies have provided evidence in support of the thesis of opportunity costs, its application in the South African context is in doubt since, traditionally, members of the extended family (and community) have assisted with childcare duties. [26] In contemporary South African society, work-related policies - such as maternal leave of absence - make it easier for women to balance the world of work with familial responsibilities. In both developing and developed societies, this is facilitated through the growth of professional childminders, crèches and day care centres, which are becoming an institutionalised feature of every-day reality. The growing emphasis on gender equality (leading to spouses or sexual partners sharing household duties) may also be a contributing factor.

[25] Kuumba (2002, p.520) correctly points out that “In both the U.S and South Africa, Black/African women have historically experienced multiplicative or simultaneous oppressions”.
[26] Under apartheid, outside the homelands, until 1983 the state subsidised day care centres, unevenly along racial lines: 80 cent per day for a white child and 7.5 cents per Black child (Meer, 1985).

3.1.4. The characteristic group hypothesis

The characteristic group hypothesis assumes a relationship between fertility outcomes and fertility norms (Day 1984, Johnson & Lean 1985, for example). Castro (1995:191-2) states that, "norms regarding the number of children considered desirable constrain the range of choices ... available to individual [s]...." This implies that decisions about using fertility control are influenced by the social and cultural context in which they occur. A number of studies have shown that family size norms are initially acquired in the family of orientation (Bumpass, 1967; Duncan, et at, 1956; Hendershot, 1969; Gustavus & Nam, 1970).

3.1.5. The modernisation thesis

According to the modernisation thesis (Cleland & Wilson, 1978), a shift in normative orientation brings about the desire for smaller families. Exposure to factors of modernisation such as western style education and values, emphasising individualism rather than traditional kinship ties, is seen as the mechanism leading to changes in family size norms. A number of studies have shown that in non-western societies, education - particularly female education - has led to the desire for smaller-sized families and the use of modern methods of fertility control in order to fulfil that desire.

The relationship between education and fertility is complex. In many sub-Saharan African countries, a curvilinear relationship exists between fertility rate and educational achievement: fertility is highest for women who are both high and low on the educational spectrum (Cochran & Faird, 1989). For example, in Nigeria, birth rates are lower among women without any schooling than among those with some education (Population Council, 1992). Several studies have, however, shown that in South Africa, a positive relationship generally exists between use of modern methods of fertility control and education (Mostert & du Plessis 1990; Chimere-Dan, 1996, Makiwane, 1998; SADHS, 2002).

3.1.6. Theory of diffusion of ideas

Rogers (1995:35) defines diffusion as a “process by which an innovation is communicated through certain channels over time among members of a social system”. The theory of diffusion of innovation is a generalised framework incorporating the spread of ideas from disciplines as diverse as anthropology,

advertising, sociology, political science, demography and communications (Wejnert, 2002). Casterline (2000, p. 2-3) tells us that "[w]hat unites them is an overarching model of social change in which attitudes and behaviors become more prevalent in a population through their spread from some individuals to others, through informal face-to-face social interaction or at a distance through the mass media".[27]

The application of diffusion theory in population research is largely motivated from findings in the Princeton European Project in which it is recognised that socio-economic or structural changes cannot account for fertility transition and that the diffusion of ideas is a factor contributing to the fertility decline.

Social learning and social influence are key components of this perspective (Bongaarts & Watkins, 1996, Casterline & Watkins; Feyisetan et al, Kohler, 2001). Social learning is merely the acquisition of knowledge and or information whereas social influence is the power or the ability to influence or shape the behaviour of another.

3.1.7. Resource access hypothesis

The resource access hypothesis (Handwerker, 1989) holds that fertility transition occurs only to the extent that resource access channels are made available to men and women. In this framework, the most crucial variable explaining fertility decline is the extent to which individuals are able to access social resources. However, for several reasons, although some individuals have knowledge of specific resource channels (i.e. sources for family planning or condoms) and possess the ability to access them, they are not motivated to use them (Jejeebhoy, 1991).

Reproductive health researchers (Gready et al, 1998) point out that, in South Africa, "[a]ccess to contraception is not the primary determinant of contraceptive usage".[28] In this line of thinking, Jejeebhoy (1991, p.223) points out that [w]hether fertility is actually regulated depends not only on motivation but also on the subjective costs associated with the practice of contraception".[29] Adoption, as well as continued and

[27] Social learning and influence are often emphasised as key elements in the diffusion process.
[28] The unmet need for contraception is quite high: approximately half of the women of reproductive age in South Africa, the majority are Black, has an unmet need for contraception.
[29] There is a big difference between imperial co-ordination and influence. The latter exists when people feel that what the individual or system wants them to do is in their own best interest, and not because they perceive that they have no choice in the matter (c.f. Weber, 1947).

effective use of fertility control, entails not only the knowledge of where and how to access family planning, but also the readiness and willingness to use it.

3.2. Resources in cultural context: A framework for analysing the patterns of dominance in decision-making for the use of fertility control among Black South Africans

Decision-making for the use of fertility control among Black South African women is complex, and involves a variety of factors. Individually, none of the paradigms discussed above can be used to guide this study. What is needed is a framework flexible enough to incorporate the different categories of the factors of interest. This study is, therefore, guided by the thesis of resources in cultural context, which holds that power in decision-making is influenced by cultural and social norms, individuals' expectation about power, as well as the amount of resources available to each individual in the relationship (Rodman 1967, 1972; LaLiberte-Richmond, 1967; Austin and Potter 1980). [30] Consistent with this line of thinking, Bankole (1995, p.318) points out that "spousal dominance [in decision-making] is a function of the prevailing socio-cultural system, and … it may vary over time and space".

3.3. Hypotheses

In line with the goal of this study, it is hypothesised that:

(1a) The background and socio-economic characteristics of the woman have no effect on decision-making for the use of fertility control among the women in this study. Alternatively, (1b) the background and socio-economic characteristics of the woman have a significant effect on dominance in decision-making for the use of fertility control among the women in this study.

(2a) Neither the context of the relationship, nor the characteristics of the husband affect dominance in decision-making. Alternatively, (2b) the characteristics of the husband, generally, have a significant effect on decision-making for the use of fertility control. (2c) Dominance in decision-making is related to the type of relationship and the number of unions.

(3a) The husband-wife's comparative characteristics do not influence dominance in decision-making for the use of fertility control. Alternatively, (3b) the husband-wife's comparative characteristics have a significant effect on dominance in decision-making for the use of fertility control.

[30] This theory is derived from a comparative analysis of studies conducted by a number of researchers in America, France, Yugoslavia and Greece (Blood & Wolfe, 1960; Buric & Zecevic, 1967; Michel, 1967; Saflios-Rothschild, 1967).

(4a) Dominance in decision-making for the use of fertility control is not related to the characteristics of the household. Alternatively, (4b) dominance in decision-making is affected by the characteristics of the household.

(5a) Dominance in decision-making for the use of fertility control is not related to the sexual and reproductive characteristics of the woman. Alternatively, (5b) the sexual and reproductive characteristics of the woman have a significant influence on dominance in decision-making for the use of fertility control.

(6a) Dominance in decision-making for the use of fertility control is not affected by exposure to sources of information and communication about family planning or HIV/AIDS. Alternatively, (6b) exposure to sources of information and communication about family planning or HIV/AIDS has a significant effect on dominance in decision-making for the use of fertility control

(7a) Knowledge and attitudes (about fertility, contraception or HIV/AIDS) have no significant effect on the patterns of dominance in decision-making for the use of fertility control. Alternatively, (7b) decision-making for the use of fertility control is significantly affected by reproductive (fertility and contraceptive) and HIV/AIDS-related knowledge and attitudes.

Chapter 4

Methodology

4.1. Introduction

The source and quality of the data used in the study are discussed and examined. Due to the time lapsed, the data used in this study are compared with other national surveys conducted between 1998 and 2005. Specifically, the data are compared with the 1998 October Household Survey (OHS), the 2001-2002 Migration Study, 2004 General Household Survey (GHS), and the 2005 Labour Force Survey (LFS). Tests for inter-item consistency have been done to check for validity of the data.

4.2. Source and quality of the data

The data used in this study is obtained from the 1998 South African Demographic and Health Survey (SADHS), which is a stratified sample involving 11 735 women from all four racial groups in the country. Over three-quarters (n=8,993, 77.9%) of the women participating in the study are Black.[31] The examination is based on data obtained from a sub-sample of 3,427 Black women interviewed. The factors determining the inclusion of only Black women in this study are the limited number of cases for women of the other racial groups. Black South African women have the highest rate of fertility, use contraception less and are thought to be at greatest risk for HIV infection.

4.2.1. Data

The Department of Health, the Medical Research Council (MRC), Macro International and USAID jointly undertook the 1998-SADHS. The South African Department of Health provided funding for the research. Data collection was supervised by the MRC. Technical support for the research - including sample design, staffing, training and data processing and analyses - was provided by MACRO International, with funding received from USAID (SADHS, 2002). Data for the study was collected between January and November 1998. The primary objective of the 1998 SADHS is to provide information on current fertility and contraceptive levels, as well as the national health status, including maternal and child mortality.

[31] Approximately three quarters (75.2%) of the population is Black. Less than one-fifth (13.6%) is White, with even fewer Coloured (8.6%) or Asian/Indian (2.6%) subjects (See World Factbook, 2004). Coloured women account for 10.2 % of the sample and the remainder is White (7.8%) or Asian/Indian women (3.5%).

4.2.2. Sample frame and design

The survey is intended to provide national estimates, as well as estimates for urban and non-urban areas, based on a sample of approximately 12 000 women of reproductive age women. The basic sampling frame is based on information obtained from the 1996 census (SADHS, 2002). Stratification was based on the nine provinces in the nation, and then on the basis of urban and non-urban areas.

Excepting for the provinces of Gauteng, KwaZulu-Natal and the Eastern Cape, the target sample was 1,000 women per province. It was estimated that 1,000 women per province were required because "results of other demographic and health surveys have shown that a minimum sample of 1,000 women is required, in order to obtain estimates of fertility and childhood mortality rates at an acceptable level of sampling errors" (SADHS, 2002, pp. 286-287). Additional 1,000 women were in the urban samples in KwaZulu-Natal and Gauteng in order to include more Asians in the survey.

Based on the request and funding from provincial authorities, the Eastern Cape was stratified into five health regions, and each region was, subsequently, stratified on the basis of residency (urban and non-urban). An additional 2 000 women were included in the sample for the province. "The sampling frame for the SADHS was the list of approximately 86 000 enumeration areas (EAs) created by the Central Statistical Services, (now Statistics South Africa (SSA)), for the 1996 census" (SADHS, 2002, p. 4). The primary sampling units were equivalent to the 86 000 EAs, and "selected with probability proportional to size (pps), the size being the number of census visiting points in the EA" (SADHS, 2002, pp. 4-5).

A two-stage sampling procedure was used in selecting potential participants for the study. In the first phase, EAs were selected with probability proportional to size. At the second phase, 10 EAs per selected urban area, and 20 per selected rural area, were chosen. A total of 12 680 households were targeted for the national survey, and adults who were 15 years or older in each of the targeted households were eligible.

4.3. Data collection instruments

The information obtained from the pilot study, conducted in November 1996, was used as the basis for the questionnaire. Household, Woman's and Adult Health Questionnaires were used to collect the information. Between January and November

1998, teams of trained field researchers in all 9 provinces (N=175), using all eleven official languages, collected the data for survey.

4.3.1. Household questionnaire

The Household Questionnaire was used to obtain information on the usual residents of each household, as well as visitors possibly staying there the previous night. It is designed to elicit information on the background characteristics of each occupant in the household The socio-economic information on the household included the following: source of drinking water, toilet facilities, type of flooring and wall materials, and ownership of durable items such as radio, television, telephone, refrigerator and motorcycle. Le and Verma (1997, p. 4) point out that the aim of the household survey is to "provide a list of the household members and information on age, sex, residency status and marital status, which are used for selecting women eligible for the individual questionnaire".

At the time of interviewing, 12,638 (98.3%) of the targeted households were occupied. Of these, 12,247(96.9%) of the occupants were successfully interviewed. In three PSUs fieldwork was not undertaken because "of concerns about the safety of interviewers' and the questionnaires for another three PSUs were lost in transit" (SADHS, 2002, p. 7).

4.3.2. Individual woman's questionnaire

Of the 12 327 eligible females, 11,735 (95.2%) were successfully interviewed. The woman's questionnaire was designed to elicit information from women of reproductive age (15-49 years). Information was obtained on the woman's background characteristics, which included: sexual and reproductive histories; contraceptive knowledge and use; fertility desires (preferences), and ante- and post-natal care and delivery. The questionnaire also included items on marital and cohabiting status, education, employment and occupational status, as well as breastfeeding practices, child health and survival, and maternal mortality. Also included were a series of items on partnership, such as the socio-economic characteristics of the husband, his fertility preferences and his approval of family planning. Items on the woman's exposure to HIV/AIDS and family planning-related information were also included.

4.3.3. Adult health questionnaire

Even though the study is based on analyses of information obtained from the household and woman's questionnaires, it is worthwhile to identify the purpose of the third instrument used in data collection for the survey. The Adult Health Questionnaire was designed to elicit information on the health of the nation's adults due to a "paucity of information on the health of adults, particularly chronic diseases" (SADHS, 2002, p. 165). The information that was gathered comes from the women's self-reports, which are unsubstantiated by clinical evidence or medical diagnoses.

This study is based on analyses of 3 427 currently married Black women of reproductive age (15 to 19 years), who participated in the 1998 SADHS (referred to as the Sub-sample). The quality of the data used in this study is assessed by first comparing the 1998 SADHS with each of the other national surveys and, then, comparing the Sub-sample to currently married Black women in other surveys, who are between 15 and 49 years of age.

4.4. Other national surveys

The list of census enumeration areas (EAs) from the 1996 South African Census was used as a sampling frame in the 1998 OHS, the 2001-2002 Migration Survey and the 2004 GHS. The list of Enumeration areas (EAs) from 2001 was used as a sampling frame in the LFS.[32]

The 1998 OHS is an annual national survey conducted by Statistics South Africa (SSA) in order to collect information on households and individuals. The Human Science Research Council (HSRC) conducted the 2001-2002 Migration Study, in order to examine national migratory trends. SSA conducted the 2004 GHS in order to gather data on a broad range of subjects, such as education, employment, fertility, and health. Statistics South Africa also conducted the Labour Force Survey (LFS) in September 2005: this is a mid-year survey assessing trends in the labour market.

The selection criterion used in each of the other national surveys was based on a random sampling approach, using the probability proportional to size (pps) approach. Selection of households (or individuals within households) was done in two or more

stages. The 1998 OHS used the probability-sampling approach. The 2001-2002 Migration Survey, the 2004 GHS and the 2005 LFS used multistage stratified, cluster sampling technique.[33]

4.5. Procedures used to compare the surveys

Simple cross-tabulation is used to compare the 1998 SADHS or the Sub-sample on nominal level variables. The Levene's procedure tests the hypothesis that sample variances are homogeneous, and the t-test is used to examine the data for homogeneity of means. The Kolmogorov-Smirnov Z (K-S) procedure is used to test the hypothesis that the distributions of age, or age at the time of marriage, in the 1998 SADHS or Sub-sample does not differ significantly from those in the 1998 OHS, the 2001-2002 Migration Survey, the 2004 GHS or the 2005 LFS.[34] That is, it tests the hypothesis that the 1998 SADHS is drawn from the same population as each if the other surveys.

4.6. Tests for inter-item reliability of the data used in this study

Tests of inter-item reliability are conducted where a set of items is used to measure the same underlying dimension. An assessment of the reliability of the data used in this study is carried out on the items on household durables, exposure to sources of information, attitudes and knowledge. Cronbach Alpha (Kuder-Richardson) and the goodness-of-fit test statistics are used to estimate the reliability of the items.[35]

4.7. Findings

4.7.1. The 1998 SADHS compared to other national surveys

There are significant differences between the 1998 SADHS and the other surveys in the proportions of women who have ever been married or those who are currently married (Table 2.1, Appendix 2)[36]. The examination reveals that participants in the

[32] Detailed information on these can be obtained from the National Research Foundation's (NRF) website.
[33] Data for the 1998 OHS, the 2001-2002 Migration Survey, the 2004 GHS and the 2005 LFS were obtained from the NRF, who granted permission to use them for comparative purposes.
[34] The assumption of no significant difference is accepted if p. ≥. 050.
[35] In SPSS, Cronbach's Alpha is equivalent to the Kuder-Richardson (KR) procedure when used with dichotomous variables, which is the case in this assessment.
[36] Nonetheless, the finding of 42.2% of women in the 1998 SADHS who are currently married (or cohabiting) is close to the figure of 41.1% in the 2001 South African Census.

1998 SADHS differ from those in the 1998 OHS, as well as the 2001-2002 Migration Survey, in average age and age at marriage (Table 2.1, Appendix 2).
These differences may be gender-related because only women between the ages of 15 and 49 are included in the 1998 SADHS, whereas both men and women are included in other surveys. For example, among all males in the surveys the average age is 25.87, compared to 28.23 among women. The median age at the time of the first marriage is 25 years among males and 22 years among females.[37]

The extent to which the women in this study are characteristic of all South African women between 15 and 49 is evaluated by comparing the respondents in the 1998 SADHS with women of a comparable age in the other surveys on key socio-demographic variables.[38]

4.7.2. Comparisons among women between 15 and 49 years of age

The 1998 SADHS differs from the 2004 GHS and the 2001-2002 Migration Survey in the proportion of women between 15 and 49 years living in urban areas. There are no significant differences between the 1998 SADHS and the 1998 OHS in the proportion of women who live in urban areas (x^2=. 145, p=. 704). The examination reveals that the median age at first marriage is lower among women in the 1998 SADHS than among those in the other surveys. Women in the 1998 SADHS differ significantly from those in the other surveys in the proportion of how many had ever been married, are currently married or are cohabiting (Table 2. 2, Appendix 2).

There is homogeneity of variances between the 1998 SADHS and both the 1998 OHS and the 2005 LFS with respect to age. The evaluation demonstrates that women in the 1998 SADHS differ significantly in average age from those in the 1998 OHS, the 2001-2002 Migration Survey and 2005 LFS. However, those in the 1998 SADHS do not differ significantly in average age from those in the 2004 GHS. The examination also shows that the age distribution among women in the 1998 SADHS differs significantly from those in the other national surveys (Table 2.3, Appendix 2).

Age comparisons show homogeneity of variances between the 1998 SADHS and

[37] Data not shown
[38] In the 1998 SADHS Final Report (p.317): "The age distribution of eligible women from the de facto household population is compared with the age distribution of the sampled women interviewed". The researchers find "that the distributions are very similar."

both the 1998 OHS and the 2001-2002 Migration Survey among women living in rural areas (Table 2.3, Appendix 2). In both urban and rural areas, women in the 1998 SADHS and the 1998 OHS differ from each other in average age. There is no significant difference in average age between those in the 1998 SADHS and the 2001-2002 Migration Survey in either urban or rural areas (Table 2.3, Appendix 2).

Comparison of the 1998 SADHS, with both the 1998 OHS and the 2001-2002 Migration Survey, demonstrate that the variances of the surveys are homogeneous with respect to age at marriage. The comparison of the 1998 SADHS and the 1998 OHS reveals that in both urban and rural areas, the variances of the two surveys are homogeneous with respect to age at marriage. Among women living in urban areas, those in the 1998 SADHS and those in the 1998 OHS do not differ in average age at first marriage (Table 2.3, Appendix 2).

Some of the differences between the 1998 SADHS and other surveys among women between the ages of 15 and 49 might be related to differences that exist between women from different population (i.e. ethnic or racial) groups.

4.7.3. Comparisons between Black and non-Black women, 15 to 49 years

In general, in all surveys, Blacks and non-Blacks differ in age and age at marriage (Table 2. 1, Appendix 2).A comparison of the data among Black and non-Black women between 15 and 49 years of age show that those in the 1998 SADHS differ significantly from those in most of the other surveys, in both average age and age at marriage. Levene's procedure for homogeneity of variances between the 1998 SADHS and each of the other surveys demonstrates equality of variances between the 1998 SADHS and the 2004 GHS with respect to age ($F= .201$, $p= .654$). There is homogeneity of variances with respect to age at marriage only between the 1998 SADHS and the 2001-2002 Migration Survey ($F=0.081$, $p=0.776$). K-S tests reveal that Black and non-Black women in the 1998 SADHS differ significantly in both age and age at marriage distributions.[39]

[39] Statistical outputs for the descriptive statistics related to the comparisons between the 1998 SADHS, or the Sub-sample, and each of the other surveys can be found in Appendix 2 to this study.

4.7.4. Comparisons among Black women aged 15 to 49

In order to examine the quality of the data used in this study further, Black women in the 1998 SADHS are compared to Black women between the ages of 15 and 49 in the other surveys. The examination demonstrates homogeneity of variances between the 1998 SADHS and both the 1998 OHS and the 2001-2002 Migration Survey, in general, as well as in both urban and rural areas (Table 2.4, Appendix 2).

Black women aged between 15 and 49 in the 1998 SADHS do not differ significantly in average age from those in the 1998 OHS, the 2001-1002 Migration Survey or the 2005 LFS. Among those in urban areas, the 1998 SADHS differs significantly from the 2001-2002 Migration Survey. On the other hand, among those in rural areas, there is no significant difference in average age between the two surveys (Table 2.4, Appendix 2).

The examination reveals that Black women in the 1998 SADHS do not differ significantly in average age from Black women between the ages of 15 and 49 in the 1998 OHS, the 2001-2001 Migration Survey or the 2005 LFS. Among those living in urban areas, there is no significant difference in average age between the 1998 SADHS and the 1998 OHS or the 2004 GHS. The examination demonstrates that, in rural areas, there is no significant difference in average age between those in the 1998 SADHS and the 2001-2002 Migration Survey.

Among all Black women aged between 15 and 49, the age distributions in the 1998 SADHS differ significantly from those in other surveys. However, in both urban and rural areas, the age distributions of Black women aged between 15 and 49 in the 1998 SADHS and those in the 2001-2002 Migration Survey are similar (Table 2.4, Appendix 2).

4.7.5. Women in the sub-sample compared with other Black women aged 15 to 49 in the other surveys

In order to further determine the representative nature of the data used in this study, the Sub-sample is compared to “Other” Black women in the SADHS who are not currently married, as well as Black women aged between 15 and 49 in each of the

other surveys, in two stages. The first set of comparisons includes all those who have ever been married, while the second includes only those who are currently married.[40]

Women in the Sub-sample differ significantly from those in the other surveys with respect to the proportion of those who have ever-married, currently married, or living in urban areas (Table 2.5, Appendix 2).

The average age at first marriage is lower among women in the Sub-sample (median age 20 years) than among those in either the 1998 OHS (median age 21 years) or the 2001-2002 Migration Survey (median age 23 years). The average age is higher among women in the Sub-sample (34.4 years) than among "Other" Black women in the 1998 SADHS (25.4 years), the 1998 OHS (28.5 years), the 2001-2002 Migration Survey (28.6 years), the 2004 GHS (29.4 years) or the 2005 LFS (28.9 years). A similar set of results is obtained when the data is examined on the basis of place of residence (Table 2.6, Appendix 2).

4.7.6. Comparisons among ever-married and currently married Black women

A comparison of the Sub-sample and "Other" Black women in the 1998 SADHS shows homogeneity of variances with respect to age among Black women who have been married. The analysis shows homogeneity of variances between the Sub-sample and both the 2001-2002 Migration Survey and the 2005 LFS (Table 2.6, Appendix 2). Women in the Sub-sample differ significantly in average age from "Other" Black women in the 1998 SADHS, as well as Black women in the 1998 OHS, 2001-2002 Migration Survey, the 2004 GHS and the 2005 LFS who have ever-married. The age distributions in the Sub-sample differ significantly from the age distributions among those who have ever-married in each of the other surveys.

Among ever-married Black women in urban areas, the variance of the Sub-sample is homogeneous only with that of "Other" Black women in the 1998 SADHS, with respect to age. In rural areas, the variance of the Sub-sample is homogeneous with "Other" Black women in the 1998 SADHS and the 2001-2002 Migration Survey (Table 2.6, Appendix 2). There is homogeneity of variances between the Sub-sample and both the 2001-2002 Migration Survey and the 2005 LFS.

[40] In the context of this study, 'currently married' includes women who are formally married and those who are in a consensual relationship.

Women in the Sub-sample differ in average age from “Other” Black women in the 1998 SADHS, as well as those in each of the other surveys (Tables 1 & 2, Appendix 2). The distribution in ages among those in the Sub-sample is not similar to that among “Other” Black women in the 1998 SADHS, the 1998 OHS, the 2001-2002 Migration Survey, the 2004 OHS or the 2005 LFS (Table 2.6, Appendix 2).

The comparison among ever-married Black women (aged 15-49), with respect to age at first marriage, finds homogeneity of variances between the Sub-sample and “Other” Black women in the 1998 SADHS (Table 2.6, Appendix 2). In rural areas, there is no significant difference in the average age between those in the Sub-sample and “Other” Black women in the 1998 SADHS. The distribution in ages among women in the Sub-sample and “Other” Black women in the 1998 SADHS are similar to each other (Table 2.6, Appendix 2). There is also equality of variances between the Sub-sample and “Other” Black women in the 1998 SADHS, in both rural and urban areas. Furthermore, there is homogeneity of variances between the Sub-sample and the 2001-2002 Migration Survey in rural areas.

There is equality of variances between the Sub-sample and “Other” Black women in the 1998 SADHS, with respect to age at first marriage. Among those who have ever-married, there is no significant difference between the Sub-sample and “Other” Black women in the 1998 SADHS in their distributions of age at first marriage (Table 2.6, Appendix 2).

In urban areas, there is equality of variances between the Sub-sample and “Other” Black women in the 1998 SADHS, as well as those in the 2001-2002-Migration Survey and the 2004 GHS. The examination reveals that age at marriage distributions in the Sub-sample is similar to those in the 2004 GHS among Black women who have ever-married (Table 2.6, Appendix 2).

In rural areas, there is homogeneity of variances between the Sub-sample and “Other” Black women in the 1998 SADHS and the 1998 OHS, among those who have ever-married. There is also no significant difference in average age at marriage between the Sub-sample and “Other” Black women in the 1998 SADHS in rural areas. The age at marriage distributions in the Sub-sample do no differ significantly from the age at marriage distributions among Black women who have ever-married in rural areas (Table 2.6, Appendix 2).

Those in the Sub-sample do not differ significantly in age at first marriage from those in the 1998 OHS, among currently married Black women in urban areas. The examination reveals that the age at marriage distributions in the Sub-sample is not different from those in the 1998 OHS. In rural areas, the age distribution in the Sub-sample is similar to the age at marriage distributions in the 1998 OHS.

There is equality of variances between the Sub-sample and the 1998 OHS, as well as the 2001-2002 Migration Survey, among currently married women in urban areas. The age distributions in the Sub-sample do not differ from the age distributions in the 1998 OHS in urban areas. There is equality of variances between the Sub-sample and the 1998 OHS among those living in rural areas, with respect to age (Table 2.6, Appendix 2).

4.7.7. Age comparisons among currently married Black women, within the province

The province of residence could assist in explaining some of the findings of significant differences between the Sub-sample and each of the other surveys since a random sampling approach was used to select participants from each province - and then by place of residence –. Therefore, the data for currently married Black women is examined on the basis of province of residence, and, thereafter, on place of residence (urban/rural), in order to ensure a more comprehensive assessment of the surveys.

There are no significant differences in age distributions between the Sub-sample and any of the other surveys In the Western Cape, Northern Cape and Gauteng (Table 2. 7, Appendix 2). There is homogeneity of variances in the Western Cape, Northern Cape and Mpumalanga. Results obtained from the K-S tests demonstrated that, in these three provinces, there is no significant difference in age distribution between those in the Sub-sample and those in the 1998 OHS, the 2001-2002 Migration Survey or the 2005 LFS (Table 2.7, Appendix 2).

In the Western Cape, Northern Cape and Mpumalanga, there is a significant difference in age distribution between those in the Sub-sample and the 2004 GHS. This finding suggests that those in the Sub-sample (hence the 1998 SADHS) and the 2004 GHS are not derived from the same population. None of the comparisons found homogeneity of variances or a significant difference in age distributions in KwaZulu-Natal (Table 2.7, Appendix 2).

The comparison with the 1998 OHS found homogeneity of variances in the Western, Eastern, and Northern Cape, as well as in Gauteng, Mpumalanga and Limpopo. K-S tests found that there is no significant difference in age distributions between the Sub-sample and the OHS among currently married Black women living in the Western Cape, Eastern Cape, Northern Cape, the Free State, the North West and Mpumalanga (Table 2.7, Appendix 2).

4.7.8. Within province comparisons of age at first marriage among currently married Black women, aged 15 to 49

The comparison of the Sub-sample with the 2005 LFS found that, in all nine provinces, there is equality of variances among currently married Black women aged between 15 and 49, with respect to age. However, K-S tests found that the age distributions are not significantly different in the Western Cape, Eastern Cape, Northern Cape, Gauteng and Mpumalanga. The evaluation also finds no significant differences in average age between the two surveys in the Western Cape, Northern Cape, Gauteng or Mpumalanga (Table 2.8, Appendix 2).

The comparison of the Sub-sample with the 1998 OHS shows homogeneity of variances between the two surveys in the Western Cape, Free State, KwaZulu-Natal, the North West, Gauteng and Mpumalanga. There is no significant difference in average ages at marriage between the Sub-sample and the 1998 OHS results from in the Western Cape, the Free State, KwaZulu-Natal, the North West or Gauteng (Table 2.8, Appendix 2).

There is homogeneity of variances between the Sub-sample and the 2001-2002 Migration Survey in the Western Cape, Eastern Cape, Northern Cape, KwaZulu-Natal, the Free State, the North West, Gauteng and Mpumalanga (Table 2.8, Appendix 2). There is no significant difference in average age at marriage between the Sub-sample and the 2001-2002 Migration Survey among women in the Western Cape, Northern Cape, KwaZulu-Natal, the North West or Limpopo (Table 2.8, Appendix 2).

Findings from K-S tests indicate that, in the Western Cape, Eastern Cape and Gauteng, the Sub-sample and the currently married Black women between 15 and 49 years in the 1998 OHS are drawn from the same – or similar - populations. The findings show that except in the Eastern Cape, Free State and Mpumalanga, women

in the Sub-sample and currently married Black women between 15 and 49 years in the 2001-2002 Migration Survey are drawn from the same or similar populations.

4.8. Within province comparisons, according to place of residence

4.8.1. Age and age at marriage comparisons in urban areas

The evaluation shows homogeneity of variances between the Sub-sample and each of the other surveys in the Northern Cape, the Free State, KwaZulu-Natal, Mpumalanga and Limpopo. The table also shows equality of variances between the Sub-sample and the 1998 OHS in the Northern Cape, the Free State, KwaZulu-Natal, Mpumalanga and Limpopo. Moreover, there is equality of variance between the Sub-sample and the 2001-2002 Migration Survey in all nine provinces. The evaluation established that, in urban areas, excluding the Eastern Cape and Gauteng, there is homogeneity of variances between the Sub-sample and the 2004 GHS (Table 2.9, Appendix 2).

Among married Black women between the ages of 15 and 49, living in urban areas, there is no significant difference in average age between the Sub-sample and the 1998 OHS, the 2001-2002 Migration Survey or the 2004 GHS in the Western Cape, Eastern Cape, Northern Cape, Gauteng and Mpumalanga (Table 2.9, Appendix 2).

There are no significant differences in age distributions in the Sub-sample and the 1998 OHS, the 2001-2002 Migration Survey or the 2004 GHS in the Western Cape, Eastern Cape, Northern Cape, Gauteng, Mpumalanga or Limpopo. These findings indicate that, in these provinces, the women in the Sub-sample come from the same or similar population as the married Black women (aged 15 to 49) in the 1998 OHS, the 2001-2002 Migration Survey and the 2004 GHS (c.f. Table 2.9, Appendix 2).

The findings suggest that women in the Sub-sample and those in the 1998 OHS and the 2001-2002 Migration Survey come from the same, or similar, population of currently married Black women in urban areas of the Free State. The findings also appear to indicate that women in the Sub-sample and married Black women between the ages of 15 and 49 in the 2001-2002 Migration Survey are drawn from the same, or similar, population in urban areas of KwaZulu-Natal. In the North West, the Sub-sample and the 1998 OHS appear to come from the same, or similar, population of currently married Black women between the ages of 15 and 49 years in urban areas.

There are significant differences in average age between the Sub-sample and the 1998 OHS in only three provinces, namely: KwaZulu-Natal, the North West and Limpopo. The examination reveals that women in the Sub-sample do not differ significantly in average age from those in the 2001-2002 Migration Survey in any of the provinces (Table 2. 9, Appendix 2).

The comparisons of age at marriage in urban areas found homogeneity of variances between the Sub-sample and the 1998 OHS in all nine provinces (Table 2. 10, Appendix 2). Table 2.10 shows that, in urban areas, there is homogeneity of variances between the Sub-sample and the 2001-2002 Migration Survey in the Western Cape, Eastern Cape, Northern Cape, Free State, KwaZulu-Natal and Mpumalanga.[41]

In urban areas, there is no significant difference in the average age at marriage between the Sub-sample and either the 1998 OHS or the 2001-2002 Migration Survey among currently married Black women between the ages of 15 and 49 in the Western Cape, Eastern Cape, Northern Cape, KwaZulu-Natal or Gauteng. The examination also reveals that, in the North West, there is no significant difference between the Sub-sample and the 1998 OHS in average age at marriage in urban areas (Table 2.10, Appendix 2).

Those in the Sub-sample and the 2001-2002 Migration Survey differ significantly in average age at marriage in the North West province. The examination also reveals that women in the Sub-sample differ significantly from currently married Black women in both the 1998 OHS and the 2001-2002 Migration Survey in the Free State, Mpumalanga and Limpopo (Table 2.10, Appendix 2).

The K-S procedure found significant differences in the age at marriage between the Sub-sample and both the 1998 OHS and the 2001-2002 Migration Survey in the urban areas of Mpumalanga and Limpopo, among currently married Black women aged between 15 and 49 (Table 2.10, Appendix 2).

There are significant differences in age at marriage distributions between the Sub-sample and the 2001-2002 Migration Survey in urban areas in the Free State. The distributions in age at marriage in the Sub-sample are not significantly different from

those in the 1998 OHS, the 2001-2002 Migration Survey or the 2004 GHS in the Western Cape, Eastern Cape, Northern Cape, KwaZulu-Natal or Gauteng.

4.8.2. Age and age at marriage comparisons among currently married Black women in rural areas

There is equality of variances between the Sub-sample and the 1998 OHS in the Western Cape, Eastern Cape, Northern Cape, KwaZulu-Natal, the North West, Gauteng, Mpumalanga and Limpopo (Table 2. 11, Appendix 2). The comparison of the Sub-sample with the 2001-2002 Migration Survey found homogeneity of variances between the two surveys in the Eastern Cape, Free State, KwaZulu-Natal, Mpumalanga and Limpopo. Table 2.11 also depicts that, in rural areas, there is homogeneity of variances between the Sub-sample and the 2004 GHS in the Northern Cape, Free State, the North West, Gauteng, Mpumalanga and Limpopo (Table 2.11, appendix 2).

In rural areas, there are significant differences in average ages between the Sub-sample and each of the other surveys conducted in the Western Cape and KwaZulu-Natal. Among currently married Black women, aged 15 to 49, living in rural areas, there are no significant differences in the average age between the Sub-samples and currently married Black women in the 1998 OHS conducted in the Eastern Cape, Northern Cape, the North West or Mpumalanga (Table 2.11, Appendix 2).

In the Free State, Gauteng, Mpumalanga and Limpopo the Sub-sample and the 2001-2002 Migration Survey do not differ significantly in average age among currently married Black women, between the ages of 15 and 49 living in rural areas. The comparison with the 2004 GHS reveals that only in the Northern Cape and Mpumalanga do the Sub-sample and the 2004 GHS not differ significantly in average age (Table 2.11, Appendix 2).

The findings indicate that, in six provinces - the Eastern Cape, Northern Cape, the Free State, the North West, Gauteng, Mpumalanga and Limpopo - the Sub-sample is drawn from the same, or similar, population as are the currently married Black women (between the ages of 15 and 49, living in rural areas) in the 1998 OHS. The findings

[41] Due to an insufficient number of cases for comparison, Limpopo is not included in this part of the analysis.

also indicate that, in rural areas, the Sub-sample and currently married Black women between the ages of 15 and 49 in the 2001-2002 Migration Survey are drawn from the same or similar populations in six provinces – the Eastern Cape, the Free State, the North West, Gauteng, Mpumalanga and Limpopo.

In rural areas, the Sub-sample and the 2004 GHS are both derived from the same population of currently married Black women between the ages of 15 and 49 in the Western Cape, Northern Cape and Mpumalanga. In KwaZulu-Natal, there are significant differences in age distributions in the Sub-sample and the 1998 OHS, the 2001-2002 Migration Survey and the 2004 GHS.

The comparisons of age at marriage in rural areas found homogeneity of variances between the Sub-sample and the 1998 OHS in the Western Cape, the Free State, KwaZulu-Natal, the North West, Gauteng and Mpumalanga (Table 2. 12, Appendix 2). There is also homogeneity of variances between the Sub-sample and the 2001-2002 Migration Survey among those women living in rural areas of the Free State, the North West and Mpumalanga (Table 2.12, Appendix 2).

In the Western Cape, Northern Cape, Free State, KwaZulu-Natal, as well as the North West, there are no significant differences between the Sub-sample and the 1988 OHS conducted in rural areas. The examination reveals that, in KwaZulu-Natal, the North West, Gauteng and Limpopo, there is no significant difference in average age between the Sub-sample and the 2001-2002 Migration Survey in rural areas (Table 2.12, Appendix 2).

In five provinces - the Western Cape, Northern Cape, Free State, KwaZulu-Natal and the North West - the Sub-sample and the 1998 OHS do not differ significantly in their distributions in age at marriage in rural areas (Table 2.12, Appendix 2).

There are no significant differences between the Sub-sample and the 2001-2002 Migration Survey in age at marriage distributions in the rural areas of the Free State, the North West and Gauteng (Table 2. 12, Appendix 2).

The comparisons of age at marriage between the Sub-sample and, both the 1998 OHS and the 2001-2002 Migration Survey demonstrate that only in the Free State and the North West is the Sub-sample drawn from the same population as currently

married Black women between the ages of 15 and 49 in both surveys (Table 2.12, Appendix 2).

4.9. Summary and conclusions of findings on comparisons between the Sub-sample and the other national surveys

Age comparisons between the Sub-sample and each of the other national surveys show that in urban areas, the Sub-sample is most homogeneous with the 1998 OHS in the Northern Cape, Free State and Mpumalanga.[42] Table 2.9 depicts that, in urban areas, the Sub-sample is most homogeneous with the 2001-2002 Migration Survey in the Western Cape, Eastern Cape, Northern Cape, Free State, KwaZulu-Natal, Gauteng, Mpumalanga and Limpopo. In urban areas, the Sub-sample is most homogeneous with the 2004 GHS - with respect to age - only in the Northern Cape and Mpumalanga (Table 2. 9, Appendix 2).

Table 2.10, Appendix 2 shows that, in urban areas, with respect to age at marriage, the Sub-sample is most homogeneous with the 1998 OHS in the Western Cape, Eastern Cape, Northern Cape, KwaZulu-Natal, the North West and Gauteng. The Sub-sample and the 2001-2002 Migration Survey are most homogeneous in the Western Cape, Eastern Cape, Northern Cape and KwaZulu-Natal.

In rural areas, the Sub-sample is most homogeneous with the 1998 OHS in the Eastern Cape, Northern Cape, the North West, Mpumalanga and Limpopo, with respect to age. Furthermore, the evaluation finds that, in rural areas, the Sub-sample is most homogeneous with the 2001-2002 Migration Survey in the Free State, Gauteng, Mpumalanga and Limpopo. The comparison with the GHS finds that the two are most homogeneous in the Northern Cape and Mpumalanga.

Tests for homogeneity in age at marriage, among currently married Black women between the ages of 15 and 49, living in rural areas, reveal that the Sub-sample is most homogeneous with the 2001-2002 Migration Survey in the North West. It is also most homogeneous with the 1998 OHS in the Western Cape, the Free State and the North West.

Some of the findings of significant differences between the Sub-sample and each of the other surveys are attributed to different approaches used in sample selection

[42] This is an overall assessment that takes into account variances, means and population distributions.

procedures. Migration and/or HIV/AIDS are two factors that may help explain some of the differences between the women in the Sub-sample and married Black women, 15-49 years, in the other surveys.

Rates of migration and HIV/AIDS infections are race-, age- and gender-specific, and occur more frequently in some areas than in others. In South Africa, migration generally takes place from rural to urban areas and from poorer to more affluent provinces. In the post-Apartheid era, there has been an increase in Black female migration (Collinson et al, 2003; Posel & Casale, 2003). Collinson et al (2003) determined that the highest rate of migration in recent years is among adolescent and young Black females. [43],[44]

Reproductive-aged women are disproportionately affected by HIV/AIDS. [45] In South Africa, the highest rate of HIV-infection is among women between the ages of 25 and 29 years (Department of Health, 2005).[46] Black women of reproductive age are at the greatest risk of being infected by the virus.[47] HIV/AIDS morbidity and mortality are generally higher in rural areas than in urban ones.[48] In 2003, AIDS-related illnesses were the fifth leading cause of death among adult South Africans, between the ages of 15 and 49 (SSA, 2006), and among the ten leading causes of death in five of the nine provinces.[49] The effect of migration and HIV/AIDS on age and/or age at marriage is indicated by findings of significant differences between the Sub-sample and the 1998 OHS, the 2001-2002 Migration Survey, the 2004 GHS or the 2005 LFS in rural areas, and in most provinces characterised by high rates of migration and/or AIDS-related mortality [50]

[43] The flow of migration is generally from rural to urban areas. Gauteng, the Western Cape and KwaZulu-Natal are the most frequent points of destination for Black migrants. On the other hand, Limpopo and the Eastern Cape are the two most frequent points of departure (Kok et al l, 2003; SSA, 2006b).
[44] Although there is a decline in the rate of marriage among Black women between the ages of 15 and 25, the major reason for permanent migration is marriage.
[45] The rate of infection among women between the ages of 15 and 49 is 20% (SSA 2006b).
[46] 33.3% of women in this age bracket are estimated to be HIV-positive.
[47] Similar to findings for Black and Latina women in the U.S.A., this is attributed to socio-economic factors such as high rates of unemployment and gender- related cultural norms and attitudes.
[48] High proportions of those in rural areas are Black (SSA, 2006).
[49] In 2003, AIDS-related illnesses were among the ten leading causes of death in the Western Cape, Eastern Cape, Northern Cape, KwaZulu-Natal and the North West.
[50] These are as follows: the Eastern Cape (high rates of out-migration and AIDS-related mortality), KwaZulu-Natal (in-migration and AIDS-related mortality), the North West (AIDS-related mortality) and Limpopo (out-migration).

The results obtained from comparing the Sub-sample with each of the other national surveys conducted between 1998 and 2005; provide reasons for believing that women in the Sub-sample are typical of the population of currently married Black South African women between the ages of 15 and 49.

4.10. Testing the internal consistency of the data

There is no general rule as to what the cut-off point should be for the result from tests for inter-item reliability. However, in social science, results in the range of 60 or higher is acceptable. The results from the reliability tests performed on selected items in the data used in this study show that in general, inter-item reliability is moderate to high (Table 2.13, Appendix 2). The coefficient for the two items measuring knowledge of a source for contraception or condoms is fairly acceptable. The coefficient for the six items on discussions on family planning is only minimally acceptable. Since the coefficient for the set of items assessing the initial source of information on family planning is in the negative direction, and is in excess of 1.0, there is a need to examine these items more closely. [51]

4.11. Variables and their measurements

4.11.1. Dependent variable

The dependent variable is the pattern of dominance or influence in decision-making for the use of fertility control. Specifically, who makes the decision about use (or non-use) of fertility control: is it the woman, her husband, both of them, or someone else who decides?

4.11.2. Independent variables

The categories of independent variables examined are classified as follows: (1) the background and socio-economic characteristics of the woman; (2) characteristics of the husband; (3) husband-wife's comparative characteristics; (4) characteristics of the household; (5) sexual and reproductive; (6) exposure and communication; (7) reproductive knowledge and attitudes and (8) HIV/AIDS knowledge and attitudes.

[51] In the context of this study, this cannot, however, be done. They are not considered appropriate for submission in multinominal logistic analysis.

4.12. The background and the socio-economic characteristics of the woman

Past research has shown a relationship between adolescents' sexual and reproductive behaviour - including the use of fertility control - and the living environment during childhood.[52] In this study, childhood place of residence, [53] mother's children [54] and birth order[55] are used to measure the impact of the living environment during childhood on decision-making for the use of fertility control. These variables are included in the study to estimate the effect of primary socialisation on dominance in decision-making for the use of fertility control.

4.12.1. Variables measuring the background characteristics of the woman

Childhood place of residence is defined in one of three ways: city, town or country. Mother's children falls into one of three categories: One to two, Three to four, or Five or higher. The variable 'birth order' is the number of children that the respondent's mother had before she (the respondent) was born, plus one. Birth order is defined in one of three ways: First and second, Third and fourth, or Fifth or higher. [56]

4.12.2. Variables measuring the socio-economic characteristics of the woman

Previous studies conducted in both developed and developing countries have shown a significant relationship between fertility control and the socio-economic characteristics of the woman. The study makes use of place of residence, age, education, employment, marriage and experience of abuse, in order to estimate the effect of the socio-economic characteristics of the woman on decision-making for the use of fertility control.[57]

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[52] See, for instance, Makinwa-Adebusoye (1992), Chimere-Dan (1997), Bakken & Winter (2002) and Odimegwu et al (2002).

[53] Most studies have shown a significant association between the use of fertility control prior to the first birth and place of residence during childhood. Chimere-Dan (1992), however, found that, among teenage parents in Namibia, the childhood place of residence is not a significant predictor for use of fertility control prior to the first birth.

[54] In general, the prevalence of the use of fertility control is positively related to the socio-economic status of the parents - particularly the mother - while there is a negative relationship between fertility and the socio-economic status of the parents. Since the 1998 SADHS does not include an item to assess the mother's education or labour force participation, the number of children that the woman's mother had is, therefore, used as a proxy for social status.

[55] Argys et al (2006), for example, found a significant association between involvement in risk-taking behaviours and birth order.

[56] See Section 1.1, Appendix 3 for the wording of the questions used to gather information on these items.

[57] See Sections 1.2 to 1.5, Appendix 3, for the items used to obtain information on the socio-economic characteristics of the woman.

Place of residence is examined in terms of province, as well as current place of residence (urban/rural).[58] The province of residence is the region wherein the woman usually resides. Place of residence is defined in terms of Urban or Rural residency. Due to the high rates of HIV-infection and AIDS-related mortality among women of reproductive age, as well as the outward migration flows from less economically sound provinces and rural areas (as discussed in 4.7, above). It is important to understand the relative effect of the place of residence on decision-making. The finding would indicate if there is a need for family planning and HIV/AIDS education and intervention programmes designed to target internal immigrants.

The woman's age is included in this study because prevalence of use of fertility control and, hence, the decision to use fertility control generally varies with the woman's age. In this study, age is coded as 15 to 24 years, 25 to 29 years, 30 to 34 years, 35 to 39 years, 40 to 44 years and 45 to 49 years.

Education is sometimes used as a proxy for social status and is often claimed to be the most decisive factor in women's decision-making autonomy.[59] Previous studies have, in fact, shown a significant association between dominance in reproductive decision-making and education.[60],[61] One study found that South African women who have more than a secondary education are more egalitarian than those who have a limited education in decision-making about using fertility control (Gready et al, 1998). However, the relative effect of education on decision-making for the use of fertility control in the South African context is not known. Therefore, understanding the relative importance of education in decision-making for the use of fertility control among Black South African women is meaningful, as past research has shown a positive association between risk reduction behaviours and education.[62]

This study makes use of the woman's levels of educational achievement and literacy, as well as whether or not the woman is currently studying, in order to measure the effect of education on decision-making for the use of fertility control. The level of educational achievement is defined in one of three ways: No education, Primary, or

[58] The prevalence in the use of fertility control is, generally, lower among women living in provinces characterised by low levels of education and employment, and a higher proportion of the population living in rural areas.
[59] See, for example, Cochran (1979) and Jejeebhoy (1996).
[60] See Hossain (1998) and Wyatt et al (2000).
[61] Chimere-Dan (1994, 1996) found, however, that rates of fertility and prevalence in the use of fertility control among Black South African women are both positively associated with education.
[62] See, for example, Luster & Small (1994), and Takahashi et al (2006).

Secondary or higher.[63] The level of literacy is defined as follows: Literate (reads with ease), and Difficult or illiterate (reads with difficulty or not at all).[64] The variable studying is a dichotomous variable, coded as Yes or No.

It is widely accepted that in sub-Saharan African societies, education affects women's social status and their autonomy in reproductive decision-making "by providing women with qualifications to obtain jobs which interfere with their bearing as many children as women who are less educated" (Levine, 1980, p.82).[65] Among Black South African women, the use of fertility control is higher among women who are employed than among those who are unemployed (Chimere-Dan, 1996; SADHS, 2002). However, the relative effect of employment on decision-making for the use of fertility control among South African women has, thus far, not been measured.

This study examines several aspects of employment, in order to assess the relative importance of employment on decision-making for the use of fertility control among the studied population. Included in the analysis are: current employment status; worked within the past year; occupation.[66]

The variable employment status is a dichotomous variable coded as Yes (i.e. employed) or No (i.e. unemployed).[67] The variable 'worked during the past year' is categorised as No, In the past year or Currently working. Occupation is defined as follows: Professional, technical and managerial; Clerical, sales and services; Skilled manual; Unskilled manual or Unemployed.

The relative importance of marriage in decision-making for the use of fertility control is

[63] Given the disparity in education, an assessment of the content of education would be more meaningful.
[64] The relative effect of literacy on decision-making for the use of fertility control is important, as women who are literate generally have more information and knowledge about fertility control than other women. Because this item asks about the woman's ability to read in her native tongue, and not in English (the language in which information in pamphlets and brochures at family planning clinics is written), the finding on this item should be interpreted with caution. Moreover, the information should be based on an objective criterion (or set of criteria) and not on the respondent's self-report.
[65] See for example, Kritz & Gurak (1989).
[66] See Section 1.3, Appendix 3 for these items.
[67] In the 1998 SADHS, women who work for cash or kind are included in the category employed. Whether or not the woman works for cash is not considered, because so few (.8%) of those who are employed do not receive cash for work.

also examined in this study. Age at first marriage/union, type of union, [68] time since the first union/marriage and co-wife are used to measure the effect of marriage on the dependent variable[69]

In DHS research, age at first marriage is operationally defined as the woman's age at the time of the first marriage (whether formal or consensual). Age at first marriage is an important factor to consider as, traditionally, it has been an indicator of the woman's initial exposure to childbearing. In regression analysis, age at first marriage is categorised as: 10-18 years, 19-24 years or 25 years or older.

There are two major reasons for including type of union in the analysis: since 1996, the proportion of Black South African women in a consensual union has increased, and, in South Africa, most births take place in the context of a formal union.[70] The type of union is defined as Formal or Consensual (living with a man to whom the woman is not legally married).

The number of unions is also considered important because, from the vantage point of every day life, women who have been in more than one union are perceived to differ from those who have not had more than one union.[71] The number of unions the woman has had is defined as: One, or More than one. [72]

Experience of abuse is often used by gender sociologists as an indicator of women's autonomy in decision-making. Knowing the relative importance of experience of abuse among the women in this study is crucial to the analysis for several reasons: Women who have been abused are at an increased risk of adverse maternal and foetal outcomes. It is estimated that 40 percent of men identified as rapists are HIV positive. Some studies show that the prevalence in the use of fertility control at sexual debut, as well as subsequent use, is lower among women who have experienced abuse than among those who have not. Women who have been abused are thought to be less efficacious in negotiating the use of fertility control, including condom use.

[68] Three distinct types of marital/union relationships (or family formation) appear in the literature: marriage (legal or formal union), consensual or cohabitation (living together as man and wife, but not formally married) and visiting relationship (involved in a sexual relationship, but not living in the same household.). See Roberts & Braithwaite (1961).
[69] See Section 1.4, Appendix 3.
[70] See Amoateng (2004).
[71] The basis of such a difference may be age, education or degree of self-efficacy, for example.
[72] Given the high rates of divorce and dissolution of relationships in South Africa, there is an obvious need for social scientific and demographic studies on remarriage, especially as it affects reproductive behaviour and decision-making.

For the purpose of this study, the experience of abuse is defined as the experience of any type of physical or sexual abuse (coercion or mistreatment). The items examining the woman's experience of abuse are given in Section 1.5, Appendix 3. The woman is considered to have a history of abuse if she answers "Yes" to one or more of these items.

4.12.3. Husband's characteristics

The husband's age, education, occupation, provision of money and approval for family planning measure the relative influence of the husband's characteristics on decision-making for the use of fertility control. The items used to obtain information on the husband's characteristics are listed in Section 2, Appendix 3.

Husband's age is defined in one of five ways: 18-29 years, 30-39 years, 40-49 years, 50 years and older or non-numeric response. The husband's education is defined in the same manner as that of the woman. His occupation is defined as: Professional, technical and managerial; Clerical, sales and services; Manual skilled, or Manual unskilled. The husband's provision of money (during the past year) is a dichotomous variable, defined as follows: Not regularly provided or Regularly provided. His approval for family planning is defined as: Approves, Disapproves or Don't know.

4.12.4. Husband-wife's comparative characteristics

The following variables are used to measure the relative importance of the comparative characteristics of the woman and her husband on decision-making for the use of fertility control.[73]

Relative age is the absolute difference in ages between the woman and her husband, and is categorised as: 0-2 years, 3-5 years, 6-9 years, or 10 years or older. Comparative age examines whether the woman is Older, the same age or Younger than the husband. The variable comparative education is defined in terms of whether the woman has more, the same amount, or less education than the husband. Comparative approval for family planning is coded in one of four ways: Both or the husband only approves, Woman only approves, both disapprove, or One or both

[73] Except for comparative fertility desires (Section 4, Appendix 3), the other variables are computed through a comparison of the characteristics of the woman with those of her husband.

uncertain. The variable 'comparative fertility desires' (Section , Appendix 3) is defined as follows: Both want the same number of children, Husband wants more, Husband wants less or Don't know (i.e. the woman is unaware of how many children the husband wants).

4.12.5. Variables measuring the characteristics of the household

"The social sciences, including sociology, economics, and anthropology, have long recognized the importance of families and households and there are extensive corresponding literatures. In contrast, demographers have neglected the quantitative dimensions of the size, composition and change in households and their causes and consequences" (Bongaarts, 2001, p.63). A number of studies have used household-related factors to examine women's autonomy in reproductive decision-making (Heller, 1982; Fapohunda & Todaro, 1987; Jejeebhoy, 1995; Kishor, 1995; Hodgkin, 1996; Bankole & Singh, 1998; Kritz, Hill & Makinwa-Adebusoye, 2001).

The 1998 SADHS collected information on the number of people who are permanent residents in the household, as well as their guests. The information collected on each individual in the household includes his/her age, gender, customary residency, relationship to the head of the household, and the number of children who are co-resident in the household. Variables measuring the socio-economic status of the household and the living environment are employed in this study, in order to measure the relative effect of household-related factors on decision-making for the use of fertility control.

Wealth quintile and household durables are used to examine the socio-economic status of the household.[74] (The variables used to assess the socio-economic status of the household are found in Section 4.1, Appendix 3). In South Africa, a negative association exists between the socio-economic status of the household and its size (Kamuzora, 2001). The review of the literature also indicates a positive association between rates of fertility and the size of the household.

Wealth quintile is an index measuring the socio-economic status (or relative inequality) of the household. The wealth index is constructed from several items in the Household Questionnaire designed to gather information on ownership of household

[74] Although durable items are used in constructing the wealth index, they are, nonetheless, examined separately.

durables, ownership of consumer items by an individual member of the household (i.e. individual ownership), and housing characteristics.

DHS uses principal component analysis (PCA) in order to assign and normalise the score for each item (with Mean = 0, Std. Dev. = 1). The sum of scores across all items is used to rank the household. Placement in a quintile is determined by dividing the sample into five groups of equal size, (or quintiles), ranging from lowest (one/first) to highest (fifth). The wealth quintile of the household is defined in one of three ways - Two lowest, Middle or Two highest.

The number of household durables is determined by ownership of the following items in the household: electricity, radio, television, telephone, refrigerator, PC, and washing machine, in addition to ownership by a member of the household of a car, bicycle or motorcycle (0-10).[75] The number of household durables is coded as: one or less (0-1), two to three (2-3), four to five (4-5) or six or more (6+).

A number of variables are associated with the living environment: the size, head, gender and age of the head of the household. The number of children aged five years or younger, sons, daughters and own children living in the household are also assessed.

The size of the household is determined by the number of individuals - including the woman - who usually live together, normally share resources, and sleep in the same household for a minimum of four nights per week (SSA, 1996).[76] The size of the household falls into one of three categories: Small, Medium or Large. A small-sized household contains one to three individuals, while a medium-sized household has between three and four individuals. A large-sized household houses six or more people. [77]

[75]One (1) is assigned if the response is "Yes" and Zero (0 if it is "No".

[76]In the 2001 census the stipulation of four nights per week is removed from the list. The size of the household is based on the de jure rather the de facto method of enumeration. In the dejure method persons are counted on the basis of usual residency and in the de facto method, they are counted on the basis of their location at the time.

[77] The lack of an item assessing the extent, to which the woman discusses family planning with other members in the household, as well as non-household members, limits the analysis of the effect of household size on decision-making for use of fertility control.

In the 1998 SADHS, the head of the household is defined by the woman's relationship to the person who is considered to be the head of the household.[78] In this study, the head of the household is categorised as follows: Head (i.e. the woman herself), Wife or Someone else. The gender of the head is either male or female. The age of the head is a dichotomous variable defined as 44 years or younger, or 45 years or older.

The number of children five years or younger, sons, daughters or own children living in the household is coded as: None (0), One to two (1-2) or Three or more (3+). The number of children five years or younger refers to all children in this age category who live in the household. On the other hand, the number of own children, regardless of age, is the number of children to whom the woman has given birth (i.e. sons and daughters) who are also co-residents. The variable 'own children' is defined in one of five ways: None (0), One (1), Two (2), Three (3), Four (4) or Five or more (5+).[79]

The husband's presence in the household is also considered an aspect of the living environment. This variable, cohabitation, is defined in one of two ways: Living with her or Staying elsewhere.

Two other variables measuring the relative influence of the household on the dependent variable are: place of work and decision-making about spending money.

Place of work is an important factor to consider, as previous studies have found a significant association between the use of fertility control and where the woman works: Women working away from home have greater autonomy in decision-making than those who work at home.

In the 1998 SADHS, a woman is asked to identify the person (s) within the household who makes the decision on how to spend the money that she earns. Knowing the relative importance of decision-making about financial expenditure, contributes to an understanding of the relationship between women's employment and autonomy in

[78] The criterion for headship is unknown because a respondent is simply asked to identify the person who is considered to be the head, but is not required to state the basis of her/his headship.
[79] Knowing what proportion of the woman's own children is classified as young vs. the proportion classified as adults would strengthen the analysis. The analysis would be enhanced by an item examining how many of the woman's own children have been fathered by the current husband/partner.

decision-making in the sub-Saharan African context.[80] This variable is categorised as: Respondent decides, Husband decides, Jointly or Other.

Past research has shown that, among Black South Africa women, reproductive behaviour varies by the type of language that the woman speaks, which is linked to place of residence (Moultrie & Timæus, 2001).[81] Knowledge of the relative importance of language is important, because English is widely used to disseminate information about reproduction (and HIV/AIDS) in brochures and pamphlets at family planning clinics.

The importance of type of language is assessed through an evaluation of the language that the woman prefers speaking at home. The finding may (or may not) point to the necessity of utilising the local language to promote reproductive health in the media. Language is defined as Nguni, Sotho, Other Bantu or Non-Bantu.[82]

4.13. Variables measuring sexual-, fertility- and contraceptive-related factors

The items used to obtain the information on sexual-related factors are in Section 5.1, Appendix 3. The set of items used to obtain information on fertility-related factors is in Sections 5.2, Appendix 3. Section 5.3, Appendix 3 includes the items used in gathering information on contraceptive-related factors.

4.13.1. Sexual-related

A number of variables are used to measure the relative effect of sexual-related factors on decision-making for the use of fertility control: ages at menarche and sexual debut; number of sexual partners during the year prior to the interview; the most recent partner; condom use at the time of the last act of intercourse, and reason for non-condom use.

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[80] However, lack of an item assessing intra-household power in decision-making about the earnings of all members limits the analysis. Nonetheless, knowing the patterns of dominance in decision-making about spending money that the woman earns contributes to existing knowledge about intra-household decision-making power in the sub-Saharan African context.

[81] The item used to obtain information on language preference is included in the women's questionnaire. For the purpose of this study it is categorised as a component of the household, as the question has to do with the language that the woman prefers speaking at home and not elsewhere. This is important in the South African context because many Black South Africans are able to speak many of the official languages.

[82] Nguni dialects are IsiXhosa, IsiZulu, SiSwati and IsiNdebela. The three Sotho dialects are SeSotho, SeTswana and SePedi. Other Bantu dialects are Venda and Shangan. Non-Bantu dialects are English and Afrikaans.

Age at menarche is an important event in the life of the woman, marked by the first menstrual flow, indicating the body's preparation for childbearing. In the absence of precautionary measures, a pregnancy can take place about two years after the young woman begins to menstruate if she is sexually active.

In this study, Age at menarche is defined in one of five ways: 13 years or younger, 14-16 years, 17-18 years or 19 years or older.[83] Age at sexual debut is coded as: 13 years or younger, 14-16 years, 17-18 years or 19 years or older.

Information on number of partners in the past year is obtained by asking the woman how many men she has had sex with in the year prior to the interview. The variable number of partners is defined as: One or none, or Two or more. The woman is asked to specify her relationship to the last sexual partner: the response is either Husband or Other. [84]

Condom use at last intercourse is defined as either Yes, No or Unsure. The reason given by the woman for non-condom use at last intercourse is defined in a number of ways: (1) Fertility-related; (2) Perceived degree of risk (i.e. low likelihood of STD or HIV infection); (3) Respondent dislike (i.e., woman dislike using condoms) (4) Partner dislike (partner dislikes using condoms) (5) Method ignorance (Never heard about condoms); (6) Use ignorance (does not know how to use the condom); (7) Condom-use anxieties (i.e., fear of losing the condom inside, leakage/breakage, wasting sperm, loss of erection, loss of sensation); (8) Access-related (did not have a condom, does not know where to get/buy condoms); (9) Context of the relationship (implies loss of trust or no love); (10) Prefers sex flesh-to-flesh; (11) Other, or (12) Don't know.

4.13.2. Fertility-related

The following variables are used to estimate the relative effect of the woman's fertility on decision-making for the use of fertility control: age at first birth, live births, children,

[83] Age at menarche is closely linked to ages at first marriage. Among the women in this study, the interval between the woman's ages at menarche and sexual debut is approximately two years, the interval between ages at sexual debut and the birth of the first child is also two years. Similarly, the interval between the birth of the first child and marriage is also approximately two years.

[84] Both of these variables are included in the analysis because use of a method of fertility control, such as the condom, is related to both number and type of sexual partner. Men and women both use the condom less frequently with spouses than with other types of partners.

sons, daughters , births in the past five, three or one year as well as pregnancy termination and reproductive status.

In univariate and bivariate analyses, age at first birth is determined by subtracting the year in which the woman was born from the year in which the first birth occurred.
The woman's age at the birth of the first child is defined as follows: 13 years or younger, 14 years, 15 years, 16 years, 17 years, 18 years, 19 years, 20 years or 21 years or older. In regression analysis, it is used in a continuous manner.

The variable births are the number of children to whom the woman has given birth. In cross-tabulations and multinominal regression , it is coded as Zero (0), One (1), Two to three (2-3), four to seven (4-7) and eight or more (8+). In regression analyses the categories are: One or none (0-1), Two to three (2-3), Four to five (4-5), or Six or more (6+).

The number of sons or daughters is the number of sons or daughters living at home or away from home. The number of sons or daughters is defined as: None (0), One (1), Two (2), Three (3), or four or more (4+)

Number of children is the total number of own children at home, in addition to the number of sons and daughters that are alive, but do not live at home, and is defined in the same manner as live births.

Whether or not the woman has had a live birth in the past five years, three years or one year is also examined. Each of these variables is defined as Yes or No. Birth interval examines whether the interval between the most recent and the previous birth is Less than four years or Four years or longer. Pregnancy termination (TOP or abortion) is also included in the analysis and is coded as Yes or No.

The variable reproductive status is defined as Fertile, or Infecund (i.e. menopausal, sterilised or believes that she is infertile).

4.13.3. Contraceptive- related

Contraceptive-related variables examined are as follows:

Ever used examines whether or not the woman has ever used a method of fertility control, and is coded as Used or Never used.

The first method of fertility control is defined in one of four ways: Pill, Injection, Sterilisation or Other.

The woman's age at first use is defined as the woman's age at initial use of a method of fertility control. In this study, age at first use is used as a continuous variable.

The number of children at first use is categorised as follows: None (0), One (1), Two (2), Three (3), or four or more (4+).

Discontinuance examines whether the woman stopped using fertility control during the 12 months prior to the interview and is dichotomised as Yes or No. The reason for discontinuing is defined in one of several ways: Was pregnant, Sexual inactivity, wanted to see menstruation, Health or Other reason.

Current use of fertility control is coded as Yes or No. Current method is defined as: Not using, Pill, Injections, Sterilisation or Other. The main reason for current non-use is defined in one of five ways: Fertility-related, Opposition to use, Lack of knowledge, Method-related or other reason. [85]

Need assesses whether or not the woman has an 'Unmet need to Space or Limit births'; whether she is 'Using contraception to Space or Limit births', and whether she is 'Not Using fertility control' because of the desire to give birth within two years or less, or because she is Infecund or Menopausal.

The variable ever used condom is a dichotomous variable, defined as Yes or No.

4.14. Variables measuring sources of information

Previous studies have shown that the use of and the decision-making for using fertility control are affected by sources of information. In this study, the influence of sources

[85] Fertility-related reasons are not having sex; having infrequent sex; menopausal/hysterectomy infertile; postpartum depression; breastfeeding; the desire for a (another) child or pregnant. Opposition to use includes opposition by self, partner or others, as well as religious prohibition. Lack of knowledge indicates that the woman is not aware of any method of birth control or a source for obtaining one. Method -related reasons are health concerns, fear of side effects, lack of access/too far, cost too much, inconvenient to use, interferes with body's natural processes, out of stock.

of information on the pattern of dominance in decision-making for the use of fertility control is examined by evaluating the woman's exposure to general media, exposure to information and communication about family planning and HIV/AIDS (c.f., Section 6.1-6.3, Appendix 3).

4.14.1. General media exposure

The relative importance of general media exposure on decision-making for the use of fertility control is evaluated by whether or not the woman has access to a radio or television in the household, whether or not she reads newspapers or magazines weekly, listens to the radio daily, or watches television weekly. The response to each item is coded as Yes or No

4.14.2. Initial source of information on family planning

An 11-items question is used to assess information about the initial source from which the woman initially received information about family planning (c.f. Section 6.3, Appendix 3). The initial source of information about family planning is defined in one of eleven ways: Mother, Sister, Father, Other relative, Friend, Teacher, Nurse, Doctor, Poster or magazine, Radio or television or Other.[86], [87]

4.14.3. Sources of information about family planning

The set of items used to gather information about the sources from which the respondents received information during the few months prior to the interview are in Section 6.2, Appendix 3. The specific sources examined are listed as follows: radio, television, newspaper or magazine, Poster or Leaflets or brochures. Each item is defined in one of two ways: Yes or No.

4.14.4. Discussions about family planning

Information on discussions about family planning is obtained by asking the woman to identify the different types of person from whom she heard about family planning in the few months prior to the interview: Husband/Partner, Mother, Sister(s), Daughter,

[86] However, the response to such a question could be misleading, especially from older cohorts, as the woman is expected to retrospectively recall the person from whom such information was initially received.

[87] Due to multicollinearity between items, variables examining the initial source from which the woman obtained information on family planning are not included in logistic analyses.

Friends/Neighbours, or Other. The second question, which assesses the frequency of discussions about family planning held with the husband, is defined as: Never, Once or Twice or More often. Another question assessing exposure to family planning, deals with whether or not the woman visited a health facility during the year prior to the interview, and whether or not she was told about family planning at the health facility at that time.

4.14.5. Exposure to and amount of HIV/AIDS-related information

An eight-items question is initially used to obtain information on the woman's exposure to HIV/AIDS-related information, as well as to the amount of HIV/AIDS information that was obtained during the year prior to the interview, can be found in Section 6.4, Appendix 3. Women are asked to recall whether they received information about HIV/AIDS from the following: (1) friends, (2) Husband or partner, (3) Relatives, (4) Radio (5) Television, (6) Newspapers or magazines, (7) Pamphlets or posters, and (8) Clinic or healthcare workers, during the year prior to the interview. Each is a dichotomous variable, coded as No or Yes.

In the second set of items, the respondent is asked to specify the amount of HIV/AIDS information that she received from each of the above sources, defined in one of three ways: None, Some or A lot.[88]

4.15. Variables measuring knowledge an attitudes

Variables examining HIV/AIDS and reproductive-related attitudes and knowledge, are used to estimate the relative importance of knowledge and attitudes in decision-making for the use of fertility control. The questions on reproductive and HIV/AIDS knowledge are given in Appendix 3, Sections 7.1 and 7.2 respectively.

4.15.1. HIV/AIDS attitudes and knowledge

Thirteen items in the 1998 SADHS are used to examine the woman's knowledge of HIV/AIDS. The first item asks whether or not she has ever heard of AIDS, and the second asks if she knows someone who is HIV-positive. A nine-item question is used to evaluate her knowledge of ways to prevent infection. Knowledge of prevention strategies is defined in one of three ways: Correct, Incorrect or don't know. The final

question assessing HIV/AIDS knowledge asks whether or not a healthy looking person can have AIDS. [89]

In order to determine the woman's knowledge of HIV prevention strategies, a knowledge score is constructed by assigning One (1) point to each correct response to an item assessing prevention strategies, and Zero (0) if the response is otherwise.

The influence of HIV/AIDS-related attitudes on decision-making for the use of fertility control is examined by the use of a 5-items question that deals with the woman's opinion on HIV/AIDS-related issues. Specifically, whether or not she thinks that a person with a positive diagnosis for HIV or AIDS should be informed about his/her status, and whether or not an HIV-positive person should disclose his/her status to the sexual partner. She is also asked to provide her opinion on mandatory reporting of HIV and AIDS.

HIV/AIDS attitude (opinion) is defined in one of three ways: Yes (endorsement of the idea); No (does not endorse the idea), or don't know (has no opinion on the issue).

4.15.2. Fertility-related attitudes

Fertility-related attitudes are examined by the following: wanted last child,[90] fertility desires, timing of desires, attitude towards pregnancy, and ideal number of children. The questions used to obtain the information on fertility-related attitudes are in Section 8.2, Appendix 3.

The variable wantedness of last child asks if the most recent child or current pregnancy was wanted, and it is defined as: Wanted then, wanted later or wanted no more. Fertility desires examine whether or not the woman desires a (another) child, and is defined in one of three ways: Wants no more, Unable to get pregnant or undecided. The variable timing of desires assesses the ideal timing of the desired birth. The woman's response is defined as: Two or fewer years, or Three or more.

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[88]The 1998 SADHS lacks an objective criterion measuring the amount of such information.

[89] The response is coded as correct if she knows whether (or not) the given strategy can be used to prevent infection. The response is coded incorrect if she does not know that the strategy cannot be used to stop viral transmission (e.g., avoiding public toilets stops infection). The response is coded ' Don't know' if she is unsure whether (or not) infection can be prevented by using the strategy.

[90] The number of children considered ideal is a community level variable that is felt to be important to fertility and, consequently, to the decision about fertility control.

The variable attitude towards pregnancy is used to get information from non-pregnant fertile women on how they would feel about the prospects of becoming pregnant within the subsequent few months. The woman's response to the prospect of becoming pregnant is defined as: Happy, Unhappy or would not matter. The ideal number of children is the number of children that the woman considers to be the ideal number to have, and is defined in one of four ways: One or none (0-1), Two to three (2-3), Four (4) or Five or more (5+).

4.15.3. Contraceptive knowledge and attitudes

The woman's approval of family planning, and her acceptability of the electronic media (radio and television), assess the effect of contraceptive-related attitudes on decision-making for the use of fertility control for promoting family planning, as well as use intent.

The woman's approval of family planning is defined in one of two ways: Approves or Disapproves/Don't know. Acceptability of the radio or television is also defined in one of two ways: Acceptable or Not acceptable/don't know.[91]

4.15.4. Reproductive knowledge

In this study, knowledge of reproductive physiology, method source, and the TOP Act, as well as knowledge of a source for contraception, source for condoms and the purpose of condoms, examine reproductive- (i.e. fertility and contraceptive) related knowledge.

The question used to examine knowledge of reproductive physiology is designed to determine whether or not she knows at what time during the monthly cycle the risk of pregnancy is increased (i.e. the time that ovulation occurs). The response to this item is defined in one of three ways: Correct, Incorrect or Don't know. [92]

The variable knowledge of the law on abortion examines whether or not the woman is aware that the 1998-Temination of Pregnancy Act allows for an abortion during the

[91] 'Don't know' indicates uncertainty about her approval or acceptance of the matter.
[92] If the response to this question is "In the middle of the cycle", the woman is considered to have a Correct knowledge of reproductive physiology and incorrect if she answers otherwise. If she is uncertain about the time (or says she doesn't know), the response is coded don't know.

first trimester of pregnancy. The woman's response to this item is defined as: Yes, No or Don't know (i.e. she has never heard about the act).

The variable knowledge of the purpose of condoms evaluates whether or not the woman knows the reason for using condoms, and is defined in one of fours ways: Family planning only, STD only, Family planning and STD, or Never heard (i.e. she does not know the reason for using condoms). Information on knowledge of method source is examined by determining whether or not the woman is aware of a source for family planning. Method source is defined in one of three ways: Don't know, Public or Other.[93] For the purpose of this study, the woman's knowledge of a source for condoms is defined as: Don't know, Government hospital, Day hospital, Family planning clinic, Mobile clinic or Other.[94]

4.16. Analytic procedures

Univariate, bivariate and multivariate statistical procedures are used to analyse the data in this study. Univariate procedures are used to report on the characteristics of the women in the Sub-sample. The relationship between the dependent and predictor variables is measuring by bivariate procedures (i.e. chi-square, correlation coefficient and tests of means differences). Logistic regression is used in modelling the data.

4.17. Region of rejection

The region of rejection for each test is established at the level of significance of 0.05.

4.18. Multivariate analysis - Logistic regression

Logistic regression is used to assess the effect of predictor variables on the dependent variable. It is, specifically, used to measure the likelihood of a joint vs. female, male vs. female or other vs. female pattern of dominance in decision-making for fertility control.[95]

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[93] The response category includes the following: a private physician or pharmacy, shop, friends, church, etc.

[94] Factors such as attitudes towards family planning staff, last source for contraception and the reason for using last source are not included in the examination because the 1998 SADHS only gathered information on these items from current users of fertility control. Their inclusion in the study would lead to a reduction in sample size. It is recommended that in the next SADHS, information on such factors be obtained from all respondents: Better service provision and programme implementation necessitate responses obtained from those not using and those using family planning.

[95] Female (i.e., the woman/respondent decides) pattern of dominance is the reference category.

When using categorical variables, data analysis is not guided by assumptions of equality of variances, normal distribution, or linearity, as it is in multiple regression analysis (Snedecor & Cochrane, 1967; Goodman, 1978; Harrel 2001; Knobe et al 2002). In this study, the dependent variable is categorical and has multiple response categories.[96] As the primary aim of this study is to estimate the likelihood of a given outcome versus an alternative one, it is appropriate to use multinominal logistic regression in order to analyse the data in this study

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4.19. Multicollinearity

Multicollinearity results from a high degree of correlation between independent variables: this problem often inflates the variances of parameter estimates. Therefore, collinearity diagnoses are performed in order to avoid the problem in this study.

Linear regression is used to test for multicollinearity between continuous variables. and tests of association conducted on nominal ones. The model generated in the SPSS collinearity diagnosis test indicates which variable should be excluded from examination, as it is strongly correlated with another (other) variable (or because it has a high variance inflation factor (VIF).[97]

4.20. Model fitting information

In SPSS Pseudo-R2, Goodness-of-fit and the Wald and likelihood ratio (LR) statistics are used to estimate how well the model fits the data.

4.20.1. Pseudo-R^2

In logistic regression modelling, pseudo-R^2 statistics assess the amount of variation in the dependent variable that is explained by the model in the SPSS procedure, three measures are given: Cox & Snell R^2, Nagelkerke R^2 and McFadden R^2. In this study, the Nagelkerke procedure is used to report the amount of variance explained by the model. This procedure is selected because the Cox & Snell's method "cannot achieve a maximum value of 1" (SPSS, 1999, p.46).

[96] The binominal (binary) logistic procedure is indicated for a categorical dependent variable with two response categories and multinominal procedure is indicated for those having three or more values.
[97] VIF is an estimation of increases in the variance parameter in the presence of multicollinearity compared to its absence.

4.20.2. Odd ratios

In logistic regression analysis, the probability of a given outcome is assessed by use of the maximum likelihood estimation (MLE). "MLE attempts a series of successive approximations to the unknown true parameter values, α and βj's. The goal is to use the sample data to estimate the parameters, α and βjs that maximize the likelihood of obtaining those observed sample values" (Knobe, Bohrnstedt, & Mee, p.307).

In the logistic regression procedure, the effect of each of the other response categories in a predictor variable is made in comparison to the baseline (reference) category.[98] In modelling, odd ratios (ORs) are used in making this comparison. Briefly, an OR is used to determine the change in the likelihood of (log odds) of one outcome with respect to an alternative (i.e., the baseline or reference category).[99]

There are the three separate calculations for the present study, with "Respondent" outcome as the reference category:

$$\mathbf{OR_{joint} = (P_{joint}/P_{female}) = \beta_0+\beta_1X_1+\beta_2X_2+...+\beta_k X_k...}$$

$$\mathbf{OR_{male} = (P_{male}/ P_{female}) = \beta_0+\beta_1X_1+\beta_2X_2+...+\beta_k X_k,}$$

$$\mathbf{OR_{other} = (P_{other}/ P_{female}) = \beta_0+\beta_1X_1+\beta_2X_2+...+\beta_k X_k,}$$

β_0 is the constant and $+\beta$ ....β_k the regression coefficients (SPSS, 1999, p.64).

4.20.3 Goodness-of-fit statistics

Pearson's chi-square and deviance tests are used in evaluating the extent to which the model fits (i.e., its appropriateness) the data. Specifically, they measure "the discrepancy between observed and expected counts in a multidimensional cross tabulation" (SPSS, 1999, p.73). Pearson's chi-square is estimated in the same manner as is the ordinary chi-square:

$$\mathbf{\Sigma\ (Observed - expected)^2 \div expected.}$$

The deviance test (called chi-square in SPSS procedure), is "the change in –2 log-likelihood when the model is compared to a saturated model - that is, when it is

[98] The coefficient of the reference category is always zero (0) because it is redundant.
[99] ORs are comparable to the beta coefficients used in multiple regression analysis.

compared to a model that has all main effects and interactions" (p.74). The deviance (chi-square) is:

D = (Model with constant only) – (Model with all variables). [100]

4.20.4. Wald statistics and likelihood ratio (LR) test

The Wald statistic is used to evaluate the significance of each predictor in the model. Harrell (2001, p. 184) defines it as "a generalization of the t- or z- statistic. It is a function of the difference in the MLE and its hypothesized value, normalized by an estimate of the standard deviation of the MLE". It is used to "test the hypothesis of a common variance" (Greene, 2003, p.329). The LR test is an estimate of the model's fit; whereas, the W statistic is used to estimate individual coefficients; including the specification of their upper and lower bounds. In the literature, the likelihood ratio (LR) test is judged to be a better than the W statistic (SPSS, 1999; Harrell, 2001).

4.21. Use of logistic regression in this study

Logistic regression is used to evaluate the effects of the self's and partner's characteristics; sexual and reproductive behaviour and knowledge; exposure to sources of information, as well as contraceptive- and HIV/AIDS-related attitudes and knowledge, on the likelihood of a Joint, Male or Other versus a Female pattern of dominance in decision-making for the use of fertility control.

Multinomial logistic regression models are separately fitted for the independent variables associated with:

i) Respondent's background and socio-economic characteristics;
ii) Husband's characteristics;[101]
iii) Husband-wife's comparative characteristics;
iv) Household characteristics;
v) Sexual and reproductive factors;
vi) Sources of information and communication;
vii) HIV/AIDS-related knowledge and attitudes;

[100] Also referred to as G/ G^2

[101] A separate model is done on the partner's characteristics, in order to determine the proportion of variation in the dependent variable explained by the characteristics of the husband, independent of the woman's characteristics.

viii) Reproductive-related knowledge and attitudes, and

ix) A binominal logistic regression model is fitted for the eight categories of variables listed above.

4.22. Stepwise procedure

A major concern of this study is how best to construct a parsimonious model specifying which variables are predictive of a given outcome. Stepwise procedure is a special feature in multinominal logistic regression, which can be used in constructing such a model. Kachigan (1986, p.265) remarks that the stepwise procedure is "desirable from the standpoint of parsimony and economy of data. "This is because the resultant model has the fewest amount of predictors that explain the greatest amount of variation "that could be explained" if the model included all predictors of interest.

A preliminary examination is done in order to exclude variables leading to reduced sample size or estimation problems (c.f. Appendix 5.2). In constructing the final model, cases with incomplete or missing information on any predictor are excluded from consideration. The final model is based on the examination of 1 269 cases - significantly reduced from the initial 3,427 – which are, nonetheless, sufficient for analysis. Backward stepwise procedure, involving 70 steps to completion, is employed in order to construct a parsimonious model explaining dominance in decision-making for the use of fertility control among married Black South African women of reproductive age (15-49 years).

4.23. Software used in data analyses

The data for this study is analysed using the Statistical Package for Social Sciences (SPSS) software package.

Chapter 5

5. The characteristics of the sample

5.1. Background and socio-economic characteristics of the woman

5.1.1. Background characteristics

The majority of the women is fourth or lower ordinal born.[102] On average, a woman's mother had 5.8 children. However, the average number of children born to mothers of those who were raised in the countryside (5.8592, Std. Dev. 2.63946) is slightly higher than among their counterparts who were raised in a city (5.4628, Std. Dev. = 2.61150 or town (5.6400, Std. Dev. =2.72512).[103]

Seventy (70.4) percent were raised in the countryside. Less than a fourth (23.4%) of those living in the Western Cape were raised in towns or cities. Less than a third of those in the Eastern Cape (25.1%), Limpopo (25.9%), the Northern Cape (25.7%), KwaZulu-Natal (29.3%) or Gauteng (30.6%) were raised in towns or cities. A third or more of those living in Mpumalanga (33.9%), the North West (36.1%) or the Free State (36.4%) were also raised in towns or cities.[104]

5.1.2. Place of residence

Fifty-six (56.5) percent of the women are living in rural areas. The examination shows that most women currently living in rural areas were raised in the countryside (92.2%). In comparison slightly more than three-fourths of their counterparts in urban areas were raised in a town (34.3%) or in the countryside (42.3%).[105] Higher proportions of women in the Free State (64.5%) and the North West (63.8%) live in rural areas compared to those in other provinces (52.7%-59.1%).[106] Most women in the Western Cape (93.6%) and Eastern Cape (94.2%) prefer speaking IsiXhosa. In the Northern Cape (53%) and the North West (91.9%) SeTswana is the preferred language. Most (87.7%) of those in the Free State prefer speaking SeSotho. Women living in

[102] 45.2% are first or second ordinal born, 30% third or fourth ordinal born and 24.8% of them are fifth or higher ordinal born.
[103] F=32.492, p=. 010.
[104] x^2=30.444, p=.000.
[105] x^2= 1076.748, p=. 000. C.f. Table 1. Internal migration, related to work and/ or marriage, might help explain the finding that the majority of those living in urban areas were raised elsewhere. The finding appears to indicate that migration flows from the countryside and towns to urban areas.
[106] x^2= 25.046, p=. 002

KwaZulu-Natal (96.2%) largely prefer IsiZulu. Over half (59.1%) of those living in Limpopo prefer to speak SePedi. The majority of those living in Mpumalanga prefer speaking either IsiZulu (38.8%) or SeSwati (32.6%). Those living in Gauteng prefer to speak IsiZulu (30.1%), SeSotho (20.7%) or SeTswana (21%).[107]

Women living in urban and rural areas differ in the type of language that they prefer speaking in the home ($x^{2=}$186.757, p=. 000). The proportion of women who prefer speaking a Nguni language is higher among those living in rural areas (55.3%) than among their counterparts in urban areas (51.8%).[108] The proportion preferring a non-Bantu language is higher among those living in rural areas than among their counterparts in urban areas (3.7% vs. 2.6%). The proportion of those who prefer to speak one of the Sotho dialects is higher among those living in urban areas (37.7%) than among their rural counterparts (35.9%). Among those preferring to speak another Bantu language (i.e. TshiVenda or ZiTsonga), the proportion is also higher among those living in urban (7.9%) than in rural (5.1%) areas

5.1.3. Age, education, employment and occupation

Less than half (49.2%) of the women are between 15 and 34 years. The average age among the women in this study is 34.4 years. On average, women living in urban areas are slightly older than those living in rural. Those living in urban areas are slightly better educated than their counterparts in rural areas (9.23, Std. Dev. = 3.084 years and 8.97, Std. Dev. = 3.246 years, respectively. F=5.711, p=. 017). [109] Further examination of the data reveals that the average number of years of schooling is lower among women living in Gauteng (8.8 years), the Free State (8.9 years) and Mpumalanga (8.7 years) than among those living in other provinces (9.1 to 9.3 years).[110]

Table 1 shows that women living in urban areas are more literate than those living in rural areas (Fisher's Exact, 1-tailed test, p=. 000). Level of literacy is also associated

[107] x^2=8278.438, p=. 000

[108] Moultier and Timaeus (2001) also found that the proportion of Nguni speakers is higher in rural than in urban areas.

[109] It is, however, noted that in urban areas, education is highest among women living in the Northern Cape (10 years) and lowest among those living in Gauteng and Limpopo (8.8 years, each). Among women living in rural areas, average number of years of education is slightly higher among those who live in the Western Cape, Eastern Cape, KwaZulu-Natal and Mpumalanga (9.1 to 9.2 years) than in other provinces (8.5 to 8.8 years).

[110] F=2.211, p=. 024.

with place of residence during childhood (x^2=98.371, p=. 000) and the number of children that the woman's mother had (x^2=15.551, p=. 001). Women who were raised in towns or cities (83.9%) are more literate than those who were raised in the countryside (67.8%). Women whose mothers had the most (9 or more) children are less literate than other women (65.3% vs.72.5% to 74.8%).[111]

Thirty percent of the women are working (Tables and 4.3, Appendix 4).[112] Close to 18 (17.9) percent of those living in rural areas are employed compared to 45.5 percent of their counterparts in urban areas (Fisher's Exact, 1-tailed test, p=. 000). [113] Thirty-two (32.4) percent of women with at least a secondary education are employed compared to 28.5 percent of those with primary and 25.2 percent of those with no education (x^2=11.079, p=. 004). [114]

Most of those who have secondary or higher education are in professional, technical or managerial (92.1%) or in a clerical (3.5%) occupations. Close to two-thirds of those who have a secondary level education are working in skilled (14.6%) or unskilled manual (51.3%) occupations. Almost all of those who have a primary level education work in unskilled (83.4%) or skilled (9.1%) manual occupations.[115] Most (91.6%) of those who have no education work in unskilled manual occupations (x^2=592.988, p=. 000).[116] Higher proportions of women living in urban areas work in clerical, sales and services or skilled occupations than their counterparts in rural areas (27.8 and 14.2 vs. 19.8 and 9.4, respectively). The proportion of women working in a professional, technical or managerial occupation or in an unskilled manual occupation is higher in rural areas than in urban areas (21.3% and 49.5% vs. 11.1 and 47%, respectively, x^2 = 35.392, p=. 000).[117]

[111] 72.5% of those whose mothers have between 7 and 8 children are literate, 73.6% of those whose mother have 4 to 6 children and 74.8% of those whose mothers have 1 to 3 children are literate.
[112] It is not at all surprising to find that less than a third of the respondents are employed because it is known that the rate of unemployment is generally high among Black South Africans.
[113] Whether the woman works for cash is not considered because only a few (3.4%) do not receive money for work.
[114] Employment status is unrelated to province of residence (c.f. Table 4.3, Appendix 4). However, employment is higher among women living in Gauteng (33.9%) and the Free State (33.3%) than among those living in other provinces (27.3%-30.4%).
[115] 3.9% of those with primary education work in services, 1.1% in sales, 1.4% in clerical and 1.1% in professional, technical and managerial occupations.
[116] 5.3% of them are in service, sales and clerical occupations and the remainder in professional, technical or managerial occupations (approximately 1.1% each).
[117] As women in urban areas are slightly better educated than their rural counterparts, this finding is unexpected because, in general, a positive relationship exists between occupation and education. There is need for a further study examining the type of occupations available in rural areas.

Table 1. Distribution of the women by selected socio-economic characteristics according to current place of residence, 1998 SADHS.

Variable	N	Urban	Rural	Total
Childhood place of residence				
%City	376	23.4	1.6	11.1
%Town	626	34.3	6.3	18.5
%Countryside	2388	42.3	92.2	70.4
Province				
%Western Cape	78	2.2	2.3	2.3
%Eastern Cape	839	23.2	25.5	24.5
%Northern Cape	132	3.1	4.4	3.9
%Free State	350	10.5	10.0	10.2
%KwaZulu-Natal	448	11.4	14.4	13.1
%North West	309	8.7	9.3	9.0
%Gauteng	363	10.9	10.3	10.6
%Mpumalanga	387	11.9	10.8	11.3
%Limpopo	521	18.1	13.0	15.2
Average age (yrs.)	3427	34.9	34.0	34.4
Std. Dev	3427	7.4	8.2	7.8
Education				
%None	449	6.6	18.1	13.1
%Primary	1261	30.5	41.7	36.8
%Secondary or higher	1717	63.0	40.2	50.1
Level of literacy				
%Reads easily	2472	79.1	67.1	72.3
%Reads with difficulty or illiterate	946	20.9	39.9	27.7
Respondent still in school				
%No	3328	94.3	99.7	97.3
%Yes	91	5.7	.3	2.7
%**Employed**	3419	45.7	17.9	30.0
Type of union				
%Formal	2652	74.9	79.3	77.4
%Consensual	775	25.1	20.7	22.6
Age at First union				
%10-18 yrs.	1154	23.2	41.7	33.7
%9-24 yrs.	1470	45.4	40.9	42.9
%25 yrs. or older	803	31.3	17.3	23.4
Median age (yrs.)	3427	22.0	20.0	21.0
Minimum	3427	10.0	10.0	10.0
Maximum	3427	44.0	45.0	45.0
Number of years since first union				
%4 or less	705	21.9	19.5	20.6
%5-9	691	22.4	18.4	20.2
%10-14	610	19.5	16.5	17.8
%15-19	619	15.6	20.0	18.1
%20-24	446	11.2	14.4	13.0
%25 or more	356	9.3	11.2	10.4
Average number of years	3427	12.8	14.1	12.7
Median number of years	3427	13.0	14.0	13.0
%**Has co-wife**	36	2.3	3.1	2.7
%**Experience of abuse**	3415	13.7	11.4	12.4

5.1.4. Marriage

Over three-fourths (77.4%) of the women in this study are in a formal union.[118] Women who are formally married are generally older than those in a consensual union (average age, 35.4 years vs. 31.2 years). The proportion of women who have had more than one union is lower among those who are formally married (3.9%) than among those who are in a consensual union (19.2%).[119] Women who are formally married are more often found in households in the two lowest wealth quintiles (45.8%) than those in consensual unions (39.9%). On the other hand, the proportion of those living in households within the two highest wealth quintiles is higher among those in a consensual union (38.3%) than among those who are formally married (30.9%).[120] Nonetheless, the proportion of women who live in households that have one or no durable items is higher among those in a consensual union than among those in a formal union (41.3% vs.30.9%). On the other hand, higher proportions of formally married women than the proportions of those in a consensual union have between four and five (26.4% vs. 20.7%) or six or more (12.2% vs. 3.1%) such items. [121]

Further examination of the data shows that the proportion of women who are employed is higher among those who are formally married than among those who are in a consensual union (32.6 vs. 28.8%). Separate examination of the data reveals that the proportion of women living in households having between four and five or six or more durable items is higher among those who are employed than among those who are not (30.3% and 14.2% vs.22.9% and 8.5%, x^2=66.510, p=. 000).[122]

5.2. Partner-related factors

5.2.1. Husband's characteristics

Approximately 52 (51.8) percent of the women have husbands who are 40 years or younger (average age = 40.6 years). The husbands of women who live in urban areas are generally younger than their counterparts in rural areas (F= 5.810, p= .016). More than half (59.3%) of the husbands have secondary or higher education.[123] The

[118] 2.3% of the women in urban areas and 3.1% of those in rural areas are in a polygamous union.
[119] Table 1.
[120] x^2=14.849, p=. 001
[121] x^2=90.330, p=. 000
[122] 36.7% of those who are unemployed live in households that have 0-1 such items compared to 25.2% of those who are employed. The proportion of women living in households that have between 2 and 3 durable items is slightly higher among those who are unemployed than among those who are (32% vs. 30.2%).
[123] Table 4.3, Appendix 4.

proportion of husbands who have primary or no education is significantly higher among those living in rural areas than among those living in urban areas. Higher proportions of the husbands of women living in urban areas have secondary or higher education than their counterparts in rural. Women living in rural areas more often than their urban counterparts do not know how much education their husbands have (Table 2). The majority of the women have husbands work in skilled or unskilled manual occupations. The proportion of husbands working in clerical, sales and service or skilled manual occupations is higher among women living in urban areas than among their counterparts in rural areas. The proportion of husbands working in unskilled manual occupations is higher among women living in rural areas than in urban areas.[124]

Similar to the woman, the husband's occupation is related to his level of educational achievement (x^2= 460.804, p=. 000). Almost all (93.1%) of the husbands working in professional, technical and managerial occupations have at least secondary education compared to 71.3 percent of their counterparts in clerical, sales and service, 46.7 percent of those in skilled manual and 32.5 percent of those or in unskilled manual occupations. Forty-six percent of husbands working in unskilled manual and 41 percent of those in skilled manual occupations have primary education compared to 22.5 percent of husband working in clerical, sales and service and 4.8 percent of those in professional, technical and managerial occupations. The proportion of husbands with no education is higher among those in manual unskilled occupations (21.5%) than among those in manual skilled (12.3%), clerical, sales and service (6.2%) or professional, technical and managerial occupations (2.1%).[125]

There is no significant association between the husband's regular provision of money and place of residence among all women. However, among women living in rural areas, the proportion of women reporting that the husband regularly provided money during the year before the interview is significantly higher among women who have secondary or more education (81.6%) than among those who have primary (76.7%) or no education (78.2%). [126]

[124] x^2= 99.927, p=. 000
[125] Data are not shown in table.
[126] x^2= 5.901, p=.052.

Table 2. Distribution the women by their husbands' characteristics according to current place of residence, 1998 SDAHS

Variable	N	Urban	Rural	%/Mean Total
Husband's age				
%18-29	376	9.5	12.1	11.0
%30-39	1137	36.3	30.8	33.2
%40-49	1168	36.3	32.4	34.1
% 50 years or older	545	12.8	18.3	15.9
%Non-numeric response	201	5.1	6.5	5.9
Husband's average age (yrs.)	3226	40.1	40.9	40.6
Std. Dev.	3226	8.5	10.2	9.5
Minimum	3226	20.0	18.0	18.0
Maximum	3226	81.0	87.0	87.0
Husband's education				
%No education	453	7.1	20.3	14.8
%Primary	1127	30.3	41.5	36.9
Secondary	1301	54.6	34.2	42.6
%Higher	143	7.2	2.9	4.7
%Don't know	32	.9	1.2	1.0
Average number of years of schooling	3024	8.3	5.9	6.9
Std. Dev.	3024	3.9	4.1	4.2
Husband's occupation				
%Clerical, sales and Services	586	21.2	13.9	17.1
%Skilled manual	1102	35.6	29.5	32.2
%Unskilled manual	1375	31.7	46.6	40.1
%Professional, technical and managerial	189	7.2	4.2	5.5
%Non-numeric response	175	4.2	5.8	5.1
Husband regularly provides money				
%Yes	2662	77.1	78.9	78.1
%No	745	22.9	21.1	21.9
Husband's approval for family planning				
%Approves	2276	72.1	62.0	66.4
%Don't know	298	7.4	9.7	8.7
%Disapproves	853	20.5	28.3	24.9

Table 2 shows that the husbands of women living in urban areas are more approving of family planning than their counterparts in rural areas.[127] The proportion of women reporting that their husbands approve of family planning is significantly higher among those whose husbands have at least secondary education than those who have primary or no education (74.3% vs.63% and 50.9%, respectively).[128] The husband's approval for family planning is also higher among women in a formal union than among those in a consensual union (67.3% vs. 63.5%, 15.332, p=. 000).

Among the women in this study, the approval of the husband for family planning is associated with the numbers of children five years or younger (F= 3.819, p=. 020) and

[127] x^2= 39.357, p=.000.
[128] x^2=109.048, p=.000.

sons (F= 12.521, p=. 000) living in the household. The average number of children five years or younger co-residing in the household is lower among women who do not know whether their husbands approve of family planning than among those whose husbands either approve or disapprove of family planning (.77 vs. .93 and .94, respectively). It is found that the average number of sons living in the household is higher among women whose husbands approve of family planning (1.24) than among those whose husbands disapprove of family planning (1.1.6) or among those who do not know if their husbands approves of family planning.

There is a significant association between the husband's approval for family planning and husband-wife's comparative fertility desires.[129] The proportion of women whose husbands approve of family planning is higher among those who want the same number of children as their husbands want (78%) or whose husbands want less children as the woman wants (77%) than among those who are uncertain of the number of children that the husband wants (46.6%) or among those whose husbands want more children than they want (50%).

5.2.2. Husband-wife's comparative characteristics

Husbands are generally older and more educated than the women are: 89 percent of the women are younger than their husbands and 62.8 percent of them have less education than their husbands. The proportions of women who are the same age or older than their husbands more often live in urban areas than in rural ones: [130] Eighty-six percent of women living in urban areas are younger than their husband compared to 91 percent of those living in rural areas. On the other hand, 7.1 percent of living in urban are older than their husbands compared to 3.8 percent of those living in rural areas (cf. Table 4.4, Appendix 4).[131]

Further examination of the data shows that the proportion of women who are older than their husbands is higher among those in a formal union than among their counterparts in a consensual union (6.3% vs. 3.8). On the other hand, the proportion of those who are the same age or younger than their husbands is higher among those

[129] x^2=447.031, p=.000.
[130] x^2= 51.979, p=. 000. There is a significant amount of correlation (r=. 71, 2-tailed test, p=. 01) between husband and wife's ages. C.f. Table 4.4, Appendix 4.
[131] x^2=38.800, p=.000.

in a consensual union than among those in a formal union (6% and 91% vs. 5.1% and 88.6%, respectively, x^2= 7.773, p=. 021).[132]

The relative difference in ages between the woman and her husband is greater among those who were raised in the countryside than among those who were raised in towns or cities.[133] Thirty-four percent of women who were raised in towns or cities and 41.2 percent of those who were raised in the countryside report a difference of six or more years in husband-wife's relative age. The relative difference in husband-wife's age is greater among women living in rural areas than among those in urban areas. Between 20.1 and 22.7 percent of women in rural areas report a difference of six or more years in husband-wife's relative ages compared to between 15.8 and 18.6 percent of those in urban areas. The proportion of women who have the same or more education than their husbands is higher among those living in rural areas than among their counterpart in rural areas (5.7% and 22.3% vs. 3.9% and12.6%, respectively).[134]

Sixty-six percent of the women in this study report joint approval (or approval of the man only) for family planning. The examination reveals that joint approval (or approval of the husband only) for family planning is higher among women living in urban areas than among those living in rural areas (71.7% vs. 61.6%). On the other hand, joint disapproval, the approval of the woman only, or uncertainty is higher among those living in rural areas than among those in rural areas (respectively 6.1%, 21.3% and11% vs.4.6%, 15.3% and8.4%).[135],[136]

Joint approval for family planning is also higher among those in a formal union than among others (66.9% vs. 63.1%). On the other hand, joint disapproval is somewhat higher among those who are in a consensual relationship than among those in a forma one (6.1% vs. 5.2%). The approval of the woman only is higher among those in a consensual union than among those in a formal union (23% vs. 17.4%). The proportion of women reporting uncertainty about family planning is somewhat higher

[132] There is no significant association between type of marriage and husband-wife's relative age, comparative education or comparative fertility desires.
[133] x^2= 34.683, p=. 000. Data are not shown in table.
[134] x^2=107.390, p=.000.
[135] x^2= 38.800, p=.000.
[136] 18.7% report approval of the woman only, 5.4% report joint disapproval and 9.9% report that either the man or the woman or both are uncertain about her/his/their approval for family planning.

among women in a formal union (10.5%) than among those in a consensual union (7.9%)[137]

There is a significant association between husband-wife's comparative approval for family planning and their comparative fertility desires.[138] Similar to the finding for the relationship between husband's approval for family planning and husband-wife's comparative approval for family planning, it is found that joint approval for family planning is higher among women who want the same number of children as their husbands want or whose husbands want less children than they do than among those whose husbands want more children than they want or who are uncertain about the number of children that their husbands want (respectively, 77.6% and 76.3% vs. 49.8% and 46.1%).

The proportion of women wanting the same number of children as their husbands is higher among those living in urban areas than among those living in rural areas (62.5% vs. 52.3%). Higher proportions of women living in rural areas than the proportions of those in urban areas have husbands who want more children than the woman wants (24.8% vs. 20.3%) or are uncertain about the number of children that the husband wants (19.1% vs. 13%).[139]

5.3. Household characteristics

5.3.1. Size, head, gender and age head of f the household

Including the woman, the average number of persons living in the household is 5.3. The examination shows that 25.2 percent of the respondents are living in small sized households, 34.2 percent are living in medium sized households and 40.5 percent are living in large sized households.[140] The size of the household is related to place of residence during childhood (x^2= 107.479, p=. 000) and current place of residence (x^2= 167.203, p=. 000). Forty-six (46.1) percent of women who were raised in the countryside are living in large-sized households compared to 25.7 percent of those who were raised in towns and 25.1 percent of those who were raised in cities (cf. Table 4.1, Appendix 4). On the other hand, 40.2 percent of those who were raised in

[137] x^2= 15.837, p=.000.
[138] x^2=450.872, p=.000.
[139] x^2=42.174, p=.000.
[140] In this study, a small size household is one in which 1 to 3 persons are living, a medium sized household is one in which 4 to 5 persons are living and six or more persons are living in a large-sized household.

cities and 39.8 percent of those raised in towns are living in medium sized households compared to 31.4 percent of those who were raised in the countryside. The proportion of those who live in small sized households is lower among those who were raised in the countryside (22.4%) than among those who were raised in towns (34.5%) or cities (27.9%).

Almost half (49.8%) of the women in rural areas are living in larger sized households compared to 28.5 percent of those in urban areas. Thirty (30.4) percent of women in rural areas and 39.2 percent of those in urban areas are living in medium sized households. Thirty-two (32.3) percent of women in urban areas and 19.8 percent of those in rural areas are living in small sized households (Table 4.1, Appendix 4).[141]

The proportion of women living in large-sized households is higher among those living in female-headed households than among those living in male-headed households.[142] Three-fourths (75.1%) of those living in households headed by a woman and less than half (47.6%) of those living in households headed by a man are living in rural areas (Fisher's exact, 1-tailed test, p=. 000).

Women living in female-headed households are younger (average age = 33.98, Std. Dev. 8.051 years) than those living in male-headed ones (average age = 34.64, Std. Dev. 7.728 years).[143] Fifty-three percent of those living in male-headed households have secondary or higher education compared to 44.2 percent of those in female-headed ones (Table 4.1, Appendix 4).

There is a significant relationship between the gender of the head of the household and its head (x^2= 3484.629, p=. 00) and age of its head (x^2= 110.793, p=. 000).[144] Over half (59.4%) of the women are living in households that are headed by their husbands and less than a fourth (22.8%) are living in households in which the woman is the head. In the remainder of the households, the head is a parent (4.8%), an in-law (9.3%) or another person (3.5%). In most (88.1%) male-headed households, the husband is actually the head of the household and the woman is the head in most (70.2%) female-headed ones. A parent or an in law is more often the head in

[141] 56.6 of the households in urban areas and 44.4% of those in rural areas are small-sized. On the other hand, 69.4% or rural households and 30.6% of urban households are large-sized.
[142] Over two-thirds (67.5%) of the women are living in male-headed households.
[143] F=5.225, p=.002
[144] Since the category Else includes different types of individuals, in this and a few other instances, the data are analysed using the original DHS categories.

households headed by females than in those headed by males. A parent is the head in nine percent of female and close to three (2.7) percent of male-headed households. In 16 percent of female and 6.1 percent of male-headed households an in-law heads the home (c.f. Table 4.1, Appendix 4).

Approximately 71 (70.8) percent of the women in this study co-reside with their husbands (Table 4.1, Appendix 4). Most (91.4%) of women living in male–headed households co-reside with their husbands compared to less than a third (28.2%) of their counterparts in female-headed households.[145]

5.3.2. Socio-economic characteristics of the household

Among women living in rural areas, the proportion of those in households in the two lowest wealth quintiles (69.8%) is higher than the proportion those in households in the middle quintile (56.1%) or two highest (38.6%) quintiles of wealth (x^2= 258.349, p=. 000).

Over half (52.6%) of the households in the two lowest quintiles of wealth are female-headed compared to 40.6 percent that are male-headed (x^2=75.937, p=. 000).[146] The proportion of women reporting four or more durable items in the household is greater among those in male-headed households (51.3%) than among those in female-headed ones (22.6%).[147]

There is a significant association between the socio-economic status of the household and husband's occupation.[148] The proportion of women whose husbands work in professional, technical and managerial occupations is slightly higher among those living in households in the two highest wealth quintiles (5.7%) than among those living in households in the middle (5.6%) or two lowest ones (5.3%). Eighteen (18.3) percent of women living in households in the middle quintile have husbands who work in clerical, sales and service occupations compared to 17.8 percent of those living in the two highest wealth quintiles and 15.9 percent in the two lowest ones.

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[145] x^2= 1437.485.p=. 000.

[146] The first and second quintiles are combined to constitute one response category and the fourth and fifth are collapsed into a single response category

[147] 22.2 percent of male-headed and 24.9 percent of female-headed households are in the middle quintile. 56.2 percent of female- headed and 40.6 percent of male-headed households are located in the two lowest quintiles of wealth (c.f. Table 4.1, Appendix 4).

[148] x^2= 15.236, p=. 055.

It is found that the proportion of those whose husbands work in unskilled manual occupations is higher among those living in households in the two lowest quintiles (43.4%) than among their counterparts in the middle or two highest quintiles (37.5%, each). The proportion of women whose husbands work in skilled manual occupations is higher among those living in households in the middle (34.1%) and two highest quintiles (33.9%) than among those living in households in the two lowest ones (29.9%).

The proportion of women who are not working is higher among those living in female-headed households (76.0%) than among those living in male-headed ones. Among those who are employed, the proportion working away from home is higher among those living in female-headed households than among those living in male-headed ones (40.1% vs. 29.7%). The examination shows that the proportion of women who work away form home is significantly higher among women living in households in the upper two quintiles of wealth (73%) than among those in either the middle (64.3%) or two lowest wealth quintiles (63.8%).

5.3.3. Decision-making about spending money

Most of the women for whom information is available (N=1105, 65.5%) report that they are dominant in decision-making about spending the money that they make and slightly more than a fifth (21.3%) jointly decide with their husbands. Few (3.9%) of them report that the husband or someone else (3.3%) is dominant in this decision (Table 4.1, Appendix 4).

There is a significant association between dominance in decision-making about spending money and the head of the household (x^2=18.112, p=. 020). The examination finds that women living in households in which they are the head (71.2%) are more dominant in deciding about how to spend the money that they make than those living in households headed by the husband (63.1%) or someone else (69.3%).[149] Join decision-making (i.e., husband-wife agreement) on how to spend money is less prevalent in households that are headed by someone else (13.9%) than in households that are headed by either the woman (22.3%) or the husband (23.1%).

[149] x^2=18.112, p=. 002.

The influence of another person (someone else) is somewhat higher among women living in households that are headed by the husband (3.8%) than among those living in households that are headed by the woman (1.8%) or the husband (2.4%). The woman more often jointly decides with someone else about how to spend the money that she earns in households in which she is the head (8.2%) than in those in which the husband (6.3%) or someone else (2.4%) is the head.

Dominance in decision-making about spending money is related to husband-wife's comparative age. [150,151] The proportion of women reporting that they are dominant in deciding about how to spend money is higher among those who are older than their husbands than among those who are the same age as or younger than their husbands (84.5% vs.62.1% and 64.5%, respectively). The proportion of women reporting the influence of the husband in deciding about spending money is slightly lower among those who are the same age as their husbands (3.4%) than among those who are older (4.2%) or younger than their husbands (4.1%). Almost seven (6.9) percent of women who are the same age as and 3.2 percent of those who are older than their husbands report the influence of someone else in making the decision.[152]

Husband-wife's agreement about how to spend the money she makes is lower among those who are older than their husbands (8.5%) than among those who are the same age as (62.1%) or younger than their husbands (64.6%). Joint agreement with someone else about spending money is also lower among women who are older than their husbands than among those who are the same age as or older than their husbands (2.8% vs. 6.9% and 5.8%, respectively).

5.4. Sexual-related factors

5.4.1. Age at menarche

Among the women in this study, the average age at menarche is 15.1 years. Most of the women got their first period between 14 and 16 years. There is no significant statistical association between the average age at menarche and place of residence during childhood. However, the proportion of women who got their first period when

[150] x^2=19.322, p=.013.
[151] It is noted that dominance in this decision is not related to any socio-economic characteristics of the woman or the husband or to husband-wife's relative age or their comparative education.
[152] None of those who are older than their husbands report the influence of someone else in decision-making about how to spend the money that the woman makes.

they were 13 years or younger is lower among those who were raised in the countryside (14.7%) than among those who were raised in towns or cities (20.2%).

Chart 1. Age at menarche, 1998 SADHS

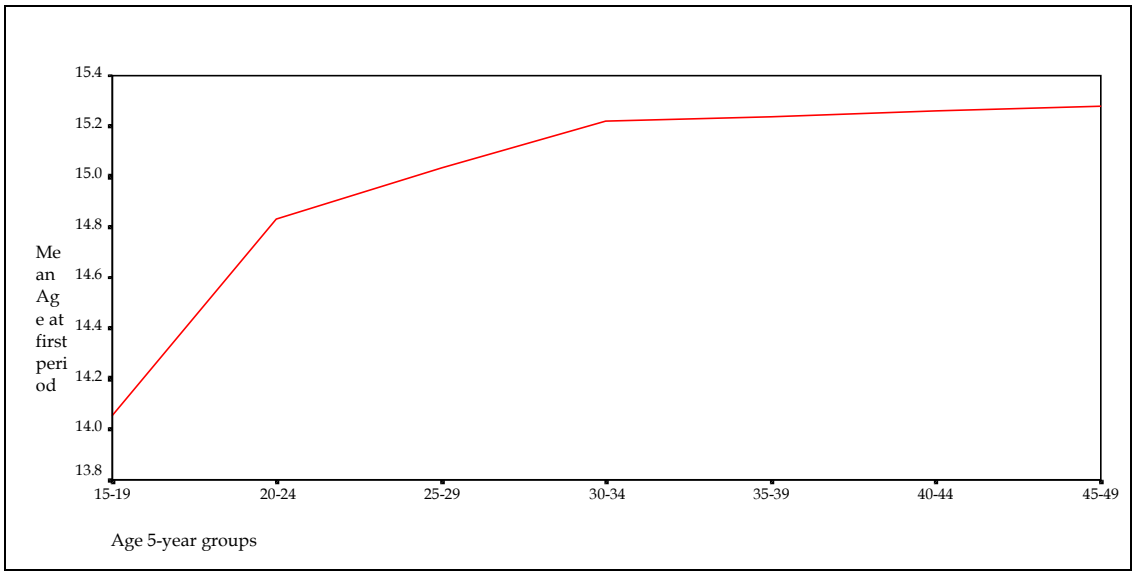


Table 3. Average age at sexual debut according to province of residence, 1998 SADHS.

Province	N	Mean	Median	Std. Deviation
Western Cape	58	17.60	17.00	2.561
Eastern Cape	749	16.92	17.00	2.393
Northern Cape	105	17.46	18.00	1.907
Free State	304	17.20	17.00	2.582
KwaZulu-Natal	383	17.85	18.00	2.591
North West	277	17.47	17.00	2.230
Gauteng	311	17.26	17.00	2.533
Mpumalanga	343	16.43	16.00	2.450
Limpopo	479	17.18	17.00	2.420
Total	3009	17.17	17.00	2.466

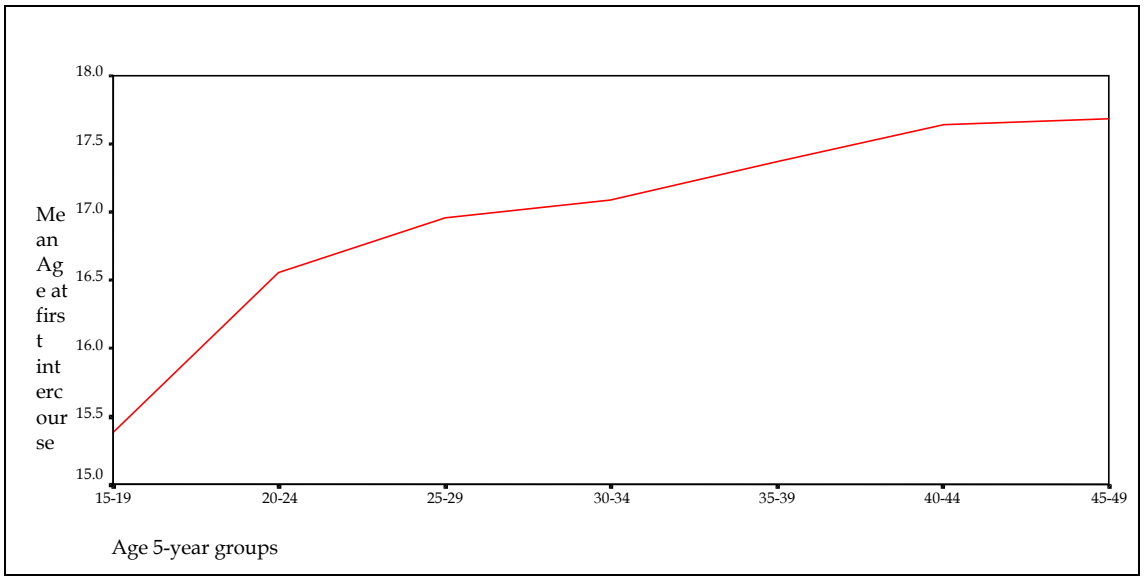
The information in Table 4 shows that the proportion of women who had the first period at 13 years or younger is higher among those currently living in urban areas than their counterparts in rural areas.

Charts 1 and 2 demonstrate that over time, average age at menarche and average age at sexual debut have both decreased.[153],[154]

[153] The woman's age at sexual debut is moderately correlated with her age at menarche (r=. 284).
[154] It is known that this is taking place in developing and developed societies.

5.4.2. Age at sexual debut

Chart 2 Age at sexual debut, 1998 SADHS



Among all respondents, the median age at sexual debut is 17 (range 10 to 33) years. Close to one-fourth (24.5%) of the women in this study had their first sexual experience prior to age 16. Approximately three-fourths (75.4%) of them were sexually active by their 18th birthday. Few (6.8%) of them waited until they were 21 years or older before first experiencing sexual intercourse.

The woman's age at sexual debut is related to place of residence during childhood (F= 4.638, p=. 010) and current place of residence (F= 18.319, p=. 000). Women who were raised in the countryside generally have their first sexual experience (average = 17.11, Std. Dev. = 2.494) at an earlier age than those who were raised in towns (average =17.18, Std. Dev. = 2.339) or cities (average = 17.56, Std. Dev. = 2.444). Similarly, age at sexual debut is earlier among women living in rural areas (average = 17.01, Std. Dev. = 2.393) than among those living in urban areas (average = 17.40, Std. Dev. = 2.551).

There is also a significant association between age at sexual debut and province of residence (F= 9.675, p=. 000).[155] Age at sexual debut occurs earlier among women living in the Eastern Cape and Mpumalanga than in other provinces. Those living in KwaZulu-Natal and the Northern Cape become sexually active at later ages than women living in other provinces (Table 3).

5.4.3. Number of partners past year

The information in Table 4 shows that most (94.2%, N=2653) of the women had only one sexual partner in the past year. A minority (3.6%) had two or more sexual partners and less (2.2%) report sexual inactivity during that time. There is a significant association between the number of sexual partners that the woman had during that time and the size of the household (x^2= 7.287, p= .026). The proportion of women who had two or more sexual partners in the year before the interview is higher among those living in small (4.3%) and medium-sized households (4.5%) than among those living in large-sized households (2.5%). The proportion of women who had two or more sexual partners during the year before the interview is also higher among those who have the same amount of education as their husbands (8.1%) than among those who have either more (2.5%) or less e (3.5%).[156]

5.4.4. Relationship to last partner

The information in Table 4 demonstrates that 82.9 percent of those for whom information is available on the last sexual partner mentioned the husband. There is a significant association between the type of partner with whom the woman last has sexual intercourse and place of residence (Fisher's exact, 1-tailed test, p=. 014). The proportion of women mentioning someone other than the husband as the last sexual partner is higher among those living in rural areas than among those living in urban areas (17.5% vs.14.6%).

There is also a significant association between the type of partner with whom the woman last had sexual intercourse and her age (x^2= 13.617, p= .018). The proportion of women mentioning someone other than the husband as the last sexual partner is higher among those between 35 and 39 years than among those who are either younger or older.[157] The examination reveals that the proportion of those whose last sexual partner is another man is higher among those whose first marriage took place four or fewer years than among other women.[158]

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[155] There is, however, no association between age at menarche and province of residence.
[156] x^2=7.289, p=.020.
[157] 19.8% of those between 35 and 39 years mentioned someone other than the husband compared to 14.6% of those 15 to 24 years, 13.3% of those 25 to 29 years, 16.2% of those 30 to 34 years), 17.4% of those 40 to 44 years and 13.9% of those 45 to 49 years.
[158] 31.1% of those whose first marriage occurred four or fewer years, 19.1% of those whose first marriage took place 5 to 9 years, 12.1% of those whose first marriage occurred 10 to 14 year, 9.4% of those whose first marriage occurred 15 to 19 years, 9.9% of those whose first marriage took place 20 to

The proportions of women whose last sexual partner is someone other than the husband is higher among those living in households in which someone else is the head than among those in which the woman or husband (15.3%) is the head (x^2= 334.666, p=. 000).[159]

5.4.5. Used condoms at last sexual intercourse

Use of condoms at last sexual intercourse is related to frequency of husband-wife communication about family planning (x^2 =43.097, p=. 000). Over 40 (40.8) percent of women who discussed family planning with their husbands during the year before the interview used condoms the last time that they had sex compared to 23.9 percent of those who did not (cf. Table 4.15, Appendix 4). In the few months before the interview, 17 percent of women using condoms with the last sexual partner discussed family planning with their husbands compared to seven percent of those who did not use condoms at that time (p=. 000).[160]

Use of the condom at last sexual intercourse is also associated with obtaining HIV/AIDS-related information from reading the newspaper or a magazine (x^2= 50.421, p=. 000) and the amount of information that the woman got from the paper or a magazine (x^2= 16.837, p=. 002). Twelve percent of those who got HIV/AIDS-related information from the newspaper or a magazine report using the condom the last time that they had sex compared to 4.6 percent of those who did not get this type of information from the newspaper or a magazine. The proportion of women using condoms at last sexual intercourse is higher among those getting a lot (10.6%) or some (10.1%) information about HIV/AIDS from reading the newspaper than among those who did not (6.7%).

Ten percent of women who got a lot of HIV/AIDS-related information from looking at the television used the condom with the last sex partner compared to 7 percent of those who got some and 7.1 percent not getting any such information from the television.

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24 years and 6.9% of those whose first marriage occurred 25 or more years ago mentioned someone else.

[159] 24.3% of the women living in households that are headed by someone else, 12.4% of those in households headed by woman and 15.3% of those in households headed by the husbands mentioned another man.

[160] The direction of the relationship does not seem to be straightforward or causal, of course. It is possible that one or more other factors (such as the woman or man's age, education, condom use attitude) might explain the association between them.

Using condoms with the last sexual partner is also related to obtaining HIV/AIDS-related information from listening to the radio (x^2= 8.434, p=. 0105) or from reading a pamphlet or brochure (x^2= 36.030, p=. 000). Six percent of women not obtaining information about HIV/AIDS from listening to the radio report using condoms with the last sex partner compared to 9.4 percent of those whom did. The proportion of women using condoms with the last sexual partner is also lower among those not exposed to such information from reading a pamphlet or brochure (5.3%) than among those who did (11.8%).[161]

Condom use at last sexual intercourse is also related to obtaining HIV/AIDS-related information from a friend (x^2= 34.908, p= .000), healthcare worker (x^2= 25.703, p= .000) or sexual partner (x^2= 43.716, p= .000) during the previous year. The proportion of women using condoms at last sexual intercourse is higher among those who got HIV/AIDS-related information from their peers than among those who did not (10.6% vs. 4.4%).

The proportion of those using condoms at that time is also higher among those who got such information from sexual partners than among others (11.4 vs. 5.0). Condom use at last sexual intercourse is also associated with getting HIV/AIDS related information from relatives (x^2= 19.825, p= .000) and the amount of HIV/AIDS-related information obtained from relatives (x^2= 9.697, p= .046). The proportion of women using condoms at last sexual intercourse is higher among those who got HIV/AIDS-related information from relatives (10.6 %) than among those did not (6.4%).

There is a significant relationship between using the condom with the last sexual partner and the type of method currently in use (x^2= 192.183, p=. 000). Less than three (2.7) percent of women who use sterilisation[162] report using the condom the last time that they had sexual intercourse compared with 4.5 percent using the IUD, 11.3 percent using injections and 13.2 percent using the pill.[163] However, as should be expected, most (95.1%) of those who use the condom as a method of fertility control report using it the last time that they had sexual intercourse.

[161] However, condom use at last sexual intercourse is not associated with the amount of such information that the woman got from the radio or from a pamphlet or brochure.
[162] Here, users of male and female sterilisation are collapsed into a single category
[163] Sterilised women are not concerned with unwanted pregnancies. Most of them attributed non-use to self (14.2%) or partner's dislike of condoms (30.9%), using condoms suggests lack of trust of partner (10.2%) or other reasons (18.5%). Only 4.4% of them attributed non-use to low or no risk of STIs, including HIV infection and 1.2% had 2 or more sexual partners during the year before the interview.

Table 4. Distribution of the women by average ages at menarche and sexual debut, number of partners, last partner and condom use at last intercourse according to place of residence, 1998 SADHS

Variable	N	Urban	Rural	%/Mean Total
Age at menarche (yrs.)				
%13 or younger	550	18.6	14.3	16.2
%14-16	2325	64.3	71.5	68.4
%17-18	381	12.3	10.4	11.2
%19 or older	144	4.7	3.9	4.2
Average	3400	15.5	15.0	15.1
Median	3400	16.0	15.0	15.0
Age at sexual debut (yrs.)				
Average.	3360	17.4	17.0	17.2
Median	3360	17.0	17.0	17.0
Number of partners past year				
%0	58	2.5	1.9	2.2
%1	2499	93.7	94.6	94.2
%2 or more	96	3.8	3.5	3.6
Last sexual partner				
%Husband	2784	85.4	82.5	83.8
%Someone else	539	14.6	17.5	16.2
Condom was used at last intercourse				
%No	2413	89.0	92.3	90.9
%Yes	230	10.7	7.2	8.7
%Don't know	11	.3	.5	.4

Due to method of rounding, some percentages might not add to exactly 100.

Use of the condom with the last sexual partner is unrelated to the woman, husband or their comparative ages or fertility desires. There is, however, a significant association between use of the condom at last sexual intercourse and husband-wife's comparative education (x^2=10.402, p=. 034). The proportion of women reporting condom use with the last sexual partner is higher among those who have less education than those who have the same amount as (6.1%) or more (6.3%) education than their husbands.

There is a significant association between use of the condom with the last sexual partner and the woman's attitude towards use of the radio (x^2= 9.698, p=. 002) or television (x^2= 28.029, p=. 005) for promoting family planning. The proportions of women using condoms with the last sexual partner are higher among those who find it

acceptable to use the radio or television for promoting family planning (7.3 % each) than among others (1.4% and 2.7%, respectively).[164]

Using condoms at last sexual intercourse is not associated with the numbers of live births or living children. There is, however, an association between use of the condom with the last sexual partner and giving birth in the past five (x^2= 11.560, p=. 001), three (x^2= 3.719, p=. 001) or one year (x^2= 10.493, p=. 001). The proportion of women using condoms at last sexual intercourse is higher among those who had a birth in the past five (8.5%), three (9.3%) or one year (10.7%) than among those who did not (5.5%, 5.8% and 6.3%, respectively).

The proportion of fertile using condoms at last sexual intercourse is higher among those who are undecided (8.7%) or do not want to have another child (8.5%) than among those who do (5.8%). [165] Use of the condom at last intercourse higher among those preferring a birth in three or more years (6.6%) than among those preferring o have it in two or fewer years (5.7%).[166]

5.5. Fertility-related factors

5.5.1. Births and living children

The average number of live births among all women in this study is 3.33. Among those who have ever given birth the average is 3.5 (Table 4).[167] A significant but weak association is found between the number of births that the woman has had and her mother's children (r=. 077, p=. 010, 2-tailed test).

The numbers of births (F=136.144, P=. 000) and children (F=116.084, P=. 000) are both related to place of residence. The average number of live births is lower among women living in urban areas (average 2.83, Std. Dev. 1.867) than among those in rural areas (3.71, Std. Dev. 2.382). Women living in urban areas have fewer children (2.61, Std. Dev. 3.33) than those in urban areas (average 2.83, Std. Dev. 1.867).

A significant but moderate amount of correlation exists between the woman's age and both numbers of births (r= .544) and children (r= .516). As previously indicated, the

[164] However, the findings might be artifactual and could, for example, be indicative of differences in place of residence, education /or age, for example.
[165] x^2= 29.382, p=. 003.
[166] x^2= 5.804, p=. 055.

older the women the higher her fertility. Among the women in this study, average numbers of births (F=150.105, p=. 000) and living children (F=167.739, p=. 000) are

[167] The numbers of births and living children are highly and positively correlated (r=. 949. p=. 001, 2-tailed test).

higher among women who are formally married than among those in a consensual union. The woman's age at first marriage is negatively and minimally correlated with the number of children to whom she has given birth (r= -. 098) and the number of children that she has (r= -. 1090). There is a significant and minimal amount of association between the length of time since the first marriage and both numbers of births (r=. 575) and living children (r= 542) among the women in this study. [168],[169]

Table 5. Distribution of the women by their fertility behaviours by place of residence, 1998 SADHS

Variable	N	Urban	Rural	%/Mean Total
Number of live births				
Among all women				
Median	3427	3.0	3.6	3.0
Mean	3427	2.8	3.7	3.3
Std. Dev.	3427	1.9	2.4	2.2
Among those who ever gave birth	3211			
Median	3211	3.0	4.0	3.0
Mean	3211	3.1	3.9	3.5
Std. Dev.		1.7	2.3	2.1
%Terminated at least one pregnancy	3427	18.4	15.5	16.7
Pregnancy losses				
%One	406	71.5	70.3	70.7
%Two or more	168	28.5	29.7	29.3
Age at first birth (yrs.)				
Average	3214	20.1	19.6	19.8
Median	3214	19.0	19.0	19.0
Living children				
Median	3427	3.0	3.0	3.0
Mean	3427	3.1	2.6	3.3
Std. Dev.	3427	1.6	1.7	1.7
Had birth				
%Past five years	3427	40.9	54.7	48.7
%Past three years	3427	26.2	38.9	33.4
%Past year	3427	11.0	15.8	13.7
%Last birth interval four or more years	2343	81.6	78.6	79.9
Pregnant				
%No or uncertain	3242	95.7	93.7	94.6
%Yes	186	4.2	6.3	5.4

Due to method of rounding, some percentages might not add to exactly 100.

[168] All are significant at .01-level, (2-tailed test).

[169]Women whose first marriage took place 30 years or more have 5.17 children and the average is 4.70 among those whose first marriage occurred 25 to 29 years, 4.09 for those whose first marriage occurred 20-24 years, 3.78 for those whose first marriage occurred 15-19 years ago, 2.99 for those whose marriage occurred 10-14 years ago, 2.31 for those whose first marriage occurred 9-10 years ago and 1.49 for those whose first marriage took place four or fewer years before.

Numbers of births (F=88.152, p=. 000) and children (F=40.554, p=. 000) are related to place of residence during childhood. Rates of fertility are higher among women who were raised in the countryside than among those who were raised in towns or cities. The average numbers of births and children among those who were raised in the countryside is 3.59 and 3.23, respectively. For those who were raised in a town it is 2.75 and 2.51, respectively. Those who were raised in a city have an average of 2.62 births and 2.45 children.

There are also significant differences between women living in different provinces in numbers of births (F= 15.278, p=. 000) and children (F= 11.685, p=. 000). Average fertility rates are lowest among women living in the Western Cape, Northern Cape and the Free State and highest among those living in the Eastern Cape and KwaZulu-Natal (Table 6).

The average numbers of births (F= 26.582, p=. 000) and living children (F= 22.731, p=. 000) are higher among women living in the same households as their husbands than among those who are not (c.f. Table 4.8, Appendix 4). The average numbers of births (F=25.097, p=. 000) and children (F=25.205, p=. 000) are higher among women living in female than among those living in male-headed households.

Because the average rate of fertility is higher among those living in female-headed households, the type of household in which the woman lives might also help account for the finding of relative low rates of fertility among women preferring to speak Afrikaans (Table 6).

Table 6. Distribution of births and children among the women by the home language by selected characteristics of the respondents, 1998 SADHS.

Language	% Rural	Average number of births	Average number of children	% Secondary or higher	% Female-Headed household	N
English	34.0	3.09	2.98	74.4	21.3	47
Afrikaans	30.2	2.92	2.65	49.2	6.3	63
IsiXhosa	67.2	3.65	3.24	49.1	38.0	934
IsiZulu	45.0	3.42	3.08	45.3	29.6	734
SeSotho	28.4	2.82	2.58	55.7	17.5	416
SeTswana	42.6	2.91	2.71	55.8	21.9	448
SePedi	77.4	3.40	3.08	50.8	50.8	394
SiSwati	77.1	3.53	3.19	42.7	32.8	131
TshiVenda	94.3	3.11	2.95	54.6	44.3	88
ZiTsonga	88.3	3.55	3.40	39.0	51.6	128
IsiNdebela	75.0	3.32	2.86	54.5	20.5	44

Age appears be a significant factor in the above finding since women living in households headed by another person are significantly younger (average age 28.86 years) than those living in households headed by the woman (average age 36.08 years) or the husband (average age 35.45 years). [170], [171] The socio-economic status of the household might partly explain the finding. The proportion of women living in households in the two lowest wealth quintiles is lower among those who live in households that are headed by someone else (21.5%) than among those who live in households that are headed by the woman (26%) or the husband (52.5%).[172],[173]

The average numbers of births (F=7.609, p=. 006) and children (F= 5.318, p=. 021) are lower among working than non-working women.[174] Average births and living children are lowest among women who work in professional, technical and managerial occupations and highest among those in unskilled occupations.[175]

Both births (F=6.629, p=. 000) and living children (F=5.353, p=. 000) are associated with the specific language that is preferred in the household. Table 6 shows that average fertility is lower among women who prefer speaking SeSotho and SeTswana at home than those expressing a preference for other languages.[176] It shows that among women who prefer speaking a non-Bantu language in the home, fertility is higher among those who prefer English than among those who prefer Afrikaans.

Numbers of births and children are lower among those preferring IsiNdebela than among those preferring any other Nguni dialect. This finding appears to be related the fact that the proportion of women who have secondary or higher education is higher among women who prefer speaking IsiNdebela than among others. The finding that average births and children are lower among women who prefer to speak TshiVenda than among those who prefer ZiTsonga also appears to be related to the finding that the finding that the proportion of women who have secondary or higher

[170] Among the women in this study, fertility is negatively related to the woman's age.
[171] There are no significant educational differences between women in different types of households.
[172] This should be interpreted with caution since 70 % percent of those living in households in the two highest quintiles are in households headed by the husband compared to 15.4% of those in households headed by the woman and 14.1% of those in households headed by someone else.
[173] Table 4.8, Appendix 4.
[174] 3.37 and 3.04 vs. 3.22 and 2.96, respectively
[175] Among those in professional technical or managerial occupations, the respective averages are 3.21 and 3.07. Among those in Clerical, sales and services, respective averages are 2.74 and 2.59. Among those in skilled manual occupations, respective averages are 2.84 and 2.63. Among those in unskilled manual occupations, respective averages are 3.41 and 3.09.
[176] Both of these languages are in the Sotho group.

education is greater among those speaking TshiVenda than among those speaking ZiTsonga.

Although the proportion of women who have secondary or higher education is approximately the same for those preferring to speak Afrikaans and IsiXhosa, average fertility is significantly higher among those who prefer to speak IsiXhosa.[177] This is explained by the fact that the proportion of women living in rural areas is significantly higher among those speaking IsiXhosa than among those speaking Afrikaans. [178]

5.5.2. Age at first birth

Among the women in this study, the median age at the birth of the first child is 19 (average 19.8, Std. Dev. range 12-39) years. Since it is found that there are decreases in both ages at menarche and sexual debut, it follows that the woman's age at first birth would also decrease as most Black South African women do not begin to use fertility control until after having at least one child.[179], [180], [181]

A significant association exists between the woman's age at the birth of the first child and her age at sexual debut (F= 86.335, p=. 000). The average age at the birth of the first child is lower among those who had their first sexual experience when they were 13 years or younger than among other women.[182]

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[177] Compared to other women, the proportion of Afrikaans speakers who have a secondary or higher level of education is only higher among those preferring ZiTsonga and SiSwati.

[178] Moultrie and Timaeus (2001) attributed the higher rate of fertility among Nguni speakers (Xhosas and Zulus) relative to Sotho speakers to the proportion living in rural areas and not to group membership.

[179] Among the women in this study the average age at the birth of a first child is 19.81 years and average age first use of a method of birth control is 20.33 years (mean difference =. 52), the average age at first marriage is 21.67 (birth-marriage interval = 1.86 years).

[180] Only 21.3% (N=3416) of the women in this study used any type of birth control before giving birth to the first child and 20.3% have never use any type of birth control

[181] Among the women in this study, the average interval between fist sexual exposure and first birth is 2.8 years. The correlation between age at first birth and age at first use of a method of fertility control is non-significant.

[182] The average age at the birth of the first child is 16.66 years among hose who had their first sexual experience at age 13 or younger (N=119) compared to 17.91 years among those who had their sexual debut at age 14 (N=203), 18.01years among those who had their sexual debut when they were 15 years (N=419), 19.02 among those who had their first sexual experience at age 16 (N=569), 19.71 years among those who had it at age 17 (N=497), 20.64 years or 18 years (N=544) It is 21.05 years among those who had their first sexual experience at age 19 (N=322), 21.81 years among those who had their first sexual experience at age 10 (N=272) and 23.35 years among those who had their first sexual experience at 21 years or older (N=207).

There is no significant association between the woman's age at the birth of the first child and the source from which she initially got information about fertility control. The examination reveals that among those who were raised in towns there is a significant association between woman's age at first birth and having a nurse as the initial source of information about contraception (F= 5.468, p=. 020). Women whose first source of information about family planning is the nurse gave birth to their first child at an earlier age than other women. Because the majority of Black South African women do not use birth control until after having at least one child, it is plausible that some of them got this information from the family planning nurse after becoming pregnant. [183]

The finding of no significant association between the woman's age at first birth and education (Table 4.9, Appendix 4) might be partly explained by the fact that the South African government does not bar pregnant girls from school attendance. Moreover, in this country, being pregnant (even if unmarried) is not an occasion for stigmatising behaviour. Because of the cultural emphasis on the woman to demonstrate proof of procreative ability, being pregnant could be viewed as a rite of passage.

The woman's age at the birth of the first child is moderately and negatively associated with her age at first marriage (r= -. 316). A negative relationship between the two variables is expected because marriage generally takes place after the birth of a child.[184]

5.5.3. Births in the past five years, three years or one year

The proportion of women who had a live birth during the past five years, three years or one year are higher among those living in rural areas than among their counterparts in urban areas (54.7%, 38.9% and 15.4% vs.40.9%, 26.2% and., 12.5% respectively). The average age is lower among women who gave birth during the past five years or three years among those who did not (respective averages are 31.57 years, Std. Dev. = 6.730, median = 31.00 years and 37.12 years, Std. Dev. = 7.862, median = 38.00 years, F= 490.606, p=. 000).

[183] Without understanding the context and content of such information, determining the effect of receiving such information from a specific person on reproductive behaviours and outcomes is problematic. Qualitative research about the context in which such information is received as well as the type and correctness of the information is necessary.

[184] Average age at first marriage is 21.67 years. The average interval between first birth and first marriage is almost two (1.86) years.

Among the women in this study, giving birth in the five years before the interview is related to the head (x^2= 54.104, p=. 000) and gender of the head of the household (Fisher's Exact 1-tailed Test, p=. 000) as well as its socio-economic status (x^2= 16.737, p=. 000). In the past five years, 63.1 percent of women living in households headed by someone else, 49.7 percent of those living in households in which the woman is the head and 44.5 percent of those living in households in which the husband is the head had at least one birth. During that time, 53.7 percent of women living in female-headed households and 46.3 percent of those in male-headed households gave birth to at least one child. Fifty-two (52.1) percent of women living in households in the two lowest wealth quintiles gave birth in the last five years compared to 48.5 percent of those in households in the middle quintile and 44.1 percent of those in households in the two highest quintiles.

In the three years before the interview 48.1 percent of the women gave birth to at least one child. Those giving birth during the three years before the interview also are younger (average age 30.90, Std. Dev. 6.541, median 31.00 years) than those not giving birth during that time (average age 36.19, Std. Dev. 7.841, median 37.00 years).[185]

Giving birth in the past three years is related to the head (x^2= 40.405, p=. 000) and gender of the household (Fisher's Exact 1-tailed Test, p=. 000) as well as its socio-economic status (x^2= 26.836, p=. 000). The evaluation finds that 43.8 percent of women living in households headed by someone else, 34.7 percent of those in households in which the woman is the head and 29.8 percent of those in households in which the husband is the head gave birth in the preceding three years. It is found that 37.4 percent of women living in female-headed households and 31.5 percent of those in male-headed households gave birth during this time. Thirty-seven (37.3) percent of women living in households within the two lowest quintiles of wealth gave birth in the three years before the interview compared to 33.5 percent of those in the middle quintile and 27.9 percent of those in the two highest wealth quintiles.

Women who gave birth during the year before the interview are significantly younger (average 30.08 years, Std. Dev. 6.362, median 30 years) than those who did not (average 35.11 years, Std. Dev. 7.831, median 35 years).[186]

[185] F= 386.634, p=. 000.
[186] F= 176.098, p=. 000.

Having a birth in the past year is related to the head (x^2= 25.481, p=. 000) and socio-economic status (x^2= 9.900, p=. 007) of the household. The proportion of women having a birth in the past year is higher among those living in households headed by someone else (20.4%) than among those in households headed by the woman (12.8%) or her husband (12.1%). The proportion giving birth during this time is higher among those living in households in the two lowest wealth quintiles (15.7%) than among those in households in the middle (13.2%) or two highest quintiles (11.5%).

There is a significant relationship between giving birth in the five years, (Fisher's Exact, 1-tailed test, p=. 000), three years (Fisher's Exact, 1-tailed test, p=. 000) or one year (Fisher's Exact, 1-tailed test, p=. 017) before the interview and employment status. The proportion of women who gave birth in the five years, three years or one year before the interview is higher among those who are unemployed than among those who are (respectively, (50.5%, 35.8% and 14.6% vs. 44.2%, 22.4% and 11.8%).[187]

5.5.4. Termination of pregnancies

Less than a fourth (16.7%) of the women in this study have had at least one abortion (Table 5). Women who have had an abortion do not differ from those who have not in average age at the birth of the first child, the ideal number of children or number of children at first use of a method of fertility control. There is also no significant difference between those who have never had an abortion (TOP) and those who have in average numbers of live births and living children.

The abortion experience is related to place or residence during childhood (Fisher's Exact, 1-tailed test, p=. 006) and current place of residence (Fisher's Exact, 1-tailed test, p=. 023). The proportion of those who have ever terminated a pregnancy is higher among those who were raised in the countryside (17.9%) than among those who were raised in a town (15%) or city (13.9%). Abortions are also higher among women living in rural areas (18.2%) than among those living in urban areas (14.9%).

[187] Similarity in findings for those giving birth during the five years, three years or one year is explained by the fact that those who gave birth in the previous three years or one year are also counted as giving birth in the past five years.

On average, women who have had a TOP are older (37.02, Std. Dev. 7.165, years) than those who have not had one (33.90, Std. Dev. 866 years).[188] Twenty-four (24.4) percent of women between 45 to 49 years, 21.6 percent of those between 40 and 44 years, 20.7 percent of those between 35 and 39 years have terminated at least one pregnancy. Fourteen percent of those between 30 and 34 years, 11.1 percent of those between 25 and 29 years, 8.9 percent of those between 20 and 24 years and 2.8 percent of those between 15 and 19 years have done so.

Eighteen percent of women who are formally married have terminated at least one pregnancy compared to 12.1 percent of those in a consensual union (Fisher's Exact, 1-tailed test, p=. 000).[189] This finding appears to be related to both fertility and age differences between women who are formally married and those in a consensual union. Women in a consensual union have less children than those who are formally married (respective averages are 2.67, Std. Dev. 1.594, median 3.55, Std. Dev. 1.639, median 3). It also shows that the average age among women in a consensual union is lower than among those in a formal union (31.19 years, Std. Dev. 8.162 vs. 35.00 years, Std. Dev. 7.485).

There is an association between history of TOP and the woman's level of education achievement (x^2= 15.987, p=. 000).[190] The proportion of women who have had an abortion is lower among those who have at least a secondary level education (14.2) than among those who have primary (19.2%) or no education (19.6%).[191] The findings are not unexpected since use and effective use of fertility control are generally more prevalent among women who have more education than among others.

The proportion of women who has a history of abortion is higher among those living in households in which they are the head (19.3%) than among those living in households in which the husband (16.8%) or someone else (13.3%) is the head. It is found that the average number of children is higher among women living in households in which they are the head (3.88, Std. Dev. = 1.638) than among those in households headed by the husband (3.38, Std. Dev. = 1.630) or another person (2.59, Std. Dev. = 2.59).

[188] F= 30.333, p=.000)
[189] Fisher's exact, 1-tailed test.
[190] Literacy is not a significant factor in whether the woman has ever had a TOP, however.
[191] Here the categories "secondary" and "higher" education are combined to create the category 'Secondary or higher'.

It is found that the proportion of women who have had an abortion is higher among those who have experienced abused than among those who have never have (20.5% vs. 16.2%, Fisher's exact 1-tailed test, p=. 008). Further examination of the data shows that among those who have had an abortion, those who have ever been abused are younger (average age 33.03, Std. Dev. 7.993 years) than those who have never been abused (average age 34.61, Std. Dev. 7.803years). [192]

The relationship between the experience of abortion and abuse appears to be linked to the type of household in which the woman lives. Among those living in households that are headed by the husband, the proportion of women who have ever had an abortion is higher among those who have been abused (20.4%) than among those who never have (13.2%). Among women living in male-headed households, the proportion of who have ever had an abortion is also higher among those who have been abused (21.4%) than among those who have never been abused (15.6%).[193]

The relationship between pregnancy termination and the woman's experience of abuse is also significant for women living in households in the middle (Fisher's Exact, 1-tailed test, p=. 019) and two highest wealth quintiles (Fisher's Exact, 1-tailed test, p=. 008). Among those living in households in the middle and two highest quintiles of wealth, the proportions who have had an abortion is higher among those who have ever been abused than among those who have never been (respectively, 25.5 % and 22% vs. 16.2% and 14%, respectively).

There is a significant relationship between history of TOP and the woman's ages at sexual debut (F= 74.725, p=. 000) and first use of a method of fertility control (F= 52.437, p=. 000). The median age at sexual debut is 18 years (average 22.90, Std. Dev. 19.954 years) among women who have ever had a TOP compared to 16 years (average 17.16, Std. Dev. 15.643) among those who never had one.

The finding that abortions are higher among those who have their first sexual experience at a later age appears to contradict what is expected since use of contraception at sexual debut and continued use is generally associated with a later age at sexual debut. However, given the cultural emphasis on the woman's ability to demonstrate proof of fertility, the finding is understandable. It is, inferred that women

[192] F= 15.060, p=. 000.
[193] Fisher's exact, 1-tailed test, p=. 010.

who are not effective contraceptors might use abortions because they do not desire a child at the time or do not want any more.[194]

5.5.5. Current pregnancy

The information in Table 5 demonstrates that current pregnancies are higher among those living in rural areas than among those living in urban areas (Fisher's Exact, 1-tailed test, p=. 007). This might be related to the fact that the interval between births is generally higher among women in urban areas than in rural areas (Fisher's Exact, 1-tailed test, p=. 000).

A significant relationship exists between a current pregnancy and the person who heads the household (x^2= = 7.206, p=. 027). Pregnancies are higher among women living in households headed by someone else (7.7%) than among those in households headed by the woman (5%) or the husband (4.9%).[195] Although only marginally significant, the proportion of those who are pregnant is somewhat higher among women whose husbands live elsewhere than among those who co-reside with the husband (6.3% vs. 5%, Fisher's exact, 1-tailed test, p=. 081).

The rate of pregnancies is also higher among women in a consensual union than among those who are formally married (6.4% vs. 5.1%, Fisher's exact, 1-tailed test, p=. 086). Further examination of the data shows that relationship between marital status and pregnancy is non-significant among women living in urban areas but significant among those living in rural areas (Fisher's Exact Test, 1 tailed, =. 022). In rural areas, the proportion of pregnant women is higher among those in a consensual union than those in a formal marriage (7.9% vs. 5.2%).[196]

Among all women, there is no significant association between being pregnant and

[194] For the women in this study, the determination is possible only through an examination of the factors associated with the decision to terminate an existing pregnancy. Unfortunately, the 1998 SADHS does not contain any item to measure this.

[195] Women in households headed by someone else have less (2.59) children than those in households headed by themselves (3.88) or husbands (3.38). Those in households that are headed by someone else are younger (28.86 years) than those in households headed by the woman (36.08 years) or the husband (35.45 years).

[196] This appears to be due to the fact that the average number of children is lower among women in a consensual union (2.67) than among those in a formal union (3.55). Women in a consensual union are also younger (average age 31.19 years) than those who are formally married (average age 35.37 years). It is found that the proportion of women who gave birth in the three years before the interview is slightly higher (67.1%) among those who are formally married than among those in a consensual union (64.9%).

employment status. However, in urban areas, the rate of current pregnancies is somewhat higher among those who are employed than among those who are not (5.7% vs. 4.1%, Fisher's exact, 1-tailed test, p=. 087).[197] Closer examination of the data shows that 13.3 percent of the women who worked during the past year but are currently unemployed, four percent of those who are employed and almost five (4.9) percent of those who did not work at any point in the past year are pregnant. [198]

There is also an association between being pregnant and number of sons in the household in rural areas only (x^2= 8.885, p=. 012). In rural areas, the proportion of pregnant women is higher among those living in the same households with three or more sons than among those living with between one and two or with none (6.3% vs. 4% and 2.3%, respectively). The examination also shows that, in rural areas, the proportion of pregnant women is higher among those who have the most of their own children living at home (i.e. five or more) than among those who living with fewer (5.8% vs. 1.1% - 4.9%, x^2= 12.265, p.031).

5.5.6. Reproductive status

More than half of fertile (56.9%) and infertile (54.6%) women are living in rural areas. The average age among fertile women is 34.26 (median 34, Std. Dev. 7.786) years and among infertile ones it is 35.15 (median 36, Std. Dev. 8.040) years (F= 6.591, p=. 010).[199] Fertile and infertile women differ in the length of time since the first marriage (12.33, Std. Dev. 7.969 years vs. 17.39, Std. Dev. 8.445 years, F= 113.829, p= .000).[200] The average age at first marriage is slightly higher (22.10.median 21, Std. Dev. 5.914 years) among infertile women than among fertile ones (21.54, median, Std. Dev. 4.988 years).[201] Among fertile women, the median number of years since the first marriage is 12 (average 12.33, Std. Dev. 7.969) compared to 18 (average 17.39, Std. Dev. 8.445) among infertile ones.

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[197] It is acknowledged that the relationship is, nonetheless, marginally significant.

[198] Fisher's exact, 1-tailed test, p=. 060. The reason for the finding is not examine in the present study.

[199] Because the age concentration of the women in this study is between 15 and 49 years, it is important to find out the causes of infertility since only 9.7 percent of the women in this study are using female sterilisation as a method of fertility. Infertility is believed to result from ageing, sterilisation or secondary to infection (e.g., STIs). Use of a long-lasting, potent method of fertility controls such as Depo-Provera might mask infertility. It is therefore possible that some women might consider themselves to be infertile, even if they are not. The information used in this study comes from self-report of the women and not from gynaecological documentation.

[200] Information on duration of time since the first marriage is not in the table.

[201] However, non-significant at .050-level of significance. F= 3.299, p=. 069.

There is no significant statistical difference between fertile and infertile women in spousal discussions about family planning during the previous year, knowledge of the purpose of condoms, ever use of condoms or using condoms at last sexual intercourse or average births or living children. However, the proportion of those who have ever used fertility control is higher among fertile than infertile women (74.8% s. 71%, Fisher's exact, 1-tailed test, p=. 030). The ideal number of children is lower among fertile than infertile ones (2.43, Std. Dev. 1.181 vs. 2.65, Std. Dev. 1.365).[202]

Thirteen percent of fertile women are breastfeeding, 10.3 percent are amenorrheic, 11.2 percent are abstaining[203] and four (4.2) percent are pregnant. Close to half (48.9%) of non-pregnant fertile women do not want to have a (another) child. A third (33.8%) desires a (another) child and few (5.8%) do not know whether (or not) a child is wanted.

5.6. Knowledge and attitudes

5.6.1. HIV/AIDS-related

Awareness of HIV/AIDS pandemic is almost universal (94.7%) among the women in this study. The woman's awareness of HIV/AIDS is associated with husband-wife's comparative approval for family planning (x^2=13.252, p=. 004). The proportion of women who have ever heard of HIV/AIDS is lower among those reporting that only the woman approves of family planning (93.7%) than among others (95.9% to 98.9%).

Awareness of the epidemic is higher among those who joint disapprove of family planning (98.9%) than among those reporting joint approval or approval by the man only (96.2%), approval by the woman only (93.7%) or uncertainty of family planning by one or both (95.9%). Only 55.7 percent of them are aware that a healthy looking person can have AIDS. [204]

[202] F= 16.129, p=. 000. This finding might simply be a function of age cohort as the ideal number has decreased over time.
[203] 4.8% of those who are infertile are abstaining.
[204] 26.8% of think that a healthy looking person cannot have AIDS and 17.6 percent are unsure. Unawareness of the fact that a healthy looking person can have AIDS is suggestive of ignorance of the disease. The finding speaks to the fact that individuals who believe that they can tell who is infected or have AIDS by looking at physiological markers (e.g., thinness, wasting) are likely to discriminate against those who have illnesses such as TB, cancer, diabetes because some of the signs and symptoms of such illnesses are also characteristic of HIV/AIDS.

Knowledge of the ways in which the virus can be transmitted is fairly high: Eighty-four (84.2%, N=3405) of them are aware that HIV transmission can be prevented through safer sex practices. Eighty-two (82.2, N=3401) percent know that using condoms during sexual intercourse can also stop HIV infection. An equal proportion (82.4%, N=3398) are aware that HIV can be spread by sharing a razor blade with an infected person. Approximately 84 percent (83.7%, N=3401) know that injecting with clean needles minimises the spread of the virus.

Sixty-one (61.1%, N=3,390) of them know that sharing food with an infected person does not lead to infection.[205] Sixty-three percent (63.3%, N=3392) know that HIV transmission is not prevented by touching an infected person. [206, 207] Close to 58 (57.7, N=3398) percent of them know that avoiding public toilets does not minimise the spread of the virus. [208] Only 37 percent (N=3338) of them know that the bite of a mosquito or other insect cannot cause HIV infection. Fifty-six (56.5%, N=3403) percent of them know that dieting cannot stop infection. [209]

Similar to findings from other studies, this study shows that HIV/AIDS knowledge and awareness is significantly higher among those living in urban areas than in rural areas. The proportion of women who have heard about AIDS is higher among those in urban areas than those in rural areas (98.7% vs. 93.7%, Fisher's exact, 1-tailed test p=. 000). Twenty (20.4) percent of those living in urban areas know at least one person who is HIV-positive compared to 10.5 percent of those living in rural areas (Fisher's exact, 1-tailed test, p=. 000). Knowledge that safer sex practices (x^2= 48.717, p=. 000) or using condoms (x^2=54.375, p=. 000) during sexual intercourse prevents HIV infection is also higher among women living in urban areas (88.6% and 87.3%, respectively) than among those living in rural areas (80.9% and 78.3%, respectively). The proportion of women who know that injecting with clean needles

[205] 20.1% think that infection can occur through sharing food and 18.8% are unsure.
[206] 18.2% think that infection can take place by touching a person who is HIV-positive and 18.5% do not know whether this is the case.
[207] Assumptions about causal contagion, such as sharing food with or touching an infected person, is a risk factor for HIV infection might result from the mistaken view that the person's entire body is infected, not merely the blood stream. Such an assumption often leads to prejudicial or stigmatising attitudes toward those who are infected or are perceived to be infected (Siegel et al, 1991).
[208] 24.2% think that HIV is transmitted through public toilet seats and 18.1% do not know if the virus is spread in this manner. The belief that avoiding public latrines can stop the spread of the virus is akin to the belief that STDs occurs in this manner. This belief is another instance of casual contagion.
[209] The confusion over the HIV- nutrition link probably results from the fact that HIV, which is viral infection, is often confused with AIDS, the disease. It is known that good nutrition; along with other things such as exercise and psychological well being retards the onset of AIDS. This fact needs to be emphasised but seldom, if ever, mentioned in this society.

prevents HIV infection is also higher among those living in urban areas than among their rural counterparts (87.6% vs. 80.6%, x^2= 39.149, p=. 000). Eighty-five (85.2) percent of women living in urban areas are aware that HIV infection can occur through sharing a razor blade with an infected person compared to 80.3 percent of those living in rural areas (x^2= 45.108, p=. 000).

Women living in urban areas are more aware than those in rural areas are that touching (74.1% vs. 54.9%, x^2= 135.172, p=. 000) or sharing food with an infected person (71.8% vs. 52.8%, x^2= 132.050, p=. 000) does not lead to infection. Similarly, two-thirds of those living in urban areas know that HIV infection cannot be prevented by avoiding public toilets compared to 51 (50.8) percent of their counterparts in rural areas (x^2= 95.062, p=. 000). Knowledge that the virus is not transmitted through mosquito or insect bites is also higher among those in urban areas than among those in rural areas (43.2% vs. 32.2%, x^2=63.406, p=. 000).

The proportion of women who are aware that a healthy looking person can have AIDS is significantly higher among those living in urban areas than among those living in rural areas (72.6% vs. 41.9%, x^2=326.829, p=. 000). Women living in urban areas are also more aware than their rural counterparts that eating well does not prevent viral infection (63% vs.54.1%, x^2=73.593, p=. 000).

Over three-fourths of the women in this study endorse the idea that people testing positive for HIV (78.1%) or AIDS (77.7%) should be informed of their status. Less than six percent of them have no opinion on whether people with a positive diagnosis for HIV (5.9 percent) or AIDS (5.8%) should be informed. Eighty-three (83.5) percent of them endorse the idea of partner disclosure and 5.6 percent have no opinion as to whether an HIV positive individual should disclose her or his status to the partner. Approximately two- thirds of the women in this study endorse the idea of mandatory reporting of HIV (66.1%) or AIDS (66.9%) cases and slightly more than ten (11.1 and 12.1, respectively) percent have no opinion on the issue.

5.6.2. Reproductive-related

Table 7 shows a significant relationship between reproductive knowledge and place of residence as well as education and age. [210], [211] The proportion of women having a

[210] Data are not shown in table.
[211] On all items assessing the relationship between knowledge and age, p=. 000.

correct understanding of the menstrual cycle is higher among those between 15 and 24 years (12.8%) and lower among those between 45 and 49 years (6.5%) than among other women (7.6%-10.1%). On the other hand, higher proportions of those between 25 and 29 years know that condoms can be used to prevent pregnancy and STIs (81.5%) or understand the conditions of the 1996-TOP Act (50.9%) than the proportions of other women (64.8 % - 77.4% and 35.1% -48.0%, respectively).

The majority of women know of a source for fertility control (94.9%) or condoms (74.6%). The proportion of women identifying a public source for birth control is higher among those living in rural areas than among those living in urban areas (Table 7). Women living in rural areas (91.1%) and those between 25 and 29 years (92.1%) more often identify a government hospital as the known source for condoms than those living in urban areas (86.2%) or those in other age groups (86.2% - 91.1%). The findings are consistent with the known relationship between knowledge and awareness of reproductive matters and place of residence. Mbanga (2002, p. 129), for example, found that in South Africa, general knowledge of reproductive health information is higher in urban than in rural areas.

Most of the women approve of (90.3%) family planning and endorse the use of the radio (93.6%) or television (91.1%) for promoting family planning. As expected, approval for family planning is higher among those living in urban areas (91.9%) than among those living rural areas (89%). In both urban and rural areas, the proportion of women who approve of family planning is higher among those who have secondary or higher education than among others.[212] Acceptance of the radio or television for promoting family planning is also higher among those in urban than in rural areas (95.8% and 94.2% vs.91.9% and 88.7%, respectively).

Women between 45 and 49 years and those between 40 and 44 years are less approving of family planning than those in other age groups (85.1% and 86.3%, respectively, vs. 90.2% - 93.4%). Women between 45 and 49 years are also less accepting of the idea of using of the radio (89.5% vs. 92.7%-96.1%) or television (86.1% vs. 89.4%- 94%) for promoting family planning.

[212] In urban areas, 94.4% of those with secondary education, 90.1% of those who have primary education and 72.4 percent of those who have no education approve of family planning. (p=.000). Similarly, among those in rural areas, 94.5% of those who have secondary or higher education approve of family planning compared to 90.1% of those who have primary education and 72.4% of those who have no education.

Table 7. Percentage distribution of the women by their knowledge of reproductive physiology, purpose of condoms, the 1996-TOP Act and source for contraception or condoms according to place of residence and level of education.1998 SADHS

Variable	All	Urban	Rural	p
Reproductive physiology				.000
Correct response	8.8	9.3	8.3	
Incorrect response	54.3	59.7	50.3	
Says she does not know	36.9	31.0	41.4	
1996-Abortion Act				000
No	24.4	17.7	29.5	
Yes	45.6	59.1	35.2	
Don't know	30.0	23.1	35.3	
Purpose of condoms				.000
Never heard of condom	7.6	4.3	10.2	
Knows for FP only	10.8	8.6	12.4	
Knows for STD only	6.4	4.3	8.0	
Knows for both FP & STD	75.2	82.8	13.43	
Source for birth control				.000
Don't know a source	5.1	4.3	5.7	
Other	6.0	9.5	3.2	
Public	88.9	86.2	91.1	
Source for condoms				.000
Don't know a source	15.4	9.3	20.1	
Other	2.4	4.0	1.3	
Day hospital	26.0	25.0	26.7	
FP Clinic	19.1	28.2	12.1	
Mobile Clinic	7.8	2.4	11.9	
Government hospital	29.3	31.0	28.0	
Education	**None**	**Primary**	**Secondary or higher**	**p.**
Proportion of women knowing				
Timing of ovulation	5.4	6.3	11.5	.000
Conditions of 1996-TOP Act	30.4	35.1	57.3	.000
Condoms can be used for FP and STIs	50.8	69.3	85.9	.000
Any source for birth control	83.9	94.2	97.3	.000
Any source for condoms	61.6	80.3	95.8	.000

The average ideal number of children is 3.63 (std. Dev. 1.647) among those giving a numeric response (N= 3382). The average is slightly higher among women living in rural areas than among those in urban areas (3.96, Std. Dev. 1.727 vs. 3.19, Std. Dev. 1.427, F= 192.001, p=. 000). More than half (55.9%) of those in urban areas think that two to three children are ideal while 62.1 percent of those in rural areas think that the ideal number of children is four or more (c.f., Table 4.31, Appendix 4). The number of children considered ideal varies with the woman's age as well (F=83.114, p=. 000). Women between 15 and 24 years think that the ideal number is less than three (2.85) children; whereas, those in older age groups think that it is over

three.[213] The proportion of women who think that the ideal number is three or less is higher among those 15 -24 years (71.5%) than among those between 25 - 29 years (59.5%), 30 - 34 years (50.3%), 35 -39 years (41.5%) 40 -44 years (37.8%) or 45 -49 years (29.3%).

Over half (59.5%) of fertile women, for whom information is available (N=2,138), say that they would be unhappy over the prospects of a pregnancy in the next few months and slightly more than a quarter (27.4%) think that they would be unhappy.

5.7. Reproductive-related factors

5.7.1. Ever use of fertility control

Almost all (97.7%) of the respondents are aware of methods of fertility control[214] but only 79.7 percent of them have ever used a method of fertility control. Among the women in this study, place of residence during childhood is the only significant predictor for whether (or not) the woman has ever used fertility control (x^2=122.083, p=. 000). Table 8 shows that the proportion of women who have ever used fertility control is higher among those who were raised in a town than among those who were raised in a city or the countryside. However, there is no significant statistical relationship between ever use of fertility control and current place of residence.

5.7.2. Age and number of children at first use of a method of fertility control

Among the women in this study, the average age at first use of a method of fertility control is 20.35 years and the average number of children that the woman has at first use of a method is approximately 1.5. The average age and number of children at first use of a method of fertility control is related to childhood place and current place of residence and province as well as age and education (c.f. Table 4.12, Appendix 4).

The average age at first use of a method of fertility control is higher among women who were raised in the countryside than among other women (20.65 years vs. 19.72 to 19.8 years). The number of children that the woman has at first use of a method of fertility control is also related to childhood place of residence (F=131.843, p=. 000).

[213] For those 25-29 years, it is 2.88; for those 30-34 years it, is 3.15; for those 35-39 years, it is 3.45; for those 40-44 years, it is3.87 and for those 45-49 years, it is 4.56.
[214] Pill, IUD, injections, diaphragm, foam jelly, condom and male or female sterilisation are modern methods of fertility control.

Table 8. Percentage distribution of the women by whether they have ever used fertility control according to selected background and socio-economic characteristics, 1998 SADHS

Variable	N	Urban	Rural	p (U/R)	%Total	p. (All)
Childhood place of residence		(.074)	(.089)			.000
City	376	78.6	70.0	.192	92.8	
Town	626	83.2	85.8	.291	89.2	
Countryside	2388	78.1	79.2	.299	75.2	
Mother's children		(.723)	(.710)			.861
1-2	369	79.2	78.1	.446	78.6	
3-4	763	81.5	78.5	.176	79.8	
5 or more	2293	79.6	80.0	.425	79.8	
Respondent's order of birth		(.801)	(.202)			.235
First & second	1547	79.1	79.8	.382	81.0	
Third & fourth	1027	83.9	78.8	.024	78.4	
Fifth or higher	851	76.9	79.5	.203	79.5	
Age (yrs.)		(.690)	(.830)			.579
15-24	408	78.5	76.6	.390	77.2	
25-29	605	80.9	80.8	.526	80.8	
30-34	672	78.9	78.6	.473	78.9	
35-39	768	79.2	80.4	.471	80.6	
40-44	556	80.9	79.9	.253	78.6	
45-49	418	77.2	80.0	.240	81.3	
Education		(.213)	(.693)			412
No education	449	73.5	78.3	.188	77.3	
Primary	1261	81.5	79.1	.167	79.9	
Secondary or higher	1717	79.9	80.4	.420	80.1	
Literacy		(.169)	(.261)			.101
Easy	2472	80.5	80.1	.446	80.3	
Difficult or illiterate	946	77.8	78.4	.426	78.2	
Type of union		(.220)	(.286)			.163
Formally married	2651	80.4	78.3	.364	79.9	
Consensual	776	84.2	78.4	.514	79.5	
Number of unions		(.502)	(.505)			.526
One	3150	79.8	79.3	.386	79.5	
More than one	250	80.4	79.1	.463	79.6	

The average number of children at initial use of a method is significantly lower among women who were raised in a city (1.23) than among those who were raised in a town (1.46) or the countryside (2.45). The examination also shows that women living in urban areas generally have fewer children at first use of a method of fertility control than those living in rural areas (respective averages, 1.55 and 2.5).

The average age of the woman at first use of a method of fertility control is lower among women living in the Western Cape (18.39 years) than among those living in other provinces (20.05 years -21.06 years). Women living in the Northern Cape and the Free State begin to use birth control at older ages than those living in other provinces (respective averages are (21.05 years and 21.06 years vs.18.39-20.53

years). Women living in the Western Cape have an average of 1.74 children when they begin to use fertility control compared to between 1.98 and 2.43 among women in other provinces (c.f. Table 4.11, Appendix 4).

As expected, the average number of children that the woman has when she begins using fertility control is significantly higher among those who have no education (3.36%) than among those who have primary (2.53%) or secondary or higher (1.52%). The examination also reveals that the average age at first use of a method of fertility control is somewhat higher among women living in households in the two highest wealth quintiles (20.06 years) than among those in other households (20.22 years – 20.66 years).

It is found that typically, the Black South African woman has her first sexual experience about two years after onset of menarche (median age 15 years, average age = 15.3 years). About two years thereafter she gives birth to the first child (median age 19 years, average age = 19.81 years). Entrance into the first union – formally or consensually - occurs one year later (median age =20). She generally begins to use a method of fertility control shortly after entering the first marriage (median age=20 years, average age = 20.35 years). These findings are consistent with the findings in Makiwane's (1998) study conducted among Black women of reproductive age in the Transkei (Eastern Cape, South Africa). The finding that marriage generally takes place only after the woman has given birth to at least one child suggests that the woman's demonstrated proof of the ability to procreate continues to be important to many Blacks in transitional South African society.

5.7.3. Initial source of information on family planning

The information in Table 9 illustrates that the nurse and the mother are the two most important sources from which the women initially obtained information about contraceptive methods.[215] The proportion of women who first got such information from a teacher is significantly higher among those who were raised in the countryside

[215] The fact that the proportion of those who first got such information from a nurse is significantly higher than those getting it from the mother is probably explained by adherence to traditional cultural norms among Black South Africans prohibiting parent-child discussions about sexuality and reproductive matters. It is likely that for those who first heard about family planning from a nurse, the antenatal clinic, postpartum ward or family planning clinic is probably the initial point of contact. Further studies assessing the context and content of the woman's initial exposure to information about family planning are suggested. Such studies might provide information that is valuable to reproductive health and HIV/AIDS educators and policy personnel.

than among those who were raised in a city or a town.[216] On the other hand, the proportion of those who first got this type of information from the mother is higher among those who were raised in a city or town than among those who were raised in the countryside.[217]

5.7.4. First method of fertility control

The injection (60.5%) and the pill (27.6%) are the two methods of fertility control first used by most women in this study. The significant predictors for the prevalence in use of first method of fertility control are childhood and current place of residence current place of residence as well as the number of children that the woman has at the time.

The proportion of women who first use the pill or IUD is higher among those who were raised in a city (30.6% and 9.5%, respectively) than among those who were raised in a town (25.8% and 5.3%, respectively) or the countryside (27.3% and 2.6%, respectively).[218] The proportion of women using the pill as the first method of fertility control is higher among those currently living in urban areas (28.9%) than among their rural counterparts (25.9%). [219] Use of the pill or the IUD as the first method of fertility control is more widespread among women who have no children at the time than among those who have one or more (respectively, 31.8% and 6.6% vs. 20.4% to 27.9% and .6 to 3.8%).[220]

Use of injections as the first method of fertility control is more widespread among women who were raised in a town (63.1%) than among those who were raised in a city (55.2%) or the countryside (61%). Use of injections as the first method of fertility control is also higher among women currently living in rural areas than among those currently living in rural areas (61.8% vs. 59.6%).

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[216] x^2=6.117. Although less than 5 percent of them first got such information from a teacher, the finding suggests that the school could play an instrumental role in promoting reproductive health; including the dissemination of information on HIV/AIDS preventative practices; especially in rural areas where people are probably not as exposed to such information from mass media and network interaction as those in urban areas.

[217] x^2=5.575. This relationship is, however, only marginally significant. It is acknowledged that excluding the mother and teacher, no other initial source of information on contraception is statistically associated with childhood place of residence.

[218] x^2=51.119, p=. 000.

[219] x^2=54.547, p=. 000.

[220] The average number of children at first use is lower among those whose first method is the IUD (.84) than among those who first used the pill (1.33), injection (1.57) or another method (2.25) – F= 24.333, p=. 000.

The proportion of women using injections as the first method of fertility control is higher among those who have three children at the time (65.4%) than among those who have no children (53.9%), one (62.3%), two (64.7%) or among those who have four or (61.2%). It is found that the average age at the birth of the first child is lower among women whose first method of fertility control is an injection (19.47 years) than among those whose first method is the pill (20.08 years), the IUD (20.66 years) or another method (19.97 years).

Table 9. Percentage distribution of the women by the initial source of method information according to place of residence during childhood, 1998 SADHS

Variable	N	%	City	Town	Countryside	p
Initial source						
Mother	2492	19.3	22.1	22.3	18.1	.062
Sister	2492	7.6	6.5	8.2	7.6	.689
Father	2492	.2	.7	.2	.2	.341
Other relative	2492	3.0	1.4	3.5	3.1	.197
Friend	2492	8.9	9.4	7.6	9.2	.513
Teacher	2492	4.2	3.6	2.4	4.8	.047
Nurse	2492	50.1	52.5	48.4	50.2	.145
Doctor	2492	5.8	5.1	6.1	5.8	.844
Poster or magazine	2492	1.0	.7	.4	1.1	.298
Radio or television	2492	.6	.7	.4	.6	.874
Other source	2492	4.4	2.9	4.3	4.6	.394

Due to method of rounding, some percentages might not add to exactly 100.

Use of a method other than the pill, IUD or injection as the first method is higher among women who were raised in the countryside (9.1%) than among those who were raised in a city (4.6%) or a town (5.9%). The proportion of women whose first method is another method is also higher among those who have four or more children at first use (17.8%) than among those who have fewer children at the time (5.5% - 7.7%).

The examination shows that the prevalence in use of the pill as the first method is higher among women between 45 and 49 years (36.3%) than among those in other age cohorts (14.3% - 34.4%). The prevalence in use of the IUD as the first method of fertility control is higher among those between 40 and 44 years than among those between 45 and 49 years (4.2%) or among younger age cohorts (1.1% - 5.6%). The prevalence in use of the injection as the first method is higher among women between 20 and 24 years (77.9%) than among those between 15 and 19 years (66.7%) or among older age groups of women (43.3% - 73%). Nineteen percent of those 15-19 years, 6.7 percent of those 20-24 years, 3.3 percent of those 25-29 years, 6.9 percent

of those 30-34 years, 7 percent of those 25-39 years, 10(9.9) percent of those 40-44 years and 16 (16.2) percent of those 45-49 years used some other method.

5.7.5. Discontinuance during the year before the interview

Twenty-two (22.5) percent of women currently using fertility control discontinued contraception during the year before the interview (Table 9). Sixteen percent of those who discontinued are currently using the pill, 78 percent the injection, 5.1 percent condoms and less than one (.6) percent the IUD.[221]

There is no significant association between contraceptive discontinuance and the woman's age or education. There is, however, a significant relationship between method discontinuance and the husband's age and education (c.f. Table 4.16, Appendix 4). Discontinuance is highest among women whose husbands are between 30 and 39 years or between 40 and 49 years. The proportion of women discontinuing contraception is generally higher among those whose husbands have primary education (24.1%) than among those whose husbands have secondary or more (23.6%) or no education (14.7%).

There is also a significant association between contraceptive discontinuance and husband-wife's relative age: Discontinuance is lowest among women who have a difference of 10 or more years in husband-wife's relative ages than among others. Among those for whom husband-wife's relative ages cannot be determined, discontinuance is higher among those living in rural areas than among their counterparts in urban areas (c.f. Table 4.17, Appendix 4).[222]

The finding that contraceptive discontinuance is not related to the woman's age or education but to the husband's education is consistent with findings from prior studies showing that the characteristics of the man exert a greater influence on the woman's contraceptive behaviour. The finding of an association between contraceptive discontinuance and husband-wife's comparative and relative ages appear to suggest that the characteristics of the woman is less important in contraceptive behaviour than husband-wife's comparative characteristics.

[221] In the 1998 SADHS, the item assessing contraceptive discontinuance applies only to those who are currently contracepting

[222] However, the finding is statistically non-significant (p=. 102).

Table 10 shows that the proportion of women who stopped using fertility control during the year before the interview is higher among those who are employed than among those who are not.[223] Further examination of the data shows that there is no significant difference between those who are employed and those who are not in average number of living children. However, women who are employed and those who are not differ significantly in the average numbers of sons (F= 4.547, p=. 033) and daughters (F=7.647, p=. 006) co-residing in the household. Women who are employed have fewer sons and daughters living at home than those who are unemployed (respective averages, 1.12 and 1.03 vs. 1.22 and 1.15).

Table 10. Percentage distribution of the women who discontinued method use during the past year by selected socio-demographic characteristics according to place of residence, 1998 SADHS

Variable	N	Urban	Rural	P(U/R)	%Total	p.
Age group (yrs.)		(.564)	(.775)			.686
15-24	167	15.5	19.8	.307	18.0	
25-29	231	25.7	26.2	.528	26.0	
30-34	286	21.2	22.0	.493	21.7	
35-39	317	19.2	26.2	.095	23.3	
40-44	225	24.2	21.6	.387	22.7	
45-49	167	18.2	24.6	.215	21.6	
Education		(.363)	(.568)			.454
No education	167	21.4	19.2	.455	19.8	
Primary	496	18.6	23.3	.130	21.6	
Secondary or higher	730	23.7	23.2	.524	23.7	
Employment status		(.024)	(.386)			.058
Unemployed	940	23.2	24.1	.412	19.8	
Employed	449	15.9	22.8	.043	23.7	
Occupation		(.308)	(.73)			.319
Prof., Technical & Managerial	75	10.0	17.8	.279	14.7	
Clerical, sales & services	136	24.0	17.5	.278	22.1	
Skilled manual	64	16.3	19.0	.519	17.2	
Unskilled Manual	225	22.9	25.0	.430	23.6	
Not working		22.9	23.4	.457	23.2	
Ever abused		(.147)	(.031)			.285
No	1288	21.5	22.5	.376	22.1	
Yes	160	15.6	32.5	.010	24.4	
Head of the household		(.843)	(.869)			.788
Woman	316	21.1	21.3	.475	22.6	
Husband	816	21.9	23.3	.544	21.2	
Else	259	24.2	23.1	.357	23/6	

It is found that the average number of years since the first marriage is significantly lower among women who discontinued using fertility control than among those who did not (8.8 years vs. 11.4 years). Further evaluation of the data shows that, in

[223] The relationship between the two variables is marginally significant, however.

general, the number of children that the woman has is positively related to the duration of time since the first marriage.[224]

The proportion of women who stopped using birth control during the year before the interview is higher among those who did not want the last child or current pregnancy than among those who wanted it then as well as among those who wanted it later (39% vs28.1% and 25.8%, respectively). The examination reveals that 25.1 percent of those who do not want to have another child stopped using fertility control compared to 23.6 percent of those who want to have another and 14.5 percent of those who are undecided about having another child (c.f. Table 4.17, Appendix 4).

There is also a significant relationship between discontinuation and the last birth interval (Fisher's Exact, 1-tailed test, p=. 049). During the year before the interview, the proportion of women who stopped using fertility control is higher among those whose last birth interval is less than four years (27.7%) than among those whose last birth interval is four or more years (21.6%).

The proportion of women discontinuing use of fertility control during the previous year is higher among those currently using birth control in order to limit births than among those using it to space births (24.9% vs. 19.8%).[225] The average number of the woman's own children living at home is higher among those contracepting for the purpose of limiting births (2.1) than among those who are doing so for spacing births (average .65). [226],[227] The average number of years since the first marriage is higher among women using birth control to limit births than among those using it to space births (F= 186.116, p=. 000).

5.7.6. Reason for discontinuing

Table 11 shows that most of the women report that they stopped using fertility control because of pregnancy (36.7%), sexual (14.7%), the desire to see menstruation (15.3%), health (16.9%) or other reasons (16.3%). The reason for contraceptive discontinuance is related to place of residence (x^2= 9.585, p=. 048), the head of the

[224] The average number of children is 4.78 among hose whose marriage took place 25 years or more before the interview compared to an average of 4.09 and 4.7 among those who first got married between 20 and 20 years ago, 2.99 and 3.78 among those who first got married between 10 and 19 years ago and 1.49 and 2.31 among those who first got married from less than one year to 9 years ago.
[225] C.f. Table 4.18, Appendix 4.
[226] F= 539.553, p=. 000.
[227] They do not differ significantly in the number of children that they have, however.

household (x^2= 64.815, p=. 001), and the number of the woman's own children living in the household (F= 12.043, p=. 000).

Table11. Distribution of the women by the reason for contraceptive discontinuance by selected socio-demographic characteristics, 1998 SADHS

Variable	Pregnancy	No sex	Menses	Health	Other	p
Age group (yrs.)						.379
%15-24	33.3	13.3	13.3	30.0	10.0	
%25-29	38.3	13.3	8.3	26.7	13.3	
%30-34	38.7	19.4	12.9	8.1	21.0	
%35-39	36.5	14.9	17.6	13.5	17.6	
%40-44	35.3	9.8	17.6	15.7	21.6	
%45-49	36.1	16.7	25.0	13.9	8.3	
Place of residence						.048
%Urban	38.7	10.6	18.3	12.7	19.7	
%Rural	35.1	18.1	12.9	20.5	13.5	
Education						.990
%No education	42.4	9.1	15.2%	18.2	15.2	
%Primary	36.4	15.9	14.0	17.8	15.9	
%Secondary or higher	35.8	15.0	16.2	16.2	16.8	
Gender of head						.981
%Male	35.8	14.4	15.8	17.2	16.7	
%Female	38.8	15.3	14.3	16.3	15.3	
Cohabiting						.830
%Yes	37.8	15.2	14.7	17.5	14.7	
%No	35.1	12.8	17.0	16.0	19.1	
Type of union						.386
%Formal	34.6	14.0	16.5	17.3	17.7	
%Consensual	44.3	17.1	11.4	15.7	11.4	
Years since first union						.381
%Four or less	34.7	19.4	16.7	19.4	9.7	
%5-9	38.7	8.1	12.9	24.2	16.1	
%10-14	35.0	16.7	10.0	15.0	23.3	
%15-19	41.5	17.0	17.0	11.3	13.2	
%20-24	25.6	14.3	14.3	9.5	21.4	
%25 or more	45.8	8.3	8.3	20.8	16.7	
Had birth in past year						.272
%Yes	41.0	15.4	7.7	25.6	10.3	
%No	36.1	14.6	16.4	15.7	17.2	
Average number of own children at home	2.1	.63	1.1	1.7	1.5	.000

The proportions of women who discontinued method use during the year before the interview because of pregnancy, the desire to see menstruation or for another reason are higher among women living in urban areas than among those in rural areas. On the other hand, higher proportions of women living in rural areas than those in urban areas stopped because of sexual inactivity or health-related reasons.

The proportion of women providing pregnancy as the reason for discontinuing use of fertility control is highest among those living in households that are headed by their husbands (61.8%) and lowest among those living in households that are headed by an unrelated person (14.3%). On the other hand, the proportion of those who stopped because of sexual inactivity is highest among those living in households headed by an unrelated person (57.1%) and lowest among those in households headed by the husband (1. 5%). Those giving pregnancy as the reason for discontinuing have more of their own children living in the household (average 1.2) than those discontinuing because of sexual inactivity (.63), the desire to see a period (1.1), health (1.7) or other reasons (1.5).

It is found that the proportion of women using contraception in order to limit births is higher among those giving pregnancy as the reason for discontinuing (40.6%) than among those who stopped because of sexual inactivity (9.4%); desire to see menstruation (14.4%), health (9.4%) or other reason (16.1%). The proportion stopping because of sexual inactivity, the desire to see a period, health or other reason is higher among women with longer intervals between births (i.e. ≥ 4 years).

5.7.7. Current use of fertility control

A quarter (25.1%) of those who are currently using a method of fertility control discontinued. Prevalence in ever use of fertility control is higher among women who were raised in towns, whose first marriage took place between 10 and 14 years prior to the interview and those who are currently employed than among other women.

The proportion of women in rural areas using fertility control in order to limit births is higher among those who have a secondary or higher education (38.1%) than among those who have primary (34.2%) or no education (30.5%). In rural areas, the interval between the last and prior birth is longer among women who have the most education (83%) than among those who have primary (76.4%) or no education (74.1%).[228] The finding might also be partly explained by the fact that, among women using fertility control, the proportion preferring to have had the last child at a later date is significantly higher among those in unskilled manual occupations than among those in other occupations. [229]

[228] p=.000. In urban areas, the relationship between birth interval and education is non-significant

[229] In rural areas, 33.3% of those in unskilled occupations, 22.7% in professional, technical and managerial occupations, 25% in clerical, sales and service occupations and 15.4% in skilled manual occupations prefer to have had the last child at a later date.

Table 12. Percentage distribution the prevalence in use of fertility control among the women by selected socio-economic characteristics according to place of residence, 1998 SADHS.

Variable	N	All	Urban	Rural
Using fertility control	3427	49.4	58.7	42.3
Age group (yrs.)				
15-24	408	48.8	49.2	48.6
25-29	605	50.2	50.9	49.7
30-34	672	50.4	50.8	50.1
35-39	768	48.3	50.0	46.9
40-44	556	48.4	49.4	47.4
45-49	418	50.7	56.6	46.5
x^2 (p.)		1.419(.922)	.644 (.422)	1.494 (.914)
Education				
None	449	45.0	51.0	43.3
Primary	1261	49.5	52.4	47.8
Secondary or higher	1717	50.6	50.2	51.0
x^2 (p.)		4.418(.110)	.598(.741)	5.802(.055)
Level of literacy				
Difficult or illiterate	946	46.8	46.9	46.8
Easy	2472	50.5	52.0	49.1
Fisher's exact, 1-tailed		.030	.064	.179
Employment status				
Employed	1083	41.7	62.7	52.5
Unemployed	2332	58.3	56.1	39.0
Fisher's exact, 1-tailed test		.000	.006	.000
Occupation				
Professional, technical & managerial	168	48.2	46.4	50.0
Clerical, sales and services	289	45.3	49.8	33.3
Skilled manual	145	46.2	45.4	48.6
Unskilled manual	552	54.2	52.7	56.9
x^2 (p.)		7.410(.060)	.551(458)	12.612(.006)
Abuse				
No	2991	49.6	51.3	48.3
Yes	424	48.3	48.6	48.2
Fisher's exact, 1-tailed		.331	.272	.514
Age at first marriage				
10-18	1154	49.0	52.0	47.6
19-24	1470	48.1	46.4	49.6
25-46	803	52.6	56.7	46.7
x^2 (p.)		4.283(.117)	12.115(.002)	.973(.615)
Years since first marriage				
0-4	705	46.5	49.8	43.9
5-9	691	56.0	59.0	53.4
10-14	610	59.3	62.0	57.5
15-19	619	48.6	46.3	50.1
20-24	446	42.4	42.7	42.1
25-29	291	38.8	39.8	38.0
30 or more	65	21.5	20.7	22.2
x^2 (p.)	27	82.285(.000)	46.227(.000)	40.558(.000)
Type of union				
Formal	2651	50.5	52.0	49.4
Consensual	776	45.7	47.2	44.7
Fisher's exact, 1-tailed	3427	.011	.073	.046

The proportion of women using fertility control is higher among those who got married when they were 25 - 46 years than among those marrying at younger ages (Table 12). Among all women and in both urban and rural areas, use of fertility control is higher among women whose first marriage took place between 10 and 14 years prior to the interview than among than those who got married at earlier or later dates. This is probably because the proportion of women using fertility control to stop childbearing is higher among those whose first marriage took place 10 - 14 years ago (44.4%) than among those whose first marriage occurred at an earlier (20.2%-33.4%) or later date (37.8%-42.5%).[230], [231]

The prevalence in use of fertility control is higher among women in a formal union than among those in a consensual union. In general, the husbands of women in a consensual union are more approving of family planning than the husbands of those in a consensual union (68. 2% vs. 64.2).[232] However, in rural areas, 64.9 percent of the husbands of formally married women approve of family planning compared to 55.7 percent of the husbands of those who are in a consensual union.[233]

In rural areas, joint approval for family planning is higher among women in a formal union (64.5%) than among those in a consensual union (55.7%). Approval of the woman only for family planning is higher among those in a consensual union (28.6%) than among those in a formal union (19.6%).[234] Among all women using fertility control, 71.8 percent those in a formal union want to stop childbearing compared to 67.7 percent of those in a consensual union.

Table 12 shows that the prevalence in use of fertility control is higher among women who are employed than among those who are unemployed. There is also a significant relationship between use of fertility control and the woman's occupation. The finding that in rural areas the proportion of women using fertility control is higher among those in unskilled manual occupations than among others is unexpected since, in general, occupation is positively related to education and education is lower in rural areas.

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[230] P=. 000.

[231] In urban areas 44.3% of those whose first marriage took place 10-14years before are using fertility control to limit births compared to between 20.6% and 35.1% among those whose first marriage occurred earlier and between 36.8% and 42.7% among those whose first marriage occurred later.

[232] P=. 047. It is noted that neither the woman's contraceptive need, her approval for family planning or husband's wife's comparative approval for family planning vary with type of union.

[233] P=. 003. The examination reveals no significant association between husband's approval for family planning and type of union among those in urban areas.

[234] p=.015. In urban areas, the relationship between the two variables is statistically non-significant.

Table 13 shows that among those currently using birth control, the average age at first use of a method is significantly higher among women living in rural areas than among their counterparts in rural areas (F=25.516, p=. 000). Among women who are both using and not using birth control, those living in rural areas have more children than their counterparts in rural areas at initial use of fertility control. The proportion of women whose last birth interval is four or more years is higher among those who are using fertility control than among those who are not (Fisher's exact, 1-tailed test, p=.000). The proportion of women whose last birth interval is four years or longer is higher among women who were raised in cities (84.7%) than among those who were raised in towns (82.3%) or the countryside (78.2%).

Table 13. Distribution of the women by current use and non-use of fertility control by selected fertility factors according to place of residence, 1998 SADHS.

	Not Using				Using			
Variables	**%/Mean Total**	**Urban**	**Rural**	**p.**	**%/Mean Total**	**Urban**	**Rural**	**p.**
Age at sexual debut (.007)				.001				.112
Average	17.0	18.7	16.1		18.5	19.1	17.9	
Median	17.0	17.0	16.0		17.0	17.0	16.0	
Age at first birth (.095)				.300				.000
Average	19.9	20.1	19.8		19.7	20.1	19.3	
Median	19.0	19.0	19.0		19.0	20.0	19.0	
Age at first use (368)				.320				.000
Average	20.4	20.3	20.6		20.3	19.7	21.0	
Median age at first use	19.0	19.0	20.0		19.0	19.0	19.0	
Children at first use (.134)	1.6	1.1	1.9	.000	1.5	1.2	1.83	.000
%Terminated pregnancy (.000)	20.3	19.2	20.8	.225	13.2	11.9	14.5	.062
%Had birth past five years (.000)	41.0	28.3	47.9	.000	56.6	49.7	63.9	.000
%Had birth past three years (.000)	27.1	15.4	33.5	.000	39.9	33.8	46.5	.000
%Had birth in past year (.000)	11.4	6.0	14.4	.000	16.1	14.5	17.8	.000
Last birth interval (.054)				.000				.008
%Less than four years	21.4	12.9	26.2		18.7	15.9	21.5	
%Four or more years	78.6	87.1	73.8		81.3	84.1	78.5	
Average number of births (.416)	3.4	3.3	3.4	.128	3.4	3.4	3.4	.167
Average number of children (.670)	3.0	3.0	3.0	.767	3.0	3.1	2.9	.119

Due to rounding, some percentages might not add to exactly 100.

The examination also reveals that the proportion of women who have had recent births is higher among those who are using fertility control than among those who are not (Table 13). The proportion of women using fertility control is higher among those giving birth in the past five years, three years or one year (57.4, 59 and 58 vs. 41.8, 44.6 and 48.1, respectively, p=. 000). Use of fertility control for the purpose of limiting births is higher among women giving birth in the past five years (p=. 010) or three years (p=. 021) than among those who have not given birth during these times

(respectively, 64.5 and 65.2 vs.59.1, 60.0).[235] It is therefore inferred that the desire to terminate childbearing can be a reason for the frequency of such discussions.

Among women having recent births, prevalence in use of fertility control is higher among those living in urban areas than among those living in rural areas. In part, these findings appear to be a function of both age and marriage: The average length of time since the first marriage is longer among those who are using birth control than among those who are not.[236] Since, in general, fertility is positively correlated with the woman's age and duration of marriage, women not using fertility control probably want to finish having the number of children that they (and/or their husbands) desire.

The examination also finds a significant association between current use of fertility control and history of pregnancy termination (Fisher's exact 1-tailed test, p=. 000). Table 11 shows that the proportion of women who have ever terminated at least one pregnancy is significantly higher among those who are not using birth control (20.3%) than among those who are (13.2%).[237] The rate of abortion is, logically, higher among women who have never used birth control (18.8%) than among those who have (15.1%).[238]

The prevalence in current use of fertility control varies with the numbers of children, sons or daughters that the woman has. The examination reveals that the proportion of women using fertility control is higher among those who have between one and two children (46.6%) than among those who have none (16.4%), between four and five (27.3%) or six or more (9.7%). The prevalence in current use of fertility control also varies with the number of sons that the woman has. This finding is consistent with those of other studies (Gadella et al, 1985; Oyeaka, 1989) showing that the number of living sons has an effect on use of fertility control.

The proportion of women currently using fertility control is higher among those who have one living son or daughter (33.6% ad 34%, respectively) than among those who have none (18.3% and 21.3%, respectively), two (27.8% and 24.8%, respectively),

[235] 64.3% giving birth in the past year are using to limit compared to 61.3% of those who did (p=.214).
[236] Those using fertility control are generally younger than those who are not.
[237] Fisher's exact 1-tailed Test, p=. 000. 16.7% of the women in this study have had at least one abortion.
[238] Fisher's exact, 1-tailed test, p =. 038. Some women might be using abortions to space or limits births, as previously indicated

three (13.2% and 12.6%, respectively) or among those who have four or more sons or daughters (7.1% and 7.3%, respectively).

Use of fertility control is associated also with spousal communication about family planning. The proportion of those using fertility control is higher among those discussing family planning with their husbands than among those not having such a discussion (10.3 vs. 5.0, p=. 000).

The proportion of women using fertility control is higher among those who obtained information about HIV/AIDS from the television, newspaper or magazine or from posters or brochures than among those who did not (respectively, 74.7%, 61.6% and 59.7% vs. 25.3%, 34.8% and 40.3%). There is a positive relationship between the prevalence in use of fertility control and the amount of exposure to HIV/AIDS-related information. The proportion of women using fertility control is higher among those who got a lot of information about HIV/AIDS from the electronic or print media (41%-80.6%) than among those who got some (10.1%-20.2%) or none (9.3%-38.8%)[239]

The above finding is consistent with findings from other studies showing that such exposure is a significant factor in contraceptive uptake (Piotrow et al, 1992; Valente et al, 1994; Bankole et al, 1996; Kane et al, 1996; Islam & Hasan, 2000; Olenick, 2000, for example). This finding is central to the aim of this study because it is known that, with media exposure to such information, there is an increase in the likelihood of spousal communication about and joint decision-making for the use of fertility control.

5.8. Knowledge and attitudes

5.8.1. HIV/AIDS-related

Over three-fourths of the women in this study endorse the idea that people testing positive for HIV (78.1%) or AIDS (77.7%) should be informed. Less than six percent of them have no opinion on whether people with a positive diagnosis for HIV (5.9 percent) or AIDS (5.8%) should be informed. Eighty-three (83.5) percent of them endorse the idea of partner disclosure and 5.6 percent have no opinion as to whether an HIV positive individual should disclose her or his status to the partner. Two thirds (66.9%) believe that AIDS should be a notifiable disease and 11.1 percent have no opinion on the issue. Similarly, 66.1 percent of them feel that HIV should be reported to the authorities and 12.1 percent do not know if the authorities should be notified.

[239] C.f. Table 4.22, Appendix 4.

Awareness of HIV/AIDS pandemic is almost universal (94.7%) among the women in this study. The proportion of women who have heard about AIDS is higher among those in urban areas than those in rural areas (98.7% vs. 93.7%, p=.000). Only 14.8 percent of them know someone who is HIV-positive.

The woman's awareness of HIV/AIDS is associated with husband-wife's comparative approval for family planning (x^2=13.252, p=.004). The proportion of women who have ever heard of HIV/AIDS is lower among those reporting that only the woman approves of family planning (93.7%) than among others (95.9% to 98.9%). More women reporting joint disapproval of family planning (98.9%) are aware of the pandemic than those reporting joint approval or approval by the man only (96.2%), approval by the woman only (93.7%) or uncertainty of family planning by one or both (95.9%).
Knowledge of the ways in which the virus can be transmitted is fairly high: Eighty-four (84.2%, N=3405) of them are aware that HIV transmission can be prevented through safer sex practices. Eighty-two (82.2, N=3401) percent know that using condoms during sexual intercourse can also stop HIV infection. An equal proportion (82.4%, N=3398) of the women are also aware that HIV can be spread by sharing a razor blade with an infected person. Approximately 84 percent (83.7%, N=3401) are aware that using clean needles for injections also minimises the spread of the virus. There is however a relatively low degree of awareness of the manner in which the virus is transmitted among the women. Only 37 percent (N=3338) of them know that HIV is not transmitted by the bite of a mosquito or other insect. Fifty-six (56.5%, N=3403) percent of them know that dieting cannot stop infection. [240]

Sixty-one (61.1%, N=3390) percent know that sharing food with an infected person does not lead to infection.[241] Sixty-three percent (63.3%, N=3392) know that HIV transmission is not prevented by touching an infected person. [242],[243] Close to 58 (57.7%, N=3398) % know that avoiding public toilets does not minimise the spread of

[240] The confusion over the HIV-nutrition link probably results from the fact that HIV, which is viral infection, is often confused with AIDS, the disease. It is known that good nutrition; along with other things such as exercise and psychological well being retards the onset of AIDS. This fact needs to be emphasised but seldom, if ever mentioned in this society.
[241] 20.1% think that infection can occur through sharing food and 18.8% are unsure.
[242] 18.2% think that infection can take place by touching a person who is HIV-positive and 18.5% do not know whether this is the case.
[243] The that casual contagion, such as sharing food with or touching an infected person, is a risk factor for HIV infection might result from the mistaken view that the person's entire body is infected, not merely the blood stream. Such an assumption is indicative of either lack of knowledge of the disease that often lead to prejudicial or stigmatising attitudes toward those who are infected or are perceived to be infected (Siegel et al, 1991).

the virus.[244] Only 55.7 percent of the women in this study are aware that a healthy looking person can have AIDS.[245]

Twenty (20.4) percent of those living in urban areas know at least one person who is HIV-positive compared to 10.5 percent of those living in rural areas (Fisher's exact, 1-tailed test, p=. 000). Knowledge that safer sex practices (x^2= 48.717, p=. 000) or using condoms (x^2=54.375, p=. 000) during sexual intercourse prevents HIV infection is higher among women living in urban areas (88.6% and 87.3%, respectively) than among those living in rural areas (80.9% and 78.3%, respectively). The proportion of women who know that injecting with clean needles prevents HIV infection is also higher among those living in urban areas than among those living in rural areas (87.6% vs. 80.6%, x^2= 39.149, p=. 000). Eighty-five (85.2) percent of women living in urban areas are aware that HIV infection can occur through sharing a razor blade with an infected person compared to 80.3 percent of those living in rural areas (x^2= 45.108, p=. 000).

Women living in urban areas are more aware than those in rural areas are that touching (74.1% vs. 54.9%, x^2= 135.172, p=. 000) or sharing food with an infected person (71.8% vs. 52.8%, x^2= 132.050, p=. 000) does not cause infection. Two-thirds of women living in urban areas know that HIV infection cannot be avoided by not using a public toilet compared to approximately half (50.8%) of those living in rural areas (x^2= 95.062, p=. 000). Knowledge that the virus is not transmitted through mosquito bites is significantly higher among those in urban areas (than among those in rural areas (43.2% vs. 32.2%, x^2=63.406, p=. 000).

The proportion of women who are aware that a healthy looking person can have AIDS is significantly higher among those living in urban areas than among those living in rural areas (72.6% vs. 41.9%, x^2=326.829, p=. 000). Women living in urban areas are significantly more aware that a good diet cannot prevent viral infection (63% vs.54.1%, x^2=73.593, p=. 000).

[244] 24.2% think that HIV is transmitted through public toilet seats and 18.1% do not know if the virus is spread in this manner. The belief that avoiding public latrines can stop the spread of the virus is akin to the belief that STDs occurs in this manner. This belief is another instance of casual contagion.

[245] 26.8% of them think that a healthy looking person cannot have AIDS and 17.6 percent are unsure. Unawareness of the fact that a healthy looking person can have AIDS is suggestive of ignorance of the disease. The finding speaks to the fact that individuals who believe that they can tell who is infected or have AIDS by looking at physiological markers (e.g., thinness, wasting) are likely to discriminate against those who have illnesses such as TB, cancer, diabetes. Some of the signs and symptoms of these illnesses are also characteristic of HIV/AIDS.

5.8.2. Reproductive-related

Reproductive knowledge is higher among women living in urban areas and among those with the most education than among others (Table 14). Further evaluation shows that reproductive knowledge is also closely related to the woman's age. [246] The proportion of women having a correct understanding of the menstrual cycle is higher among those between 15 and 24 years (12.8%) and lower among those between 45 and 49 years (6.5%) than among other women (7.6%-10.1%). On the other hand, higher proportions of those between 25 and 29 years know that condoms can be used to prevent pregnancy and STIs (81.5%) or understand the conditions of the 1996-TOP Act (50.9%) than the proportions of other women (64.8 % - 77.4% and 35.1% - 48.0%, respectively).

The majority of women know of a source for fertility control (94.9%) or condoms (74.6%). The information in Table 15 shows that the proportion of women identifying a public source for birth control is higher among women living in rural areas than among those living in urban areas. Women living in rural areas (91.1%) and those between 25 and 29 years (92.1%) more often identify a government hospital as a source for condoms than those living in rural areas (86.2%) or those in other age groups (86.2% - 91.1%). It is known that exposure to such information from the media and social networks is generally higher in urban areas than in rural areas. Education is also generally higher in urban areas than in rural areas. Mbanga (2002, p. 129), for example, found that in South Africa, general knowledge of reproductive health information is higher in urban than in rural areas.

Over half of the women living in urban areas (55.9%) think that two to three children is the ideal number to have and over half 962.1%) of their rural counterparts feel that the ideal number of children is four or more (c.f., Table 4.32, Appendix 4) The proportion of women who think that the ideal number of children is three or fewer is higher among those between 15 and years 24 (71.5%) than among those between 25 and 29 years (59.5%), 30 and 34 years (50.3%), 35 and 39 years (41.5%) 40 and 44 years (37.8%) or 45 and 49 years (29.3%).

Most of the women approve of family planning (90.3%) and endorse the use of the radio (93.6%) or television (91.1for its promotion. As expected, approval for family

[246] Data are not shown in table.

planning is higher among those living in urban areas (91.9%) than among those living rural areas (89%). In both urban and rural areas, the proportion of women who approve of family planning is higher among those who have secondary or higher education than among those who have primary or no education.[247] Acceptance of the radio or television for promoting family planning is also higher in urban than in rural areas (95.8% and 94.2% vs.91.9% and 88.7%, respectively).

Table 14. Percentage distribution of the women by their knowledge of reproductive physiology, purpose of condoms, the 1996-TOP Act and source for contraception or condoms according to place of residence and level of education,1998 SADHS

Variable	All	Urban	Rural	p
Reproductive physiology				.000
Correct	8.8	9.3	8.3	
Incorrect	54.3	59.7	50.3	
Says she does not know	36.9	31.0	41.4	
1996-Abortion Act				000
No	24.4	17.7	29.5	
Yes	45.6	59.1	35.2	
Don't know	30.0	23.1	35.3	
Purpose of condoms				.000
Never heard of condom	7.6	4.3	10.2	
Knows for family planning only	10.8	8.6	12.4	
Knows for preventing STIs only	6.4	4.3	8.0	
Knows for family planning and STIs	75.2	82.8	13.43	
Source for birth control				.000
Don't know a source	5.1	4.3	5.7	
Other	6.0	9.5	3.2	
Public	88.9	86.2	91.1	
Source for condoms				.000
Don't know a source	15.4	9.3	20.1	
Other	2.4	4.0	1.3	
Day hospital	26.0	25.0	26.7	
FP Clinic	19.1	28.2	12.1	
Mobile Clinic	7.8	2.4	11.9	
Government hospital	29.3	31.0	28.0	
Education	**None**	**Primary**	**Secondary or higher**	**p.**
Proportion of women knowing				
Timing of ovulation	5.4	6.3	11.5	.000
Conditions of 1996-TOP Act	30.4	35.1	57.3	.000
Condoms prevent pregnancy and STIs	50.8	69.3	85.9	.000
Any source for contraception	83.9	94.2	97.3	.000
Any source for condoms	61.6	80.3	95.8	.000

[247] In urban areas, 94.4% of those with secondary education, 90.1% of those who have primary education and 72.4 percent of those who have no education approve of family planning (p=. 000). Similarly, among those in rural areas, 94.5% of those who have secondary or higher education approve of family planning compared to 90.1% of those who have primary education and 72.4% of those who have no education.

Age is a significant factor in whether (or not) the woman approves of family planning (c.f. Table 4.35, Appendix, 4). Women between 45 and 49 years and those between 40 and 44 years are less approving of family planning than those in other age groups (85.1% and 86.3%, respectively, vs. 90.2% - 93.4%). Women between 45 and 49 years are less accepting of the idea of using the radio (89.5% vs. 92.7%-96.1%) or television (86.1% vs. 89.4%- 94%) for promoting family planning.

5.9. Information and communication

Most (82.8%) of the women in this study live in households that have a radio and slightly more than half of them (51.9%) live in households that have a television.[248] The household's ownership of a radio is related to the husband's level of educational achievement (x^2=6.365, p=. 041). An association is found between having a television in the household and the husband's age (x^2=21.026, p=. 000).

The proportion of women having access to a radio in the household is somewhat higher amongst those whose husbands have no education (85.8%) than among those whose husbands have primary (83.5%) or secondary or higher education (81.3%). The proportion of women living in households that have a television is higher among those whose husbands are between 40 and 49 years (57.7%) than among those whose husbands are younger or older (48.1%-49.9%).

5.9.1. General media exposure

Seventy-two (72.4) percent of the women in this study daily listen to the radio. The proportion of women listening to the radio daily is higher among those living in urban areas than among those living in rural areas (80.6% vs. 66.1%, p=. 000). Over three-fourth (75.6%) of women living in male-headed households listen to the radio daily compared to less than two-thirds (65.9%) of those in female-headed households (p=. 000). Women living in households headed by the husband (77.4%) or a sister (77.3%) more often listen to the radio on a daily basis than women living in other households (64.7% to 73.5%).[249]

[248] In most developing countries, most people are more exposed to the radio than any other medium of information

[249] x^2= 29.766, p=.000.

Seventy-six percent of women who are the wives of the head of the household listen to the radio on a daily basis compared to between 66.4 and 68.9 percent of women in other households. Listening to the radio is also related to the socio-economic status of the household (x^2=22.414, p=. 000). The proportion of women who daily listen to the radio is lower among those living in households in the two lowest quintiles of wealth (68.4%) than among those in households in the middle (74.8%) or two highest (76.2%) ones. The proportion of women who listen to the radio daily is also higher among those who work than among those who are not working (78% vs. 70%, p=. 000). Over three-fourths (79.6%) of the women with secondary or higher education listen to the radio daily compared to less than two-thirds of those with primary (66.1%) or no education (61.5%).[250]

Approximately 52 (51.9) percent of the women look at television weekly. Weekly viewing of television is more common in urban areas than in rural areas (71.9% vs. 36.4%, Fisher's exact, 1-tailed test, p=. 000). Sixty-one (61.5) percent of women who work and 47.8 percent of those who do not work view television on a weekly basis (Fisher's exact, 1-tailed test, p=. 000). The proportion of women looking at television on a weekly basis is higher among those who have secondary or higher education than among those who have primary or no education (65.7% vs.40.3% and 31.5%, respectively, x^2= 275.200, p=. 000).

The proportion of women who look at television on a weekly basis is significantly higher among those living in households headed by the husband (61.1%) than among those living in other households (between 38.4% and 56.2%).[251] The proportion of women who weekly look at television is higher among those living in male-headed households than among those living in female-headed ones (57.8% vs. 37.5%, Fisher's exact, 1-tailed test, p=. 000). Only 42.8 percent of women living in households in the two lowest wealth quintiles look at television on a weekly basis compared to 55.5 percent of those living in households in the middle quintile of wealth and 61.7 percent of those living in households in the two highest ones.

Only 25.6 percent of the women in this study read the newspaper on a weekly basis. Weekly reading of the newspaper is more often found among women living in urban areas than among those living in rural areas (39.2% vs. 15%, Fisher's exact, 1-tailed

[250] x^2=100.586, p=.000.
[251] x^2=63.201, p=.000.

test, p=. 000). Weekly reading of the newspaper is more common among women living in households headed by a husband (32.4%) than among those in other households (18.4% to 28.2%).[252] Women in male-headed households more often than those in female-headed ones read the newspaper on weekly basis (28.8% vs. 18.7%, Fisher's exact, 1-tailed test, p=.000). Further evaluation of the data shows that the rate of literacy is higher among (73.6%) than those in female-headed households (69.7%) than among those in male-headed ones. Weekly reading of the newspaper is lower among women living in households in the two lowest quintiles of wealth (20.7%) than among those in households in the middle (27.8%) or two highest quintiles (30.7%).[253] But women living in households that are headed by their husbands do not differ from those in other households in rate of literacy, educational achievement or the socio-economic status of the household. Further examination shows that the proportion of women discussing family planning with their husbands is higher among those who live in male-headed households than among their counterparts in female-headed ones (c.f. Table 14).

A significant association exists between reading the newspaper and the woman's level of educational achievement (x^2 = 563.161, Fisher's exact, 1-tailed test, p=. 000). Approximately 42 (41.9) percent of women with secondary or higher education read the newspaper weekly compared to 11.6 percent of those with primary education and two percent of those with no formal education. The proportion of women reading the newspaper at least once a week is also higher among working than non-working women (32.2% vs. 22.7%, p=. 000).

5.9.2. Exposure to information about family planning through the media

During the month before the interview, the proportion of women getting information about family planning from the radio (72.4%, N=3423) is higher than the proportion getting it from the television (43.7, N=3422), newspaper (28.7%, N=3419), posters (30%, N=3419) or brochures (25.3 %, N=3419).[254]

Women living households in the two highest wealth quintiles and in male-headed households are more exposed to information about family planning from the media than other women. Such exposure is higher among women living in urban areas than

[252] x^2= 41.388, p=.000.
[253] x^2= 36.347, p=.000.
[254] Data are not shown.

among those living in rural areas (Table 12). Similar to the preceding set of findings, exposure to information about family planning is higher among those who have the most education (i.e., secondary or higher) and among those who are employed than among others.[255]

Table 15. Distribution of the women by their exposure to information about family planning from the media by selected household and socio-economic factors, 1998 SADHS.

Variable	Radio	Television	Paper	Poster	Brochures
Wealth quintile					
Two lowest	66.6	34.9	23.1	22.7	20.2
Middle	75.3	45.9	31.0	31.3	25.3
Two highest	78.3	54.3	34.8	39.0	32.2
Gender of head					
Male	73.9	48.7	32.2	32.8	28.8
Female	69.3	33.4	21.5	24.0	17.9
Place of residence					
Urban	77.3	60.4	42.8	42.4	38.0
Rural	68.6	30.9	17.9	20.4	15.5
Education					
None	62.9	24.6	4.7	11.4	6.7
Primary	70.2	37.5	19.0	22.5	17.1
Secondary or higher	76.5	53.3	42.1	40.3	36.2
Employed					
Yes	75.7	51.4	35.6	37.2	32.0
No	71.0	40.5	25.8	26.9	22.4
Type of language					
Nguni	72.9	42.7	27.6	28.8	24.0
Sotho	70.6	45.3	29.6	31.1	26.3
Other Bantu	77.7	45.4	37.5	35.6	30.6
Non-Bantu	73.4	40.7	20.4	25.0	25.0

Further examination shows that during the few months before the interview, the proportion of women who obtained information about family planning from a newspaper or brochures is higher among those between 25 and 29 years than among those who are younger or older.[256]

There is a significant relationship between obtaining information about family planning from the radio during the month before the interview and the type of language that the women prefers speaking in the home.

[255] All are significant at $p \leq .05$-level.

[256] 34.9% of those between 25 and 29 years got such of information from reading a newspaper compared to between 19.7% and 32.5% of women in other age groups. 30.4% of those between 25 and 29 years got such information from brochures compared to between 18.5% and 27.4% of those in other age groups.

The proportion of women obtaining information about family planning from reading the newspaper is higher among those preferring to speak an "Other Bantu" language (i.e., TshiVenda or ZiTsonga) than among other women. Although not statistically significant, the information in the table demonstrates that these women are also more exposed to such information from posters than other women.

5.9.3. Communication about family planning

The proportion of women discussing family planning with friends or neighbours (23.0%) in the few months before the interview is higher than the proportion discussing the issue with the husband (7.6%) mother (1.55), father (.2%), sister (4.8) or daughter (2.6).[257] Discussing family planning with the husband, sister or friend or neighbour is associated with the socio-economic status of the household (Table 14).

The proportion of women who discussed the issue with a sister or friend or neighbour is higher among those living in households in the middle quintile of wealth than among other women. Although marginally significant (Fisher's exact, 1-tailed test, p=. 067), the proportion of women discussing the matter with a daughter(s) is higher among those in households in the two highest wealth quintiles than among others.

During the few months before the interview, the proportion of women discussing family planning with their mothers, sisters, daughters or friends or neighbours is higher among those living in urban areas than among those living in rural areas. Women in urban areas are more exposed to this type of information and have grater awareness and knowledge of HIV/AIDS. Women living in urban areas have a greater understanding of the menstrual cycle[258] and are more likely than those in rural areas to know of a source for family planning or condoms.

5.9.4. Spousal communication about family planning

The proportion of women discussing family planning with their husbands during the few months before the interview is higher among those living in households in the middle and two highest wealth quintiles than among those in other households.

[257] Data are not shown.

[258] 3.3% of those in urban areas do not know of a source for family planning compared to 5.2% of those in rural areas. 9.4% of those in urban areas do not know of a source for condoms compared to 14.1% of those in rural areas. 15% of women living in urban areas know that ovulation occurs during the middle of the menstrual cycle and only 8.1% of those living in rural areas are aware of this fact.

Spousal discussions about family planning are more frequent among those living in male-headed households than among those living in female-headed ones (Table 16). This is probably because co-residency is significantly higher among women living in male-headed than in female-headed households.

Table 16. Percentage distribution of the women by type of persons with whom they discussed family planning during the month before the interview by selected socio-economic characteristics, 1998 SADHS.

Variable	Husband	Mother	Father	Sister	Daughter	Friends or neighbour
Wealth quintile	(.016)			(.000)		.003
Two lowest	6.2	1.3	.1	3.1	2.0	20.3
Middle	8.6	1.9	.4	7.4	2.4	25.7
Two highest	8.9	1.3	.2	5.3	3.5	24.8
Gender of head	(.000)	(.070)				
Male	9.0	1.7	.3	4.7	2.7	23.6
Female	4.7	1.0		5.0	2.4	21.8
Place of residence	.000)	(.013)		(.006)	(.000)	.000)
Urban	10.4	2.0	.1	5.9	4.2	26.3
Rural	5.4	1.0	.2	4.0	1.4	20.5
Education	.000)			(.000)		.000)
None	3.8	.9	.2	1.8	2.0	11.0
Primary	5.7	1.1	.1	2.9	2.5	19.6
Secondary or higher	10.0	1.9	.2	7.1	2.9	28.6
Employed					(.075)	.031
Yes	8.1	1.8	.1	5.1	3.2	25.2
No	7.4	1.3	.2	4.7	2.3	22.1
Type of language						(.027)
Nguni	7.9	1.4	.2	4.8	2.6	22.9
Sotho	7.7	1.7	.2	4.8	2.7	24.3
Other Bantu	6.9	1.4	.5	4.2	3.2	20.8
Non-Bantu	2.8			6.4	.9	12.8
Age (yrs.)		(.002)		(.000)		
15-24	6.9	2.2	.2	4.9		28.2
25-29	9.8	2.5	.2	8.8	.2	29.9
30-34	8.0	1.8	.1	4.2	.9	25.5
35-39	7.6	1.0	.1	3.5	3.3	25.5
40-44	7.2	1.1	.2	5.2	5.2	17.2
45-49	5.0		.2	1.9	6.7	14.6

During the few months before the interview, the proportion of women discussing family planning with their husbands is higher among those living in urban areas than among those living in rural areas. The proportion of women discussing family planning with a husband, daughter, friend or neighbour is significantly higher among those who have secondary or higher education than among other women. Spousal communication about the issue is more frequent among those who have secondary or higher education than among those who have primary or no education (Table 17).

Among the women who discussed family planning with their husbands during the few months before the interview, the proportion is higher among those who approve of family planning than among those who do not (8.2 vs.1.8, Fisher's exact, 1-tailed test p=. 000).

The proportion of women who discussed the issue with their sisters at that time is also higher among those who approve of family planning than among those who do not (5.1 vs. 2.4, p=. 015). The proportion of those having such a discussion with friends or neighbours during that time is higher among those who approve of family planning than among those who disapprove (24.6 vs. 8.1, Fisher's exact, 1-tailed test p=. 000).

Spousal discussions about family planning is related to their comparative approval for family planning (x^2 =77.720, p=. 000). The proportion of those discussing family planning with their husbands during the months before the interview is higher among those reporting joint approval for family planning (10%) than among those reporting approval by the woman only (4.2%), joint disapproval (.5%) or uncertainty for family planning by one or both (1.5%).

There is a significant relationship between husband-wife discussions about family planning and their comparative fertility desires as well (x^2 =21.772, p=. 000). The proportion of women discussing family planning with their husbands is higher among those who want the same number of children as their husbands (9.2%) than among those whose husbands want more (6.4%) or less (6.7%) children than the woman wants and among those who are uncertain of their husbands' fertility desires (3.9). [259]

The finding that husband-wife discussions about family planning is higher among those who want the same number of children as their husbands is consistent with the finding that the fertility desires of husband and wife both affect use of fertility control (Bankole, 1995, Bankole & Singh, 1998). Although only marginally significant, the average number of living children is higher among women discussing family planning with their husbands during the month before the interview than among those who did not (3.24, Std. Dev. 2.015 years vs.3.00, Std. Dev.1.979 years, F=3.524, p=. 061). This finding seems to suggest that spousal communication about controlling fertility is positively associated with the number of children that the woman or couple has.

[259] However, there is no relationship between having such discussions with a sister or neighbours and husband-wife comparative fertility desires.

Spousal discussions about family planning are more frequent among women between of 15 and 24 years, 25 and 29 years and those between 30 and 34 years than among other women (Table17). The average age is higher among those not discussing family planning with their husbands (36.17, Std. Dev. 7.994) than those who had such a discussion once or twice (33.91, Std. Dev. 7.770) or those who had such a discussion more often (33.03, Std. Dev. 7.341). [260]Table 17 shows that the proportion of women who never discussed family planning with their husbands is significantly higher among those whose husbands are 50 years or older than among other women. Such discussions are most frequent among those whose husbands are between 18 and 29 years and between 30 and 39 years.[261]

The proportion of women who never discussed family planning with their husbands during the year before the interview is higher among women who are older than their husbands than among other women. On the other hand, during that time, the proportion of those having such a discussion once or twice is higher among those who are the same age as or younger than their husbands than among those who are older than their husbands. Women younger than their husbands more often have such a discussion with their husbands than those who are either older than or the same age as their husbands (Tale 17).

There is an association between the frequency of husband-wife discussions about family planning and both the woman's and the husband's education (Table 15). Women who have secondary or higher education and those who are employed discussed the issue more often with their husbands than other women. The proportion of those who never discussed the issue with their husbands during the year before the interview is highest among those whose husbands are uneducated. The proportion of those who discussed it once or twice is higher among women whose husbands have a primary level education than among others. Women whose husbands have secondary or higher education more often than others had such discussions during the year before the interview. Such discussions are less frequent

[260] The proportion of women discussing family planning with their husbands is lower among those between 45 and 49 years than among those in other age cohorts (Table 18). During the year prior to the interview, 15.3% of women between 45 and 49 years discussed family planning with their husbands more than twice compared to between 18.9% and 29.4% of those in other age groups.

[261] Adherence to traditional cultural norms prohibiting such discussions between a man and a woman might help to explain the finding that such discussions are lower among women with the oldest husbands. Such discussions are probably more widespread among those husbands are 18 to 39 years since it is commonly knowledge that in South Africa reproductive aged women (who are generally younger than their husbands) are at greatest risk for HIV infection.

among women who have less education than their husbands than among those who have more or less than their husbands.[262]

Table 17. Percentage distribution of the women by frequency of spousal communication about family planning by selected socio-economic and partner-related factors, 1998 SADHS.

Variable	Never	Once or twice	More often	p.	x^2
Place of residence				010	9.211
Urban	29.5	44.8	25.7		
Rural	34.4	41.7	24.0		
Gender of head of household				.027	7.253
Male	31.3	42.6	26.0		
Female	34.2	43.8	22.0		
Wealth quintile				.029	10.775
Lowest two	34.4	41.4	24.2		
Middle	30.9	46.4	22.6		
Highest two	30.3	42.7	27.0		
Age(yrs.)				.000	109.21
15-24	24.5	46.1	29.4		
25-29	24.5	47.3	28.3		
30-34	27.7	43.6	28.7		
35-39	31.9	42.8	25.3		
40-44	40.5	40.6	18.9		
45-49	48.2	36.5	15.3		
Relative age				.067	11.772
2 or less	29.8	42.3	27.9		
3 to 5	29.9	43.3	26.7		
6 to 9	33.2	42.2	24.6		
10 or more	34.3	44.5	21.2		
Education				.000	177.232
None	52.2	34.8	12.9		
Primary	36.4	44.1	19.5		
Secondary or higher	24.0	44.3	31.6		
Employment status				.022	7.606
Employed	28.9	45.3	25.8		
Unemployed	33.7	42.0	24.3		
Husband's education				.000	137.586
None	47.3	37.0	15.7		
Primary	35.6	44.7	19.7		
Secondary or higher	24.5	43.4	32.0		
Comparative education				.000	54.043
Less	25.8	44.8	29.5		
More	38.8	42.7	18.4		
Same	34.5	43.5	22.0		

Due to rounding, some percentages might not add to exactly 100.

[262] It is possible that among these women, gender-related norms are more important than socio-economic status in determining husband-wife interaction

During the year before the interview, the proportion of women who never discussed family planning with their husbands is significantly higher among those who disapprove of or are uncertain about their approval for family planning. Such discussions are more frequent among women who approve of family planning than among other women (Table 16). The proportion of women not discussing family planning with their husbands during the year before the interview is higher among those who do not know if the husband approves of family planning than among other women (Table 18).

The proportion of women who had such a discussion once or twice or more often is higher among those whose husbands approve of family than among those whose husbands do not. The proportion of women who never discussed family planning with their husbands during the year before the interview is significantly higher among those reporting uncertainty about family planning than among those reporting joint disapproval approval by the woman only or joint approval (Table 18) .

Such discussions are more frequent among those who have given birth in the past five, three or one years than among those who have not given birth during these times. The finding of a significant association between frequency of husband wife discussions and recent births might be linked to the fact that use of fertility control is higher among those who have had recent births than among those who have not.[263]

The proportion of women discussing the issue with their husbands once or twice in the previous year is higher among those whose husbands want fewer children than they do than among others. Women who want the same amount of children as their husbands or whose husbands want fewer children discussed the matter more often. This finding is consistent with prior studies showing that the husband's fertility desires have a significant effect on decision-making for the use of fertility control in many sub-Saharan African countries (e.g., Bankole & Singh, 1998).

There is a significant association between frequency of husband-wife discussions about family planning and whether the woman has ever used condoms (c.f. Table 4.15, Appendix 4). The proportion of women who never discussed family planning

[263] But the direction of this relationship cannot be ascertained from the available information. It is likely that those who have such discussions are also more likely to use fertility control than those who do not because of certain attributes such as education or, approval for family planning.

with their husbands during the year before the interview is higher among those who have never used condoms than among those who have. During that time 42.9 percent of those who have never used condoms and 43.4 percent of those who have ever used condoms discussed family planning with their husbands once or twice.

Table 18. Percentage distribution of the frequency of spousal discussions about family planning among the women by selected reproductive-related factors, 1998 SADHS.

Variable	Never	Once or twice	More often	x2	p.
Comparative approval for family planning				702.521	.000
Both or man only approve	19.0	50.0	31.0		
Woman only	42.3	39.7	18.0		
Both disapprove	67.6	24.3	8.1		
One or both uncertain	82.5	13.0	4.4		
Approval for family planning				234.267	.000
Approves	28.1	45.2	26.6		
No or don't know	70.5	22.3	7.2		
Husband approves of family planning				661.672	.000
Approves	19.2	49.9	30.9		
Don't know	84.9	10.4	4.7		
Disapproves	48.8	36.0	15.2		
Comparative fertility desires				137.667	.000
Partner wants more	33.9	43.2	22.9		
Partner wants less	24.4	47.4	28.1		
Uncertain	51.1	36.3	12.6		
Both want same	26.7	44.6	28.7		
Fertility desires				1.943	.746
Have another	33.0	43.3	23.6		
Undecided	33.3	40.4	26.3		
Wants no more	31.3	43.7	25.0		
Birth past five years				54.876	.000
Yes	26.4	45.4	28.2		
No	37.8	40.8	21.4		
Birth past three years				42.899	.000
Yes	25.3	45.6	29.1		
No	35.8	41.7	22.5		
Birth past year				19.985	.000
Yes	23.6	49.3	27.2		
No	33.6	42.0	24.3		
Last birth interval four or more years				1.826	.401
No	34.9	41.1	24.0		
Yes	31.6	43.5	24.9		
Wanted last child or current pregnancy				5.944	.203
Waned then	30.8	42.5	26.7		
Wanted later	31.1	45.1	23.8		
Wanted no more	37.9	38.2	23.9		
Attitude toward a pregnancy				8.137	.087
Happy	29.8	44.0	26.2		
Unhappy	32.5	42.7	24.8		
Would not matter	32.8	35.3	32.0		

Due to rounding, some percentages might not add to exactly 100.

There is also an association between frequency of spousal discussions and use of condoms at last sexual intercourse (x^2 =43.097, p=. 000). Over 40 (40.8) percent of women who discussed family planning with their husbands during the year before the interview used condoms the last time that they had sex compared to 23.9 percent of those who did not (cf. Table 4.15, Appendix 4).

In the months before the interview, 17 percent of women using condoms with the last sexual partner discussed family planning with their husbands compared to seven percent of those who did not use condoms at that time (p=. 000). This is not surprising since use of a method of fertility control such as the condom requires the knowledge, involvement, consent and participation of both sexual partners, even if prevention of STIs and not pregnancy is the reason for using it.[264]

A significant relationship exists between frequency of spousal discussions about family planning and exposure to family planning specific information from reading the newspaper during the few weeks before the interview. Thirty-tree percent of women who discussed family planning with their husbands more than twice during the year before the interview also got this type of information from the newspaper (c.f. Table 4.22, Appendix 4).

There is also finds a positive association between frequency of spousal discussion about family planning and exposure to HIV/AIDS-related information during the previous year (c.f. Table 4.24, Appendix 4). The proportion of women discussing family planning with the husband during the past year is significantly higher among those who were exposed to HIV/AIDS-related information than among those who were not (respectively, 69.8%-74.7% vs.54%-61.9%).[265]

Findings of a positive correlation between spousal discussions about family planning and exposure to information from the media is consistent with the findings a number of studies showing that husband-wife communication is enhanced through such exposure (Valente et al., 1994; Piotrow et al., 1997; Rogers et al., 1999; Storey et al., 1999; Sharan & Valente, 2000; Sood et al 2004).

[264] The direction of the relationship between spousal communication and the woman's condom use behaviours cannot, of course, be determined from the information that is available.
[265] Fisher's exact, 1-tailed test, p=. 000. Media exposure to HIV/AIDS information is discussed further in section 5.5.9, below.

5.9.5. Exposure to HIV/AIDS related information through the media

Although not statistically significant (p=. 077), the proportion of women getting information about HIV/AIDS from the television, newspaper or magazines (p=. 106) or from posters or brochures (p=. 099) is higher among those preferring to speak an "Other" Bantu languages (i.e., TshiVenda or ZiTsonga) than among other women.

Among the women in this study, exposure to HIV/AIDS information from the television, the newspaper or magazines or from posters or brochures is related to the socio-economic status and gender of the head of the household as well as current place of residence, the woman's education and employment status.

The proportion of women obtaining information about HIV/AIDS from the radio (84%, N=3285) is higher than the proportion getting it from the television (69.6%, N=3285), newspapers or magazines (58.1%, N=3280) or from pamphlets or brochures (56.1%, N=3261). The proportion of women exposed to HIV/AIDS-related information from listening to the radio is higher among those who are employed than among those who are unemployed (Table 19).

Women living in male headed-households or in urban areas as well as those who have secondary or higher education and those who are employed are more exposed to this type of information from watching the television, reading the newspaper or magazines or from posters or brochures than other women. Women living in households in the middle and two upper wealth quintiles are more exposed to information about HIV/AIDS from watching television than other women. Those living in households in the two highest quintiles of wealth are also more exposed to such information from reading the newspaper or magazine or from posters or brochures than other women (Table 19).

Further examination of the data reveals a significant association between exposure to information about HIV/AIDS during the year before the interview and the husband's approval for family planning (x^2=39.057, p=. 000). During the year before the interview, the proportion of women exposed to such information through watching television is higher among those whose husbands approve of family planning (60.7%) than among those whose husbands disapprove of family planning (52.3%) or among those who do not know if their husbands approve (55.1%). Women whose husbands approve of family planning were also more exposed to HIV/AIDS information from

posters or pamphlets (59.2%) than those whose husbands disapprove (48.9%) or those who do not know if their husbands approve (52.4%) of family planning.[266]

Table 19. Percentage distribution of the women by their exposure to HIV/AIDS information from the media during the year before the interview by selected socio-economic factors, 1998 SADHS.

Variable	Radio	Television	Newspaper or magazines	Pamphlets
Wealth quintile		(.000)	(.000)	(.000)
Two lowest	84.5	63.8	52.0	50.7
Middle	85.4	72.2	59.0	57.9
Two highest	82.5	72.2	65.5	61.9
Gender of head		(.000)	(.000)	(.000)
Male	83.5	72.9	61.4	59.4
Female	85.0	62.7	51.2	49.1
Place of residence		(.000)	(.000)	(.000)
Urban	84.4	91.0	78.0	78.3
Rural	83.4	52.2	42.0	38.1
Education		(.000)	(.000)	(.000)
None	82.1	63.8	52.2	44.3
Primary	84.6	66.3	54.4	52.7
Secondary or higher	84.1	73.4	62.3	61.5
Employed	(.000)	(.000)	(.000)	(.000)
Yes	87.9	86.0	74.3	72.5
No	82.3	62.3	50.9	48.4
Type of language			(.106)	
Nguni	83.4	68.6	57.1	54.8
Sotho	84.9	70.7	58.7	57.2
Other Bantu	85.2	75.2	62.5	62.5
Non-Bantu	81.1	63.2	53.8	51.4
Age group (yrs.)				
15-24	84.8	66.4	53.7	53.0
25-29	81.7	69.5	55.9	56.5
30-34	83.7	68.0	60.1	56.0
35-39	84.9	72.4	59.8	58.6
40-44	83.6	69.9	59.7	56.7
45-49	86.1	69.8	57.2	53.0

There is an association between obtaining HIV/AIDS information from reading the newspaper or magazine and the woman's approval for family planning (p=. 020). During the year before the interview, 58.7 percent of women who approve of family planning and 52.6 percent of other women (i.e., those who disapprove or unsure if they approve) got such information from reading the newspaper or magazine. [267]

[266] x^2=26.489, p=.000.

[267] Note that the woman's approval for family planning is unrelated to any other variable measuring media exposure to HIV/AIDS or obtaining such information from the clinic or healthcare workers.

The proportion of women getting HIV/AIDS information from the television in the year before the interview is higher among those reporting joint approval or approval by the man only than among those reporting joint disapproval uncertainty or approval by the woman (73.3% vs. 59.9%, 67.8%, 64.5%, respectively).[268] During that time, 60.7 percent of those who report joint approval for family planning got this type of information from newspapers or magazine compared to between 52.1 percent and 54.8 percent of women in other response categories (x^2=17.801, p-=.000). The proportion of women getting such information from posters or pamphlets at is also higher among those reporting joint approval for family planning (59.1%) than among those reporting joint disapproval (56.6%), uncertainty (52.5%) or approval by the woman only (46.7%)[269, 270]

5.9.6. Amount of HIV/AIDS information from the media

Among women obtaining a lot of information about HIV/AIDS, the proportion is higher among those getting it from the radio than among those getting it from the television, newspaper or pamphlets (Table 20). The proportion of women obtaining a lot of information from the radio, television, newspaper or pamphlets is higher among those living in urban areas than among those living in rural areas.

The proportion of women who got no information about HIV/AIDS from the radio, television, newspaper or pamphlets is higher among those living in rural areas than among those living in urban areas. The proportion of women getting some information about HIV/AIDS from newspaper or pamphlets is also higher among those living in urban areas than among their rural counterparts. On the other hand, the proportion of those getting some of this type of information from the radio is higher among those in rural areas than in urban areas (Table 20).

There is a significant association between obtaining such information from the television (x^2=43.026, p=. 000), newspaper (x^2=64.512, p=. 00) or pamphlets (x^2=86.863, p=. 000) and the socio-economic status of the household. The examination shows that the proportion of women obtaining a lot of information about HIV/AIDS from the newspaper is higher among those living in households in the two

[268] x^2=43.529, p=.000.
[269] x^2=30.754, p=.000.
[270] There is no significant relationship between exposure to such information from the radio or clinic/healthcare workers and husband-wife's comparative approval for family planning.

highest quintiles of wealth (42.7%) than among those living in households in the middle (35.8%) or two lowest (30.8%) ones. The proportion of women getting a lot of HIV/AIDS information from the television is also higher among those in households in the two highest wealth quintiles (66.6%) than among those in the middle (57%) or two lowest ones (46.4%). Women living in households in the two highest quintiles of wealth are more exposed to such information from pamphlets than are those living in the middle or two lowest ones (43.1% vs. 38.9% and 30.5%, respectively).

Table 20. Percentage distribution of the women by the amount of HIV/AIDS-information that they got from the media by place of residence, 1998 SADHS.

Variable	N	%	Urban	Rural	Value	p.
Radio					73.544	.000
None	438	12.8	8.3	16.3		
A lot	2628	76.7	83.5	71.5		
Some	359	10.5	8.2	12.2		
Television					497.260	.000
None	1133	33.1	14.0	47.9		
A lot	1896	55.4	74.7	40.6		
Some	393	11.5	11.3	11.6		
Newspaper					339.621	.000
None	1587	45.9	29.7	59.4		
A lot	1224	36.5	51.1	24.1		
Some	606	17.6	19.2	16.6		
Pamphlets					382.360	.000
None	1587	45.9	27.6	60.0		
A lot	1224	36.5	51.9	24.6		
Some	606	17.6	20.5	15.4		

Chapter 6

Factors influencing the patterns of dominance in decision-making for the use of fertility control: Results from bivariate examination of the data

The majority of the women in this study solely make the decision about whether or not to use fertility control (40.2%), or do so in conjunction with their husbands (39.2%). Less than one quarter (16.2%) of husbands is dominant in making this decision.

6.1. The influence of the background and socio-economic characteristics of the woman on decision-making for the use of fertility control

Joint decision-making for the use of fertility control is higher among women who were raised in towns, than among those who were raised in cities or the countryside as well as among those whose order of birth is fifth or higher, than among other women Table 21). The proportion of women reporting joint decision-making for the use of fertility control is also higher among those who currently live in urban areas, between 25 and 29 years, have the most (i.e. secondary or higher) education and among those who are literate than among others. The information in Table 21 shows that joint decision-making for the use of fertility control is widespread among women who are employed and among those who work in professional, technical or managerial occupations as well as among those who have never experienced any type of abuse. The examination reveals that joint decision-making for the use of fertility control is also more commonly found among women whose first marriage took place when they were between 19 and 24 years [271] and among those whose first marriage took place five to nine years ago than among others.

Table 21 also depicts that female influence in decision-making about fertility control is more widespread among those raised in a city and among those who are fifth or higher birth order. Female dominance is also more commonly found among those currently living in urban areas, between 45 and 49 years, have the most education, literate, employed, working in unskilled manual occupations and among those who report a history of abuse than among other women. [272]

[271] Joint decision-making for the use of fertility control is least common among those whose first unions occurred the longest (20 or more years) years and the shortest (4 or fewer) periods of time.
[272] This includes physical, mental or sexual abuse, as well as sexual coercion.

Table 21. Percentage distribution of the patterns of dominance in decision-making for use of fertility control by the background and socio-economic characteristics of the woman, 1998 SADHS.

Variable	Both	Woman	Husband	Other	LR	p.
Childhood place of residence					95.222	.000
City	38.6	49.5	9.3	2.7		
Town	49.8	38.8	9.7	1.6		
Countryside	36.3	39.3	19.1	5.3		
Mother's children					5.213	.517
One to two	40.9	39.3	14.4	5.4		
Three to four	39.7	38.0	17.8	4.4		
Five or more	38.9	41.0	16.0	4.0		
Birth order					22.450	.000
First and second	37.9	41.1	16.4	4.7		
Third and fourth	39.2	37.0	19.2	4.6		
Fifth or higher	42.1	42.2	12.6	3.2		
Current place of residence					63.342	.000
Urban	42.1	43.4	12.2	2.3		
Rural	37.2	37.7	19.4	5.7		
Age (yrs.)					57.391	.000
15-24	36.9	39.7	19.6	3.9		
25-29	43.1	40.0	14.5	2.3		
20-24	40.2	41.5	15.6	2.7		
35-39	41.1	38.2	17.6	3.1		
40-44	39.2	39.2	15.6	5.9		
45-49	31.6	43.8	14.8	9.8		
Educational level					89.315	.000
None	31.4	39.4	18.5	10.7		
Primary	37.0	39.4	18.2	5.3		
Secondary or higher	43.0	40.9	14.2	1.8		
Level of Literacy					26.310	.000
Illiterate or reads with difficulty	35.1	39.7	18.5	6.7		
Literate	40.8	40.5	15.4	3.3		
Employed					51.282	.000
No	35.5	47.0	17.4	3.7		
Yes	47.1	33.7	13.6	5.7		
Occupation					42.994	.000
Professional, technical or managerial	55.3	40.0	4.7			
Clerical, sales & services	39.7	42.5	12.6	5.2		
Skilled manual	36.2	37.9	24.1	1.7		
Unskilled manual	40.4	43.2	13.2	3.2		
History of abuse					14.207	.003
Yes	34.2	48.6	13.2	4.0		
No	40.2	39.1	16.6	4.3		
Type of union					.351	.950
Formal	39.4	40.2	16.2	4.1		
Consensual	39.0	40.1	16.3	4.6		
Age at first marriage					21.262	.002
Ten to eighteen	38.6	37.6	18.7	5.0		
Nineteen to twenty-four	40.7	39.3	15.6	4.4		
Twenty-five or older	37.6	45.5	13.9	3.0		
Years since first marriage					43.675	.000
Four or less	38.2	41.6	17.0	3.3		
Five to nine	41.4	42.1	14.3	2.4		
Ten to fourteen	40.0	41.6	14.9	3.4		
Fifteen to nineteen	40.5	36.2	19.4	3.9		
Twenty or more	37.0	39.3	15.8	7.9		

The influence of the woman is also more widespread among those whose first marriage took place when they were 25 years or older and among those whose first marriage occurred five to nine years before the interview as well as among those who have experienced some form of abuse.

The influence of the husband is more prevalent among those who were raised in the countryside, and among those whose order of birth is third or fourth. Male influence in decision-making for the use of fertility control is found more frequently among the youngest age group of women (15-24 years), those who have primary or no education, those who are not employed as well as those working in skilled manual jobs (Table 21).

The influence of the husband is also more widespread among women whose first marriage occurred when they were between 10 and 18 years, whose first marriage occurred 15 to 19 years prior to the interview and among those who have never experienced abuse than among other women.

The influence of others in deciding about the use of fertility control is more often found among women who were raised in the countryside and among those who are fourth or lower ordinal born. The examination also finds that the influence of others is also more widespread among the oldest age cohort of women (45-49 years), those currently living in urban areas, who have no education, and among those who are less than literate, as well as among those who are employed or working in clerical, sales and service occupations than among others.

The dominance of others in deciding about contraception is also more widespread among those women who had entered their first union 20 years or longer prior to the interview and among those whose first marriage happened when they were between 10 and 18 years than among women. The influence of others in deciding about the use of fertility control is slightly higher among women who have never been abused than among those who have.

6.2. The influence of the characteristics of the husband on decision-making for the use of fertility control

Bivariate analyses of the data show that joint decision-making for the use of fertility control is commonly found among women whose husbands have the most education

and among those whose husbands are between 18 and 39 years. Joint decision-making is also more widespread among those whose husbands work in relatively high status occupations, and among those whose husbands approve of family planning, than among others (Table 22).

Female dominance in decision-making for fertility control is highest among those whose husbands are between 30 and 39 years, do not know their husbands' occupation or if they approve of family planning as well as among those whose husbands have less than secondary education. [273]

The information in Table 22 shows that the influence of the husband in decision-making for the use of fertility control is more widespread among women whose husbands have no education, are 40 to 49 years; disapprove of family planning and among those who do not know their husband's occupation.

Table 22. Distribution of the women by the patterns of dominance in decision-making for use of fertility control according to selected marriage and partner-related factors, 1998 SADHS.

Variable	Both	Woman	Husband	Other	LR	p.
Husband's age (years)					67.535	.000
Eighteen to twenty-nine	41.0	38.8	15.7	4.5		
Thirty to thirty-nine	41.5	41.7	15.3	1.5		
Forty to forty-nine	40.6	38.6	17.3	3.5		
Fifty or older	34.9	39.1	16.0	10.1		
Husband's education					70.294	.000
None	31.8	40.4	18.1	9.7		
Primary	37.9	40.3	16.8	5.1		
Secondary or higher	43.3	39.4	15.4	1.9		
Husband's occupation					53.138	.000
Professional, technical or managerial	46.0	40.7	12.2	1.1		
Unskilled manual and agricultural	38.8	36.7	18.5	6.0		
Skilled manual	38.1	43.9	14.5	3.4		
Clerical, sales and services	43.5	39.9	13.8	2.7		
Don't Know	29.1	44.6	21.7	4.6		
Husband's approval of family planning					532.474	.000
Approves	50.3	33.5	15.4	.8		
Disapproves	18.7	52.2	20.8	8.3		
Don't Know	14.4	57.0	9.7	18.8		

Due to method of rounding, some percentages might not add up to exactly 100.

[273] The findings should be accepted with caution, due to a limited number of cases in some response categories.

It is among women whose husbands are older (≥50 years), uneducated, and working in unskilled manual and agricultural jobs that the influence of others in the decision about birth control is most widespread. The influence of others is also more widespread among those respondents who state that they do not know if their husbands approve of family planning.

6.3. The influence of husband-wife's comparative characteristics on decision-making for the use of fertility control

Joint decision-making is more common among those with a relative difference of between three and five years in their and their husbands' ages. Joint decision-making is also more commonly found where husbands have a secondary or higher level of schooling than among other women. Women who say that they and their husbands want the same number of children or that both (or the husband only) approve of family planning, also report joint decision-making for the use of fertility control more often than others.

Female dominance in decision-making for the us of fertility control is more often found among those with a difference of two or fewer years in husband-wife's relative ages as well as among those who have the same amount as or more education than their husbands than among other women. The influence of the woman in decision-making for the use of fertility control is also more generally found among those who do not know if their husbands approve of family planning and among those who are uncertain about their husbands fertility desires than among other women.

Male dominance in deciding about the use of fertility control increases with increasing differences in husband-wife's relative ages. The influence of the man in deciding about fertility control is also more common when both disapprove of family planning or when the man wants fewer children than the woman does (Table 23).

Among the women in this study, the wider the gap in husband-wife's relative ages, the more widespread is the influence of others in decision-making for the use of fertility control. Others are also more influential in deciding about fertility control among women who have more or the same amount of education as their husbands as well among those reporting joint disapproval of or uncertainty about the husband's fertility desires than among others (Table 23).

Table 23. Percentage distribution of the the women by the patterns of dominance in decision-making for use of fertility control according to husband-wife's comparative characteristics, 1998 SADHS.

Variable	Both	Woman	Husband	Other	LR	p.
Difference in ages (yrs.)					33.182	.000
Two or less	40.4	43.9	13.4	2.3		
Three to five	42.1	39.4	14.7	3.8		
Six to nine	39.6	37.5	19.1	3.8		
Ten or more	36.0	38.8	19.0	6.2		
Comparative ages					7.846	.250
Woman older than husband	36.8	44.9	14.1	4.3		
Woman same age as husband	39.4	42.9	16.5	1.2		
Woman younger than husband	40.2	39.3	16.3	4.2		
Comparative education					19.468	.003
Less education than husband	42.0	39.5	16.0	2.5		
More education than husband	36.2	41.6	16.7	5.5		
Same amount of education	41.7	41.7	14.3	5.4		
Comparative approval for FP					583.862	.000
Both or only husband approve	50.2	33.4	15.5	.8		
Only woman approves	16.3	59.6	19.7	4.4		
Both disapprove	27.0	29.7	22.7	20.5		
One or both uncertain	16.9	54.1	11.2	17.8		
Comparative fertility desires					293.255	.000
Both want the same number	49.4	32.1	15.9	2.6		
Husband wants less	35.6	35.6	25.2	3.7		
Husband wants more	24.2	51.2	20.7	4.0		
Uncertain about husband's desires	26.6	53.5	9.2	10.6		

6.4. The influence of the characteristics of the household on decision-making for the use of fertility control

The information in Table 24 demonstrates that joint decision-making for the use of fertility control is most often found among those who prefer speaking SeTswana at home than among those who prefer to speak another language. The examination reveals that joint decision-making is also higher among women living in households within the middle or two highest quintiles of wealth, than among those living in households in the two lowest ones. The proportion of women reporting joint decision-making for the use of fertility control is also higher among women who live in households with the most (i.e. six or more) durable items than among others.

In addition, joint decision-making for the use of fertility control is more prevalent among women living in medium-sized households (i.e. those households wherein 4-5 individuals live) than among those in small or large-sized ones (1-3 and 6 or more individuals, respectively). Bivariate examination of the data shows that joint decision-making for the use of fertility control is also more prevalent among women who live in

male-headed households, those who live in households headed by their husbands and those who co-reside with their husbands as well as those in households that are headed by an individual who is 44 years or younger than among other women.

The examination reveals that joint decision-making for use of fertility control is more commonly found among women living in households that have no children who are five years or younger, than among those in households that have one or more children of comparable ages. Table 24 shows that joint decision-making is higher among women living in households with two to three children of their own, than among those living in households with either less or more.

Women living in the same household with one to two sons report joint decision-making more often than those living in households with either more or fewer sons. However, the proportion of women reporting joint decision-making is slightly higher among those living in households with no daughters than among those living in households with at least one daughter (Table 24).

The examination reveals that women preferring to speak IsiZulu at home are more dominant than other women in deciding if fertility control should be used. Table 24 shows that the influence of the woman is more frequently found among those living households in the two highest wealth quintiles, and among those living in households that have five or less durable items. The influence of the woman in decision-making for the use of fertility control is also more prevalent among those living in large-sized households than among those in other households.

The influence of the woman in decision-making for the use of fertility control is higher among those preferring to speak IsiZulu at home than among others. The influence of the woman in decision-making about the use of fertility control is more widespread among those living in large-sized households, and those in households headed by a person who is 45 years or older, as well as among those in female-head households or households headed by someone else – other than the husband or the woman - than among others. . The influence of the woman in decision-making for the use of fertility control is somewhat higher among women in households that have five or less durable items than among those in households that have six or more such items. The influence of the woman is also more commonly found among women co-residing with three or more children five years or younger and those co-residing with one or no children of their own than among other women (Table 24).

Male dominance in decision-making for the use of fertility control is significantly higher among those women who prefer speaking another indigenous language (i.e. TshiVenda or ZiTsonga) at home than among other women (Table 24). Table 24 shows that the influence of the husband (i.e. male dominance) is more prevalent among women living in households in the two lowest wealth quintiles, and in households that have the least amount of durables. The examination also reveals that male dominance is higher among women living in large-sized households and among those who do not live in the same households as their husbands, than among their counterparts in other households. Male dominance is also more prevalent among women living in female-headed households, as well as among those women who head their own households, than among their counterparts in male-headed households and in households headed by the husband or someone else.

The influence of the husband in decision-making for the use of fertility control is higher among women who live in households with three or more children who are five years or younger than among other women. The information in Table 24 also shows that male dominance is more prevalent among women living in households with five or more of their own children than among other women. The influence of the husband in decision-making for the use of fertility control is also more widespread among those co-residing with three or more sons or with one or more daughters than among others[274]

Table 24 shows that others are more dominant in the decision about the use of fertility control among women who prefer speaking IsiZulu at home than among those who prefer to speak another language. The examination reveals that the influence of others is more often found among women living in households within the two lowest quintiles of wealth, and among those living in households with the least amount of durables.

The proportion of women reporting the influence of others in decision-making for the use of fertility control is higher among women living in households that are headed by a person who is forty-five years of age or older than among those in households headed by a younger person.

[274] 20.6% of women who have 3 or more sons report male dominance in decision-making for the use of fertility control compared to 16.1% of those co-reside with between 1 and 2 sons and 14.8% of those not living with any sons. 6.1% of those who live with 3 or more daughters, 2.9% living with between 1 and 2 daughters and 5.9% of those not co-residing with a daughter report the influence of the husband in deciding about the use of fertility control.

Table 24. Percentage distribution of the women by the patterns of dominance in decision-making for fertility control by household characteristics, 1998 SADHS

Variable	Both	Woman	Husband	Other	LR	p.
Home language					278.559	.000
Non-indigenous	38.2	39.1	17.3	5.5		
IsiXhosa	35.1	37.4	22.1	5.5		
IsiZulu	30.8	47.8	15.1	6.3		
SeSotho	45.9	44.7	7.9	1.4		
SeTswana	57.1	32.4	8.9	1.6		
SePedi	42.4	43.1	10.9	3.6		
Other Nguni	42.9	46.9	6.9	3.4		
Other Indigenous	28.7	23.6	43.1	4.6		
Wealth quintile					31.280	.000
Two lowest	37.2	38.8	18.2	5.8		
Middle	41.2	39.8	16.5	2.4		
Two highest	40.9	42.3	13.4	3.5		
Durables					47.716	.000
One or none	33.8	40.6	19.1	6.4		
Two to three	40.3	40.7	14.7	4.3		
Four to five	42.4	40.5	14.9	2.1		
Six or more	44.7	38.3	14.6	2.3		
Place of work					47.469	.000
Home	32.8	28.2	16.0	6.3		
Away from home	54.4	45.0	11.5	5.9		
Size of Household					13.911	.031
Small	39.9	39.2	15.7	5.2		
Medium	42.0	39.9	14.3	3.8		
Large	36.0	41.0	18.2	4.1		
Husband lives in house					27.518	.000
Yes	41.6	40.1	14.5	3.5		
No	34.5	40.1	19.4	6.0		
Head					27.241	.000
Respondent	35.2	39.6	19.7	5.5		
Husband	42.3	39.3	14.6	3.7		
Someone else	34.5	43.7	17.3	4.4		
Gender of head					21.810	.000
Female	34.8	40.7	19.0	5.5		
Male	41.5	39.9	14.9	3.7		
Age of head					32.730	.000
Forty-four or younger	42.1	38.9	16.0	3.0		
Forty-five or older	35.0	42.1	16.7	6.2		
Children 5 years or younger					31.342	.000
None	42.6	38.5	13.8	5.2		
One to two	38.1	41.1	17.2	3.6		
Three or more	27.7	43.5	24.6	4.2		
Own children					56.053	.000
One or none	39.6	40.5	16.1	3.8		
Two	41.6	42.0	14.5	1.9		
Three	41.3	40.4	15.5	2.8		
Four	38.3	37.8	18.0	5.8		
Five or more	34.8	37.9	22.9	4.3		

The influence of others in decision-making about use of fertility control is more often found among women living in female-headed households, and in households that are headed by the woman herself, than among those in other households. The influence of others in decision-making for the use of fertility control is higher among women living in the same households as their husbands than among those who do not.

The information in Table 24 shows that the influence of others in decision-making about use of fertility control is more often found among women who do not live in households with children five years or younger or with any sons. On the other hand, the influence of others is more prevalent among those who live in households with three or more daughters than among those living in households with two or fewer daughters. The proportion of women reporting the influence of others in decision-making for the use of fertility control is higher among those who live with four of their own children than among those who live with fewer or more of their own children.

6.5. The influence of sexual and reproductive - related factors on decision-making for the use of fertility control

6.5.1. Sexual-related factors

Bivariate analyses reveal no significant association between the dependent variable and the woman's age at sexual debut, the number of sexual partners in the past year or the reason for non-condom use at last intercourse. Among the women in this study, decision-making for the use of fertility control is related to the woman's age at menarche (x^2= 17.415, p=. 043), the type of last partner (x^2=13.882, p=. 003) and condom use at last sexual intercourse (x^2=18.077, p=. 004).

The proportion of women reporting joint decision-making for the use of fertility control is significantly lower among women who had their first period when they were 13 years old or younger (36.9%) than among those who had their first period when they were between the ages of 14 and 16 years (39.2%), 17 and 18 years (43.3%) or 19 years and older (42.4%).

On the other hand, female dominance in the decision is lower among those who had their first period when they were 19 years and older (34.7%) than among those who had their first period when they were between 17 and 18 years (36%), 14 and 16 years (40.7%) or 13 years and younger (42%). The influence of others in decision-

making for the use of fertility control is also lower among women who experienced their first period when they were 19 years of age and older (.7%) than among those who were 13 years old and younger (4%), 14 to 16 years old (4.4%), or 17 to 18 years (5.2%).

Joint decision-making is higher among women who used condoms at last sexual intercourse than among those who did not (or do not know if condoms were used): 48.1% vs. 39.2%, respectively. The influence of the woman in deciding about the use of fertility control is higher among those who did not use condoms at the time (or do not know if the condom was used) than among those who did (40% vs.37.3%, respectively). Male dominance and the influence of others are also higher among those who did not use condoms (or do not know if the condom was used) the last time that they had sex, than among those who did (16.6% and 4.3% vs.14.2% and .4%, respectively).

There is no significant association between the patterns of dominance in decision-making for the use of fertility control and the following factors: the woman's age at birth of the first child, numbers of live births or living children (including sons and daughters), pregnancy termination or the interval between births, or current pregnancy. The evaluation does reveal a significant relationship between the dependent variable and whether or not the woman gave birth in the previous three years (x^2=30.514, p=. 000) or five years (x^2=40.933, p=. 000).[275]

Joint decision-making for the use of fertility control is somewhat higher among women who did not give birth in the past five years (40%) than among those who did (38.5%). Women who had a child during that time are more dominant than other women in the decision about using fertility control (40.8% vs. 39.6% respectively). The influence of the husband is also higher among those who gave birth at that time (18.3%) than among those who did not (14.3%). The proportion of women reporting the influence of others in decision-making for the use of fertility control is higher among those who did not give birth in the five years prior to the interview than among those who did (6.1% vs. 2.3%).

[275] Decision-making for the use of fertility control is marginally related to having had a birth in the past year. Joint decision-making is higher among women who had a child in the year prior to the interview, than among those who did not (43.7% vs. 38.6%). The influence of the husband is slightly higher among women who gave birth within the previous year (17.6%) than among those who did not (16%). Female dominance and the influence of others are more commonly found among women living in rural areas than among those in urban areas (41% and 4.3% vs. 34.8% and 3.8%, respectively).

The examination also reveals that joint-decision-making for the use of fertility control is slightly higher among women who experienced no births in the three years prior to the interview than among those who did (39.2% vs.38.2% respectively). The influence of the woman in decision-making for the use of fertility control is approximately the same among those who did give birth (40.6%) and those who did not (40%). The dominance of the husband in decision-making for the use of fertility control is more widespread among women had had a birth in the previous three years (19.1%) than among those who did not (14.8%). The influence of others in deciding about the use of fertility control is more prevalent among women who did not give birth during that time (5.3%) than among those who did (2.1%).

There is a significant association between patterns of dominance in decision-making for the use of fertility control and the woman's reproductive status (x^2= =11.679, p=. 009). The examination reveals that joint decision-making and the influence of the husband in the use of fertility control are both higher among fertile than infertile women (39.4% and 16.7% vs.38.8 and 14.4%, respectively). The influence of others in deciding about fertility control is higher among infertile than fertile women (6.8% vs. 3.7%). The proportion of women reporting male dominance in the decision is almost equivalent for fertile (40.2%) and infertile women (40.1%).

6.5.3. Contraceptive-related factors

There is an association between dominance in decision-making for the use of fertility control and whether or not the woman has ever used fertility control (x^2=297.097); the first method used (x^2=121.021); children at first use (x^2=313.381); history of condom use (x^2=63.472), and current method (x^2=197.786). [276]

Joint decision-making for the use of fertility control is higher among women who have at some point used a method of fertility control than among those who never have (43% vs. 26%). The influence of the woman in deciding about the use of fertility control is also higher among women who have used birth control (47.1%) than among those who have not (34.7%). On the other hand, the influence of the husband, as well as the influence of others, in decision-making for the use of fertility control is significantly higher among those who have never used birth control (24.1% and 15.2%, respectively) than among those who have (14% and 1.2%, respectively).

[276] All are significant at the .000-level

Among those who have at some point used birth control, joint decision-making for the use of fertility control is higher among women who had no children at first method use (45.8%) than among other women (25.7% - 44.3%). Female dominance is higher among women who had two children at the time that they first used birth control than among others (44.9% vs. 34.6%-41.9%).

The examination reveals that among those who have used birth control, female dominance is more prevalent among women whose first method was the pill (44.2%) than among women whose first method was the IUD (37.6%), the injection (37.9%), or some other method (43.2%). Male dominance in decision-making for the use of fertility control is more commonly found among those who initially used another contraceptive method (20.1%), than among those initially using the pill (14.1%), IUD (13.8%) or the injection (13.5%).

Joint decision-making for the use of fertility control is significantly higher among women who have used condoms than among those who have never used them (51% vs. 37.3%). On the other hand, female and male dominance, as well as the influence of others, in decision-making for the use of fertility control are more prevalent among women who have never used condoms (40.9%, 16.8 and 5%, respectively) than among those who have (35.8%, 13% and .2%, respectively).

There is a significant relationship between the dependent variable and the woman's contraceptive need (x^2=385.758, p=000). It is found that joint decision-making is more commonly found among women who are using contraception in order to limit births (42.4%) than among those who are doing so in order to space births (41.4%), have a need to space or limit births (35.2%, each), are infecund or menopausal (36.8%) or desire to have a child in two or fewer years (39.1%).

The influence of the woman in deciding about fertility control is more widespread among those who are infecund or menopausal (45.7%) than among those who have an unmet need to space births (42.9%); those who have a need to limit births (40.5%); those who are using in order to space (36.5%) or limit births (39.2%); those who are infecund or menopausal (44.2%) or those desiring a birth within the next two years (36.9%).

Male dominance in decision-making for the use of fertility control is higher among women who are contracepting in order to space births (21.4%) than among those who

are doing so in order to limit births (12.6%), those who have a need to space (15.1%) or limit births (14.7%), those who are menopausal or infecund 14.9%), or those who desire to give birth within two or fewer years (16.9%). The proportion of women reporting the influence of others in deciding about the use of fertility control is higher among those who are using contraception in order to limit births (5.1%) than among others (2.8%-4.2%).

6.6. The influence of reproductive-related knowledge and attitudes in decision-making for the use of fertility control

6.6.1. Attitudes

Table 25 shows that female influence in deciding about the use of fertility control is more common among women who want a child, but are unsure of the desired timing of the event, as well as those who feel that having one or no children is ideal. Others are also more influential in deciding about fertility control among women who believe that five or more children are ideal.

Decision-making for fertility control is significantly associated with whether or not the woman approves of family planning, in general, as well as the use of radio and television programming for the promotion of family planning (Table 25). For the three variables, joint decision-making is highest among those women who say that they approve of family planning, and lowest among those who are uncertain of whether or not they approve. Table 25 shows that female influence in decision-making for fertility control is most often found among women who generally approve of family planning, as well as those who both approve of and are uncertain if the electronic media (radio and television) should be used for family planning messages.

The influence of the in contraceptive decision-making is most widespread among those who disapprove of family planning but lowest among those who approve on all three measures. The influence of others is common among those uncertain if they approve of family planning or if radio or television should be used in disseminating family planning messages.

6.6.2. Knowledge

Table 24 shows a significant association between dominance in decision-making for fertility control and known sources for obtaining any method of contraception or

condoms. Decision-making about the use of fertility control is also affected by knowledge of reproductive physiology (i.e. the most fertile time during the menstrual cycle), purpose or function of condoms, and awareness of the conditions of the 1996-South African Choice of Termination of Pregnancy (TOP) Act.

Joint decision-making about fertility control is more widespread among women who know that they can get contraception or condoms from a government hospital or private sources than among others. It is also more common among those who know that condoms are used for family planning and STD prevention, in addition to those who are aware of the conditions of the 1996-TOP Act, as well as those who understand the menstrual cycle.

Women who know that condoms can be obtained from a private source, family planning clinic or Day Hospital, as well as those who know that they can get birth control from a Day Hospital, clinic or other public source, are more dominant in deciding about contraception than their less knowledgeable counterparts. The dominance of the woman in decision-making for use of fertility control is more common among those who think that condoms are used solely for family planning, than among other women. Knowledge of the fertile period of the menstrual cycle is not related to female dominance in decision-making about use of fertility control. Women who are aware of, or are uncertain about, the changes in the 1996 TOP Act are also more influential than others are in deciding about the use of fertility control.

It is also depicted that the influence of the husband is more widespread among women who are unaware of the fertile period of the reproductive cycle, as well as those who do not know about the changes in the 1996 TOP Act. Males are also more influential in making the decision about using fertility control among women who are uncertain about where to obtain condoms, or those who know that condoms can be obtained from other public sources, or that methods of birth control can be obtained from a Day Hospital or clinic. Male dominance in contraceptive decision-making is more prevalent among women who think that condoms are used only to prevent STIs. In part, the findings appear to be related to the fact that women who are poorer and less educated, generally, go to government-run facilities for contraceptive service.

Table 25. Distribution of the women by the patterns of dominance in decision-making about using fertility control by reproductive-related attitudes, 1998 SADHS.

Variable	Both	Woman	Husband	Other	LR	p
Fertility preferences					1.182	.978
Have another	39.5	39.4	16.5	4.5		
Undecided	37.7	41.7	15.6	4.0		
No more	38.8	40.4	16.7	4.1		
Ideal number of children					66.969	.001
One or none	24.0	51.9	17.1	7.0		
Two to three	42.6	41.2	13.9	2.4		
Four	39.6	39.2	17.2	3.9		
Five or more	35.2	37.8	18.8	8.3		
Average	3.5	3.6	3.8	4.4		
Attitude toward pregnancy					10.678	.099
Happy	38.7	41.0	17.4	2.8		
Unhappy	37.9	40.9	16.7	4.5		
Would not matter	44.8	32.8	16.2	6.2		
Approves of family planning					172.74	.000
Approves	40.7	40.8	16.1	2.4		
Disapproves	27.7	33.6	18.5	20.2		
Uncertain	23.4	35.1	16.0	25.5		
Television to promote family planning					64.50	.003
Approves	40.0	40.4	16.4	3.2		
Disapproves	32.2	36.7	17.6	13.6		
Uncertain	31.8	40.2	11.2	16.8		
Radio broadcast to promote family planning					58.08	.001
Approves	40.2	40.3	16.0	3.5		
Disapproves	27.1	37.4	21.3	14.2		
Uncertain	25.0	39.0	17.2	18.8		
Reproductive physiology					11.40	.000
Aware	45.7	40.0	12.3	2.0		
Unaware	38.7	40.2	16.6	4.5		
TOP law					89.38	.000
Heard	43.7	40.6	13.8	1.9		
Never heard	32.4	38.5	23.0	6.1		
Uncertain	38.3	40.8	14.5	6.3		
Source for condoms					196.14	.000
Government hospital	47.1	37.0	13.3	2.6		
Private	46.0	43.2	10.8	0.0		
FP clinic	43.1	42.2	12.4	2.3		
Day hospital	36.9	43.9	16.3	2.8		
Other public	34.8	37.0	25.6	2.6		
Uncertain	25.1	38.3	22.6	14.0		
Source for contraception					152.19	.000
Government hospital	46.0	35.9	15.2	2.8		
Private	45.5	36.6	16.8	1.0		
Day Hospital/Clinic	33.3	43.8	18.1	4.8		
Other public	37.4	44.5	15.5	2.6		
Uncertain	24.4	36.0	15.5	24.4		
Knowledge of use of condoms					150.83	.000
Both family planning and STD	42.7	40.3	14.5	2.5		
Family planning only	31.2	43.9	21.1	3.8		
STD only	29.2	35.2	25.6	10.0		
Uncertain	25.6	38.1	19.1	17.2		

The influence of others in deciding about the use of birth control is more evident among women who do not know where they can get birth control or condoms from, than among their counterparts who are aware of such sources. Others are also more influential in decision-making among women who are unaware of any reason for using condoms. The influence of others in deciding about the use of birth control is also more widespread among women who are unaware of, or uncertain about, the conditions for obtaining an abortion under the 1996 TOP Act than among those who are aware of the provisions.

6.7. The influence of information and communication on decision-making for the use of fertility control

The relationship between the dependent variable and information and communication is examined by looking at the general media, in addition to exposure to information and communication about family planning and HIV/AIDS.

Joint decision-making is highest among women who listen to the radio on a daily basis, read the newspaper, or watch television weekly. The influence of the woman is found more often among those who do not read the paper weekly than among other women. Males and others are more often influential in making the decision about fertility control among those women who are not exposed to general print or electronic media.

6.7.1. Sources of information and communication about family planning

Joint decision-making for the use of fertility control is most widespread among women exposed to three or more sources of information about family planning in the few months before the interview. It is more common among women who obtained such information from the electronic or printed media.

The examination shows that the influence of the woman in decision-making for fertility control is more widespread among women who obtained such information from a poster, than among those who did not. The influence of the woman in decision-making for the use of fertility control is more commonly found among women not discussing planning with their husbands or sexual partners during the past few months than among those who did. Female influence is also more widespread among

those discussing the issue with a sister or with a friend or neighbour than among those who did.

The examination also finds that discussing family planning with the husband, friend or neighbour(s) a daughter (s) or a sister (s) in the past few months also have a significant influence on the dependent variable. Table 26 shows that the more frequent spousal communication on the issue, the higher the proportion of women reporting joint decision-making about the use of birth control.

The influence of the man is more apparent among women who have not discussed family planning with a sister, friend or neighbour, or with a daughter in the last few months, but who discussed the issue with their husbands at least once during the previous year. On the other hand, the influence of others in deciding about fertility control is most evident among women who discussed family planning with daughters as well as those who did not discuss the issue with sisters or with a friend or neighbour in the last few months or with the husband in the past year.

Tables 26 and 27 show a significant association between decision-making for the use of fertility control and sources and amount of information about HIV/AIDS –related information obtained during the past year.

Joint decision-making for the use of fertility control is more often found among women who, during the year prior to the interview, did not obtain information about HIV/AIDS from listening to the radio. It is also more commonly found among those who were exposed to this type of information from watching television, reading newspapers or magazines, or pamphlets or posters, as well as from a sexual partner or the husband, relatives or from a friend(s) of neighbour(s) in the past year (Table 26). Joint decision-making is also more widespread among those who received such information from a any of these sources or from the clinic or healthcare worker(s).

Joint decision-making is also more widespread among those who report obtaining a lot of HIV/AIDS-related information from the newspaper, pamphlets, or from the radio, as well as among those who got some of this type of information from watching television, than among others (Tables 27).

Table 26. Percentage distribution of the women by the patterns of dominance in decision-making for use of fertility control by exposure to sources of information and communication about HIV/AIDS, 1998 SADHS.

	Both	Woman	Husband	Other	LR	p
Radio					13.695	.003
Yes	39.4	39.0	17.3	4.3		
No	41.9	42.3	11.0	4.8		
Television					127.772	.000
Yes	45.2	33.9	15.8	5.1		
No	27.3	52.6	17.3	2.8		
Newspaper or magazine					23.257	.000
Yes	42.8	36.4	16.1	4.7		
No	35.6	44.0	16.4	3.9		
Pamphlets or posters					71.307	.000
Yes	44.6	33.7	16.4	5.3		
No	33.4	47.2	16.2	3.2		
Clinic or Healthcare worker					4.793	.188
Yes	39.9	38.9	17.0	4.6		
No	39.9	41.9	14.3	3.9		
Sexual partner(s)					14.299	.003
Yes	40.6	36.8	18.0	4.5		
No	38.9	42.5	14.3	4.2		
Relatives					17.766	.000
Yes	40.2	37.1	17.6	5.1		
No	39.2	42.9	14.5	3.4		
Friends					10.785	.013
Yes	40.3	38.0	16.9	4.8		
No	38.5	43.4	14.8	3.4		

The examination shows that female dominance in decision-making about the use of fertility control is more commonly found among women not exposed to information about HIV/AIDS from any of the sources examined (listed in Table 26) than among those who were.

The influence of the woman in decision-making for the use of fertility control is generally found among those who did not get information about HIV/AIDS from the electronic media (i.e., radio or television), sexual partner, friends or neighbours or from relatives in the year prior to the interview (Table 26).

Table 27 shows that the influence of the woman in this decision is also more widespread among those who obtained some information about HIV/AIDS during the year prior to the interview, than among women who obtained plenty (i.e., a lot) or no such information. Those who obtained a lot or no such information from pamphlets or healthcare workers (or clinics) are also more dominant in making the decision about the use of fertility control than among those who did not.

Table 27. Percentage distribution of the women by the patterns of dominance in decision-making for use of fertility control by amount of HIV/AIDS-related information obtained during the past year, 1998 SADHS.

Variable	Both	Woman	Husband	Other	LR	P
Radio					42.946	.000
A lot	41.6	39.3	15.6	3.5		
Some	35.3	42.1	18.7	4.2		
None	29.2	43.8	18.0	8.9		
Television					85.782	.000
A lot	43.3	39.3	14.5	2.9		
Some	44.5	38.7	15.3	1.5		
None	30.9	42.1	19.5	7.5		
Newspaper					74.283	.000
A lot	47.1	36.4	13.6	2.8		
Some	39.1	43.9	13.9	3.1		
None	33.3	41.5	19.3	5.9		
Pamphlets or posters					98.079	.000
A lot	45.8	40.3	11.8	2.1		
Some	42.1	39.6	15.6	2.7		
None	33.1	40.2	10.0	6.7		
Clinic or Healthcare workers					75.683	.000
A lot	43.0	40.4	13.0	3.5		
Some	34.1	39.2	22.7	4.0		
None	31.2	40.2	21.7	6.9		
Friends					65.049	.000
A lot	44.8	38.2	13.2	3.9		
Some	37.9	41.4	18.0	2.7		
None	31.2	42.6	19.9	6.3		
Sexual Husband(s)					133.090	.000
A lot	47.3	36.0	13.2	3.5		
Some	42.0	40.0	16.0	2.0		
None	27.4	45.5	20.3	6.8		
Relatives					81.233	.000
A lot	44.1	38.2	13.3	4.4		
Some	43.0	39.4	16.3	1.3		
None	32.0	42.6	19.1	6.3		

* Due to method of rounding, some percentages might not add up to exactly 100.

It is found that male dominance is more pronounced among those getting such information from the radio, clinic or a healthcare worker, a friend or neighbour, a relative or a sexual partner, and those not getting it from the television (Table 26).

The information in Table 27 shows that the influence of the man (i.e. husband) is widespread among women who say that they got no information about HIV/AIDS from pamphlets, the newspaper or the television during the year prior to the interview. Male dominance in decision-making for the use of fertility control is also more common among those women who obtained some information about HIV/AIDS in the year prior to the interview from the clinic or healthcare workers than among other women who got a lot or none (Table 27).

The influence of others is more prevalent among women who were exposed to HIV/AIDS-related information from the television, a newspaper or magazine, pamphlets or posters, clinic or healthcare worker, a relative or from a friend or neighbour during the year before the interview Table 26). The information in Table 27 shows that the influence of others is also more widespread among those who report getting no information about HIV/AIDS from any source than among those getting some or a lot.

6.8. The influence of contraceptive and HIV/AIDS-related knowledge and attitudes on decision-making for the use of fertility control

6.8.1. Knowledge

Joint decision-making about use of birth control is more widespread among individuals who are aware of the pandemic than among those who are unaware thereof. On the other hand, the influence of either partner or another individual is more common among those who state that they are unaware of the pandemic (Table 28).

Among those who are aware of HIV/AIDS, joint decision-making for the use of fertility control is more common among those who know how to prevent viral transmission than among their counterparts who do not. In general, the influence of the man, woman or another individual in making the decision about the use of fertility control is more widespread among those answering otherwise.

Joint decision-making for use of fertility control is more common among those who know that viral infection could be prevented through safer sexual practices, or by using condoms during sexual intercourse. Joint decision-making is also more common among women who know that injecting with clean needles can prevent infection, or that viral transmission can occur by sharing a razor blade with an HIV positive person than among others. The information in Table 28 also shows that joint decision-making and the influence of the woman are more common among those who know at least one HIV-positive individual than among those who do not. It shows that the influence of the husband or others is more prevalent among those who do not know anyone who is HIV-positive.

Table 28. Percentage distribution of the women by the patterns of dominance in decision-making for the use of fertility control by HIV/AIDS knowledge, 1998 SADHS

Variable	Both	Woman	Husband	Other	LR	p.
Has heard about AIDS					22.714	.000
Yes	40.1	39.8	16.1	4.0		
No	25.8	46.2	18.1	25.8		
Knows HIV positive individual(s)					10.649	.014
Yes	43.8	41.1	12.3	2.8		
No	39.2	39.8	16.9	4.2		
Safer sex stops transmission					29.956	.000
Correct	40.8	39.8	15.6	3.8		
Incorrect	41.7	38.8	18.0	1.5		
Does not know	25.7	40.7	24.6	9.0		
Using clean needles					51.049	.000
Correct	41.9	39.3	15.1	3.7		
Incorrect	31.5	41.8	24.7	2.1		
Does not know	23.7	44.9	23.3	8.2		
Using condoms					81.460	.000
Correct	41.7	39.9	15.3	3.1		
Incorrect	34.2	46.2	17.9	1.6		
Does not know	27.6	33.8	23.7	14.8		
Avoid public toilets					28.101	.000
Correct	37.5	43.4	15.1	4.0		
Incorrect	42.4	38.5	16.0	3.1		
Does not know	34.6	39.5	18.4	7.5		
Transmission by sharing razor					38.857	.000
Correct	41.8	38.7	15.9	3.6		
Incorrect	33.3	51.2	11.6	4.1		
Does not know	26.4	44.8	21.5	7.3		
Transmission by sharing food					41.523	.000
Correct	39.6	40.8	15.0	4.6		
Incorrect	42.0	39.4	15.9	2.7		
Does not know	32.6	40.0	18.8	8.8		
Transmission through mosquito bite					31.688	.000
Correct	38.7	40.6	16.2	4.5		
Incorrect	43.6	38.0	16.3	2.2		
Does not know	35.5	41.9	16.0	6.5		
Transmission by touching					49.062	.000
Correct	40.7	40.5	14.7	4.1		
Incorrect	41.8	39.3	16.2	2.7		
Does not know	31.3	40.8	18.4	9.5		
Dieting to prevent transmission					52.745	.000
Correct	42.1	37.6	14.4	5.9		
Incorrect	41.1	40.8	16.1	2.1		
Does not know	34.7	39.5	18.3	7.5		
Healthy looking person can have AIDS					65.448	.000
Correct	42.7	38.9	15.7	2.7		
Incorrect	38.0	44.0	15.4	2.6		
Does not know	36.7	35.7	17.7	10.0		

6.8.2. Attitudes

Each respondent is asked to give her opinion on five HIV/AIDS-related issues. An affirmative response indicates that she approves or endorses the idea, and a negative response indicates that she does not. If she says that she does not know or is uncertain, then she is considered not to have an opinion on the issue. The information in Table 29 reveals a significant association between dominance in decision-making for the use of fertility control and all five factors examined.

Joint-decision-making is more common among women who disapprove of mandatory reporting of HIV and AIDS cases to official authorities, than among those who approve or who are uncertain. However, joint decision-making is higher among women endorsing the idea that a person testing positive for HIV or AIDS should be informed of his/her health status, as well as with those women who endorse the idea that a HIV-positive individual should disclose his/her status to his/her partner.[277] On the other hand, joint decision-making is less common among women who have no opinion on any issue examined.

The influence of the woman in deciding about the use of birth control is more widespread among women who do not have an opinion about partner disclosure or mandatory reporting of HIV and AIDS cases. Female dominance in decision-making for the use of fertility control is more common among those women who do not endorse the idea that a person who has tested positive for HIV should be informed of his/her status. The influence of the woman in fertility control decision-making is also higher among women endorsing the idea that a person who tests positive for AIDS should know his/her health status. On the other hand, it is less common among those who hold no opinion about whether or not individuals who are diagnosed with HIV or AIDS should be informed about their status. Female influence in decision-making is also more commonly found among women who both approve and disapprove of mandatory reporting of HIV and AIDS cases, as well as those who endorse partner disclosure.

However, the influence of the man in decision-making about the use of fertility control is commonly found among women who endorse the idea of mandatory reporting of HIV or AIDS cases.

[277] There are, however, only minor percentage differences between the three categories of women on the receipt of a positive diagnosis for HIV, which, in reality, might not constitute a real difference.

Table 29. Percentage distribution of the women by the patterns of dominance in decision-making for the use of fertility control by HIV/AIDS-related attitudes, 1998 SADHS

Variable	Both	Woman	Husband	Other	LR	p
Mandatory reporting of HIV cases					17.321	.008
Disapproves	42.9	39.9	13.8	3.2		
Approves	39.9	39.5	17.0	3.6		
No opinion	35.2	41.1	16.5	7.2		
Mandatory reporting of AIDS cases					14.459	.025
Disapproves	42.2	39.4	15.0	3.4		
Approves	40.0	39.5	16.9	3.6		
No opinion	35.8	42.5	14.5	7.3		
AIDS diagnosed should know					22.477	.001
Disapproves	38.6	39.0	18.9	3.4		
Approves	40.7	40.2	15.5	3.6		
No opinion	34.1	37.3	17.8	10.8		
HIV diagnosed should be informed					21.533	.000
Disapproves	37.2	40.1	19.5	3.3		
Approves	41.1	39.8	15.5	3.6		
No opinion	33.7	38.9	17.4	10.0		
Partner disclosure					22.916	.000
Disapproves	36.1	42.7	18.3	2.9		
Approves	41.3	39.1	15.8	3.8		
No opinion	28.2	45.3	17.7	8.8		

Male dominance in deciding about fertility control is also widespread among women who do not feel that people who test positive for HIV or AIDS should be informed about their status or that an HIV-infected person should disclose his/her status to a sexual partner. On the other hand, the influence of the man in deciding about using birth control is less common among women who believe that individuals testing positive for HIV or AIDS should be informed about their health status or that the HIV-infected person should inform his/her partner. Males are also less dominant among those women who disapprove of mandatory reporting of HIV or AIDS cases, as well as those holding no opinion on the issue of reporting AIDS cases.

The influence of others in decision-making for the use of fertility control is more widespread among women who hold no opinion about any of the issues under discussion. In general, the influence of others in the decision does not vary by whether or not the woman endorses most of the issues under discussion. However, the influence of others in the decision about use of fertility control is less common among those who do not endorse the notion of partner disclosure than among those who do.

6.9. Evaluating the validity of the hypotheses from findings in bivariate analyses

The lack of previous work done on the factors affecting dominance in decision-making for the use of fertility control in the South African context warrants a re-evaluation of the assumptions offered in Chapter three, in order to determine if they are supported by the findings obtained in the bivariate examination of the data.

6.9.1. Hypotheses about the effects of the background and socio-economic characteristics of the woman

The assumption that the background characteristics of the woman do not have any effect on the patterns of dominance in decision-making for the use of fertility control is confirmed by the finding that there is no significant relationship between the dependent variable and the number of children the respondent's mother had. The alternate hypothesis is supported by the finding of a significant relationship between the dependent variable, and both the childhood place of residence and birth order.

The finding of no significant association between the dependent variable and type or number of unions supports the null hypothesis. The alternate hypothesis is supported by the findings of a significant association between decision-making for the use of fertility and most socio-economic factors examined: place and province of residence; age; education; attending school; literacy; abuse; employment and occupation, as well as age at first marriage and length of time elapsed since the first marriage.

6.9.2. Hypotheses about the effect of husband's characteristics

The findings that decision-making for the use of fertility control is affected by the characteristics of the husband appears to be supported by the findings of a significant association between the dependent variable and husband's age, education, occupation, approval for family planning, and whether or not he regularly provided money. The null hypothesis - of no significant relationship between the dependent variable and the characteristics of the husband - finds no support in bivariate examination.

6.6.3. Hypotheses about husband-wife's comparative characteristics

The assumption that the husband-wife's comparative characteristics affect dominance in decision-making for the use of fertility control is supported by the finding of a

significant association between the dependent variable and their comparative ages, education, approval of family planning and fertility desires, as well as their relative difference in ages. The examination finds no evidence is no support for the null hypothesis of no significant relationship between the dependent variable and the husband-wife's comparative characteristics.

6.9.4. Hypotheses about the characteristics of the household

The finding of no significant association between decision-making for fertility control and decision-making about how to spend the money that the woman earns lends some support to the assumption that dominance in decision-making for the use of fertility control is not affected by the characteristics of the household.

The assumption that the characteristics of the household have a significant effect on the dependent variable is confirmed by the findings of a significant relationship between the dependent variable and a number of household-related factors. Namely, the size, gender and age of the head of the household; wealth quintile and number of durables; the numbers of children five years or younger, own children as well as numbers of sons and daughters co-residing in the home, husband's co-residency, the home language and place of work.

6.9.5. Hypotheses about sexual and reproductive-related factors

The finding that the dependent variable is unrelated to the woman's age at sexual debut; number of partners, or reason for non-condom use at last sexual intercourse appears to support the null hypothesis that sexual and reproductive factors have no significant effect on the patterns of dominance in decision-making for the use of fertility control. The hypothesis is further supported by the finding that decision-making for the use of fertility control is unrelated to the respondent's age at birth of the first child, numbers of live births or living children (including sons and daughters), pregnancy termination, the interval between births, or current pregnancy.

The finding of a significant association between the dependent variable and age at menarche; the last sexual partner and condom use at last sexual intercourse, as well as having given birth in the last five or three years, would tend to support the alternate hypothesis. The finding of an association between the dependent variable and ever use of a method also supports this hypothesis. The findings of a significant

relationship between the patterns of dominance in decision-making for the use of fertility control and the first method used; history of condom use; current method and contraceptive need also lend support to the assumption.

6.9.6. Hypotheses about the effect of reproductive knowledge and attitudes

The finding that dominance in decision-making for the use of fertility control is unrelated to the woman's fertility desires or attitude towards the prospects of a pregnancy in the next few months furnishes evidence in support of the hypothesised null association between the dependent variable and reproductive knowledge and attitudes.

The assumption that reproductive knowledge and attitudes have a significant effect on dominance in decision-making for the use of fertility control is confirmed by the finding of a significant relationship between the dependent variable and the ideal number of children. The finding that the dependent variable is significantly related to the woman's approval of family planning, and her acceptance of radio or television for promoting family planning, also tend to support this assumption. The finding of an association between the dependent variable and knowledge of reproductive physiology, the 1996-TOP Act, as well as knowledge of a source for birth control or condoms, further support the hypothesis.

6.9.7. Hypotheses about information and communication about family planning

The assumption that dominance in decision-making is unaffected by exposure to sources of information and communication about family planning is supported by the finding that the dependent variable is not related to discussing family planning with the mother during the few months prior to the interview.

The finding of a significant relationship between the dependent variable and obtaining information about family planning from print and electronic media in the few months prior to the interview tends to support the alternate hypothesis. Additional support for the alternate hypothesis comes from the findings of a significant statistical relationship between the dependent variable and discussing family planning with a friend or neighbour, a daughter, a sister or with the mother in the few months prior to the interview, as well as the frequency of spousal discussions about family planning during the year prior to the interview.

6.9.8. Hypotheses about information and communication about HIV/AIDS

The hypothesised null association between the dependent variable and exposure to sources of information and communication is confirmed by the finding of no significant association between the dependent variable and obtaining such information from a clinic or healthcare workers during the previous year.

The finding that dominance in decision-making is related to obtaining information about HIV/AIDS from the radio, television, newspapers or magazines or from pamphlets or posters during the year prior to the interview appears to support the alternate hypothesis. The finding of a significant association between the dependent variable and obtaining such information - and the amount of information that was obtained - from a sexual partner or the husband, relative(s), friend or neighbour(s) or from the clinic or healthcare worker(s) also furnish evidence for this assumption.

6.10. Remarks on the findings from bivariate analyses of the data

The results obtained through bivariate analyses of the data provide evidence that would appear to support the assumption of a significant association between the dependent variable and each category of the predictors examined. However, since in multivariate analyses, the relationship between the dependent and each of the predictor variables is examined while controlling for the other variables, a different set of results is likely to be obtained.

Chapter 7

Modelling the patterns of dominance in decision-making for the use of fertility control

Multinomial logistic regression is used to estimate the effect of the following factors, separately on the likelihood of a male, joint, or other pattern of dominance versus a female pattern of dominance in deciding about the use of fertility control: background and socio-economic characteristics of the woman; the husband's characteristics; husband-wife's comparative characteristics; the characteristics of the household; sexual and reproductive-related factors; information and communication; reproductive knowledge and attitudes and HIV/AIDS knowledge and attitudes.

7.1. The effects of the background and socio-economic characteristics on dominance in decision-making for the use of fertility control

7.1.1. The influence of others relative to female dominance

The examination reveals a decrease in the likelihood (.54) of another person (other than the woman and /or husband) influencing the decision about whether or not to use fertility control when the woman's birth order is fifth or higher, as oppose to when she is the first or second-born child. The likelihood of others deciding about the use of fertility control is also diminished when the woman is between 25 and 29 years old (.39), or between 30 and 34 years or 35 to 39 years (.40, each), relative to being 45 to 49 years. The model also shows a significant decrease (.33) in the likelihood that others decide about the use of fertility control if the woman lives in an urban rather than in a rural one (Table 30).

On the other hand, the odds of others making the decision about fertility control are significantly improved if the woman has no education (5.32), or primary education (2.56), as oppose to her having secondary or higher education. The likelihood that others are dominant in the decision about using fertility control is also significantly increased if the woman works in a professional, technical or managerial occupation (4.40), or in a clerical, sales and service occupation (3.26) than if she works in an unskilled manual one, as well as if the lapse of time since the first marriage is 10-14 years (1.99) as opposed to 20 years or longer.

Table 30. Odd ratios from multinominal logistic regression analysis examining the relationship between dominance in decision-making for the use of fertility control and the background and the socio-economic characteristics of the woman, 1998 SADHS.

Characteristic		Decides about using methods					
		Other		Jointly		Husband	
Childhood place of residence	City	1.26		0.97		0.49	**
	Town	0.73		1.60	***	0.67	*
	Countryside	ref.		ref.		ref.	
Mother's children	1-2	1.25		1.02		1.02	
	3-4	0.67		0.90		1.18	
	5+	ref.		ref.		ref.	
Respondent's Order of Birth	Third & Fourth	1.03		1.20		1.23	
	Fifth & Higher	0.54	*	1.09		0.71	*
	First & Second	ref.		ref.		ref.	
Age	15-24 years	0.56		1.08		1.33	
	25-29 years	0.39	**	1.38	*	1.11	
	30-34 years	0.40	**	1.25		1.13	
	35-39 years	0.40	**	1.46	*	1.39	
	40-44 years	0.72		1.34		1.19	
	45-49 years	ref.		ref.		ref.	
Province	Western Cape	0.71		0.82		1.40	
	Eastern Cape	0.57		0.85		0.81	
	Northern Cape	1.18		0.63		1.56	
	Free State	1.38		0.94		1.13	
	KwaZulu-Natal	0.49		0.75		0.81	
	North West	0.84		0.93		1.16	
	Gauteng	1.21		0.86		0.80	
	Mpumalanga	1.19		1.06		1.08	
	Northern Province	ref.		ref.		ref.	
Urban/Rural	Urban	0.33	***	0.72	**	0.71	*
	Rural	ref.		ref.		ref.	
Literacy	Difficult or illiterate	0.76		0.99		1.08	
	Easy	ref.		ref.		ref.	
Educational level	None	5.32	***	0.78		1.00	
	Primary	2.56	***	0.90		1.10	
	Secondary r higher	ref.		ref.		ref.	

Continued on next page

Table 30, continued

Characteristic		Decides about using methods		
		Other	Jointly	Husband
Respondent still in school	No	0.68	0.86	0.67 **
	Yes	ref.	ref.	ref.
Respondent currently working	No	1.15	1.34	0.51
	Yes	ref.	ref.	ref.
Respondent's occupation	Not working	0.43	0.45 ***	1.87
	Prof., Tech., Managerial	4.40 ***	1.61 *	2.38 **
	Clerical, Sales & Services	3.26 **	1.31	1.32
	Skilled manual	0.89	1.53	1.33
	Unskilled manual	ref.	ref.	ref.
Any type of abuse	No	1.50	1.01	0.98
	Yes	ref.	ref.	ref.
Age at First Marriage	19-24	1.05	0.94	0.90
	25-46	0.62	0.75 *	0.81
	10-18	ref.	ref.	ref.
Type of union	Formal	0.89	0.97	1.04
	Consensual	ref.	ref.	ref.
Time since first marriage	0-4	1.34	1.21	1.39 *
	5-9	1.72	1.13	1.36
	10-14	1.99 *	1.13	1.17
	15-19	1.25	1.03	1.17
	20+	ref.	ref.	ref.
Number of unions	Once	1.51	1.15	1.03
	More than once	ref.	ref.	ref.
**=p<.05, **=p<.01, ***=p<.001, N=3319*				
-2 Log Likelihood = 7266.862, Chi-Square = 440.282, df = 114, Sig. = .000, Pseudo R^2 – Nagelkerke = .138				

7.1.2. Joint decision-making relative to female dominance

Only one of the variables – childhood place of residence - that assess the influence of the background characteristics of the woman has a significant influence on joint decision-making about the use of fertility control. The information in Table 30 shows a significant increase (1.60) in the likelihood of joint decision-making for the use of fertility control if the woman was raised in a town rather than in the countryside. The model shows a significant association between joint decision-making for the use of fertility control and four of the variables estimating the effect of the socio-economic characteristics of the woman on decision-making for the use of fertility control: viz., current place of residence, age, occupation and age at first marriage.

The likelihood that the decision about using fertility control is jointly made rather than solely made by the woman is significantly increased among women between the ages of 25 and 29 years (1.38), and among those between the ages of 35 and 39 years (1.46) relative to those between 45 and 49 years. There is also a significant increase (1.61) in the likelihood of joint decision-making if the woman is working in a professional, technical or managerial occupation, than in an unskilled manual one.

In the model (Table 30), the likelihood that the decision about use of fertility control is jointly decided upon, rather than the woman influencing the decision, is diminished if the woman is not working (.45) than if she works in an unskilled manual occupation. The likelihood of joint decision-making is also decreased significantly if the woman lives in an urban area (.72) than if she lives in a rural one or if her first marriage occurred when she was between 25 and 29 years (.75), than between 10 and 18 years

7.1.3. The influence of the husband relative to female dominance

There is a significant decrease in the likelihood of male dominance, relative to female dominance, if the woman was raised in a city (.49) or town (.67) than in the countryside. There is also a significant decrease in the likelihood that the husband is dominant in decision-making about the use of fertility control when the woman lives in an urban (.71) rather than in a rural one or if she is not studying (.67) than if she is.

The odds that the husband is dominant in decision-making about the use of fertility control are significantly increased, relative to the woman if the woman works in a

professional, technical or managerial occupation (2.38),, instead of an unskilled manual one or if the duration of time since the first marriage is four or fewer years rather (1.39) rather than 20 years or longer.

7.2. The influence of the husband's characteristics on decision-making for the use of fertility control

7.2.1. The influence of others relative to female dominance

Table 31. Odd ratios from multinominal logistic regression analysis examining the relationship between dominance in decision-making for the use of fertility control and the characteristics of the husband, 1998 SADHS.

Characteristic		Decides about using methods					
		Other		Jointly		Husband	
Husband's age(groups)	18-29	0.94		1.44		1.01	
	30-39	0.25	***	1.34		0.93	
	40-49	0.56		1.47		1.15	
	50+	1.19		1.42		0.99	
	Not Specified	ref.		ref.		ref.	
Husband's educational level	None	2.26	**	0.90		1.07	
	Primary	1.81	*	0.95		0.99	
	Secondary or higher	ref.		ref.		ref.	
Husband's occupation	Clerical, sales & services	2.00		1.10		1.17	
	Manual, Skilled	1.66		0.94		1.13	
	Manual, Unskilled	2.73		1.24		1.78	*
	Non-numeric	1.37		0.85		1.73	
	Professional, Technical & Managerial	ref.		ref.		ref.	
Husband's regular provision of money	Not regularly provided	0.59	*	0.71	***	0.99	
	Regularly provided	ref.		ref.		ref.	
Husband's approval for family planning	Approves	0.19	***	4.16	***	1.21	
	Don't know	1.96	**	0.74		0.43	***
	Disapproves	ref.		ref.		ref.	
*=p<.05, **=p<.01, ***=p<.001, N=3359							
-2 Log Likelihood = 1873.517, Chi-Square = 635.593, df = 39, Sig. = .000, Pseudo R^2 - Nagelkerke = .191							

There is a decrease in the likelihood of the influence of others in decision-making for the use of fertility control when the husband is between 30 and 39 years (.25), rather than if the woman does not know his age or if the husband did not regularly provide money during the year prior to the interview (.59), than if he did. The likelihood of the influence of others is diminished (.19) if the husband approves of family planning.

The likelihood of the influence of others significantly increases when the husband has no education (2.26) or primary education (1.81), than if he has secondary or higher or if the woman does not know whether he approves or disapproves of family planning (1.96) than if he disapproves (Table 31).

7.2.3. The influence of the husband relative to female dominance

The probability that the husband will be dominant relative to the woman in decision-making for the use of fertility control is enhanced significantly (1.78) when he is working in an unskilled manual occupation rather than in a professional, technical or managerial occupation. The model shows that likelihood that the husband, and not the woman, influences the decision about the use of fertility control is decreased (.43) when the woman does not know whether or not her husband approves of family planning relative to when he is disapproving (Table 31).

7.3. The influence of the husband-wife's comparative characteristics on decision-making for the use of fertility control

7.3.1. The influence of others relative to female dominance

There is a significant decrease (.47) in the likelihood of the influence of others if the woman is less educated than the husband is, than if the woman does not know the husband's level of education. The likelihood that the decision about the use of fertility control is made by others, rather than by the woman, is reduced significantly if there is joint approval (or approval by the man only) for family planning (.10) or if only the woman approves of family planning (.31) than if one or both are uncertain about her/his/their approval. The odds that others are dominant in deciding about fertility control increases significantly (2.46) when there is joint disapproval for family planning than when there is uncertainty about approval for family planning (Table 32).

7.3.2. Joint decision-making relative to female dominance

Table 32 shows a significant decrease (.62) in joint decision-making when the difference in the husband-wife's relative ages is two or fewer years than if the difference in their ages cannot be determined (i.e. the woman does not know how old her husband is). There is also a significant decrease in the likelihood of joint decision-making if the husband wants more (.40) or less children than the woman wants (.63) or if the woman is uncertain of how many children he wants (.45) than if the woman wants the same number of children as the husband.

The odds of joint decision-making, relative to female dominance, in decision-making for the use fertility control is significantly increased (1.86) if the woman is younger than her husband than if she does not know his age. The odds of joint decision-making is also significantly increased when there is either joint approval (or approval of the man only) for family planning (3.83) as well as joint disapproval (2.72) for family planning, than if there is uncertainty about its approval.

Table 32. Odd ratios from multinominal logistic regression analysis examining the relationship between dominance in decision-making for fertility control and husband-wife's comparative characteristics, 1998 SADHS.

Characteristic		Decides about using methods					
		Other		Jointly		Husband	
Relative ages	0-2	0.61		0.62	*	0.69	
	3-5	0.94		0.75		0.93	
	6-9	0.90		0.76		1.25	
	10+	1.10		0.74		1.21	
	Undetermined	ref.		ref.		ref.	
Comparative age	Older	0.71		1.79		0.88	
	Same	0.37		1.84		1.27	
	Younger	0.94		1.86	*	0.94	
	Can't Compare	ref.		ref.		ref.	
Comparative education	Less	0.47	**	1.04		0.87	
	More	0.70		1.03		0.86	
	Same	0.86		1.13		0.80	
	Can't compare	ref.		ref.		ref.	
Comparative approval for Family planning	Both (or man only)	0.10	***	3.83	***	1.77	**
	Woman only	0.31	***	0.87		1.35	
	Both disapprove	2.46	**	2.72	***	2.89	***
	Uncertain (one or both)	ref.		ref.		ref.	
Comparative fertility desires	Husband wants more	0.66		0.40	***	0.83	
	Husband wants less	1.28		0.63	*	1.38	
	Uncertain	1.30		0.45	***	0.39	***
	Both want same	ref.		ref.		ref.	
**=p<.05, **=p<.01, ***=p<.001, N=3419*							
-2 Log Likelihood = 1949.427, Chi-Square =773.193, df = 48, Sig. = .000, Pseudo R^2 - Nagelkerke = .224							

7.3.3. The influence of the husband relative to the influence of the woman

There is a significant decrease in the odds that the husband is dominant in deciding about fertility control (.39) if the woman is uncertain about her husband's fertility desires than if both want the same number of children (Table 32). There is a significant increase in the likelihood of male dominance in decision-making for the use of fertility control if there is either joint approval (or approval of the man only) or joint disapproval for family planning (respectively, 1.77 and 2.89) than if one or both are uncertain about her/his/their approval for family planning.

7.4. The influence of the characteristics of the household on decision-making for the use of fertility control

7.4.1. The influence of others relative to female dominance

Table 33 shows a decrease (.33) in the likelihood that others, rather than the woman, decide about the use of fertility control when the head of the household is between 30 and 39 years, than 60 years or older. The odds that others, and not the woman, are dominant in decision-making for the use of fertility control are decreased if the woman prefers speaking an Nguni (.28) or Sotho dialect (.37) in the home than if she prefers a non-Bantu dialect. The likelihood of the influence of others in decision-making for the use of fertility control also decreases if the woman co-resides with the husband (.53). The table also shows a significant decrease in the odds of others deciding about the use of fertility control if one (.25), two (.09) or three (.11) of the woman's own children are co-residing in the household, than if there is none.

The likelihood of the influence of others in decision-making for the use of fertility control increases significantly (1.69) if the woman lives in a medium-sized household rather than a large-sized one.

7.4.2. Joint decision-making relative to female dominance

Among the women in this study, the number of children five years or younger living in the household is the only household-related factor affecting joint decision-making in the model of the effect of the characteristics of the for the use of fertility control. Table 33 shows significant decreases (.61-.80) in the likelihood that the decision about the use of fertility control is jointly made relative to the woman deciding if there are three of fewer children five years or younger living in the household.

Table 33. Odd ratios from multinominal logistic regression analysis examining the relationship between decision-making for fertility control and the characteristics of the household, 1998 SADHS.

Characteristic		Decides about using methods		
		Other	Jointly	Husband
Head of household	Else	0.69	0.90	1.10
	Head	0.70	0.85	0.99
	Husband	ref.	ref.	ref.
Sex of household head	Male	0.82	1.05	0.98
	Female	ref.	ref.	ref.
Age of Head of Household	15-29	0.55	1.42	0.87
	30-39	0.33 **	1.24	0.74
	40-44	0.63	1.36	0.98
	45-60	0.96	1.00	0.80
	61+	ref.	ref.	ref.
Preferred Language	Nguni	0.28 **	0.88	0.50 **
	Sotho	0.37 *	1.08	0.49 **
	Other Bantu	0.38	1.50	0.67
	Non-Bantu	ref.	ref.	ref.
Husband lives in house	Living with her	0.53 **	1.17	0.83
	Staying elsewhere	ref.	ref.	ref.
Quintiles of wealth index	Two lowest quintiles	0.74	0.88	0.98
	Middle quintile	0.62	1.05	1.16
	Two highest quintiles	ref.	ref.	ref.
Size of Household	1-3	1.74	0.99	1.45
	4-5	1.69 *	1.03	1.13
	6+	ref.	ref.	ref.
Children 5 years and less at home	1-2	0.98	0.80 *	1.15
	3+	0.83	0.61 *	1.54
	0	ref.	ref.	ref.
Sons at home	1-2	2.24	1.32	1.04
	3+	2.34	1.39	0.90
	0	ref.	ref.	ref.
Daughters at home	1-2	1.70	1.02	1.07
	3+	3.14	0.96	0.63
	0	ref.	ref.	ref.
Own children at home (GP)	1	0.25 **	1.01	1.07
	2	0.09 **	0.90	0.99
	3	0.11 **	0.95	1.18
	4	0.23	0.97	1.72
	5+	0.12	0.90	2.62
	0	ref.	ref.	ref.
**=p<.05, **=p<.01, ***=p<.001, N=3383*				
-2 Log Likelihood = 6786.137, Chi-Square =213.393, df = 78, Sig. = .000, Pseudo R2 - Nagelkerke = .068				

7.4.3. The influence of the husband relative to female dominance

The information in Table 33 shows that male dominance (i.e. the influence of the husband is related only to language preference. The examination reveals a significant decrease in the likelihood of male dominance relative to female dominance if the woman prefers speaking an Nguni (.50) or Sotho (.49) dialect rather than a non-Bantu dialect in the home.[278]

7.5. The influence of sexual and reproductive-related factors on decision-making for the use of fertility control

7.5.1. The influence of others relative to female dominance

The influence of others versus the influence of the woman in decision-making for the use of fertility is predicted by whether or not the woman has had a birth in the past five years, as well as the reason for non-use of the condom at the time of last sexual intercourse. Table 34 shows that the likelihood that others decide about the use of fertility control is increased significantly (2.41) if the woman has not given birth during the five years prior to the interview than if she has.

There is a significant decrease in the likelihood that others are more dominant in the decision, relative to the woman, (.20) if method ignorance is the reason why the condom was not used the last time that she had sex, than if the reason for non-use is fertility-related.

7.5.2. Joint decision-making relative to female dominance

There is a significant decrease in the likelihood of joint decision-making relative to female dominance in the decision about the use of fertility control if the woman's age at sexual debut is between 17 and 18 years (.30), or 14 and 16 years (.29), than if she does not remember how old she was at the time (or is inconsistent in her responses).

Table 34 shows that having a child in the year prior to the interview significantly increases (1.58). The likelihood of a joint pattern of decision-making in fertility control relative to a female pattern.

[278] Qualitative information on gender relationship among and between people from different linguistic (tribal or ethnic) groups is necessary in order to determine the possible reason(s) for the findings.

7.5.3. The influence of the husband relative to female dominance

Table 34 shows that giving birth in the past year also increases the likelihood (1.55) of the influence of the husband, relative to the influence of the woman, in the decision about the use of fertility control.[279]

7.6. The influence of sources of information and communication on decision-making for the use of fertility control

7.6.1. The influence of others relative to the influence of the woman

The model of the effect of sources of information and communication (Table 35) shows that the likelihood of the influence of others in deciding about fertility control is significantly enhanced (2.40) if the woman watches television at least once a week, or by listen to the radio daily (1.71) than if she does not. The information in the table also shows a significant increase in the likelihood that others influence the decision, relative to the woman (3.92), if the woman receives information about family planning while visiting a health facility during the past year. There is a significant increase (3.33) in the odds that others, and not the woman, influence the decision about whether or not to use fertility control if she obtained information about family planning from a poster(s) during the few months prior to the interview, than if she did not.

It is found that the odds that others influence the decision are reduced significantly if the woman discussed family planning with her husband once, twice (.21), or more often (.23), during the year prior to the interview than if she never had such a discussion. However, there is a significant increase in the likelihood that others are dominant in the decision, relative to the woman, if the woman did not hear about family planning from her friends or neighbours during the year prior to the interview, than if she did. There is a significant reduction in the likelihood that another person influences the decision about using fertility control (.48), relative to the woman, if she did not hear about HIV/AIDS from a relative during the year prior to the interview, than if she does. There is a significant reduction in the odds that others influence the decision and not by the woman (.26) if she did not obtain any information about HIV/AIDS from watching television during the year prior to the interview than if she had received such information. Not getting information about HIV/AIDS from

[279] It is noted that none of the variables in the model contributes to a significant increase in the likelihood of male dominance among the women in this study.

pamphlets or posters in the previous year significantly reduces the odds (.42) that the decision about use of fertility control is influenced others and not the woman.

Table 34. Odd ratios from multinominal logistic regression analysis examining the relationship between dominance in decision-making for the use of fertility control and sexual and reproductive-related factors, 1998 SADHS.

Characteristic		Decides about using methods		
		Other	Jointly	Husband
Live Births	0-1	0.2	1.17	3.23
	2-3	0.64	1.10	1.00
	4-5	0.73	1.14	1.12
	6+	ref.	ref.	ref.
Living children	0-1	2.56	1.13	0.21
	2-3	1.80	1.19	0.81
	4-5	1.76	1.36	0.95
	6+	ref.	ref.	ref.
Living Sons	0	0.68	0.91	1.31
	1	0.90	0.78	1.02
	2	1.08	0.83	0.86
	3	0.89	0.80	0.80
	4+	ref.	ref.	ref.
Living Daughters	0	0.44	1.05	1.16
	1	0.60	0.85	1.13
	2	0.48	0.81	0.95
	3	0.37	1.08	0.98
	4+	ref.	ref.	ref.
Births in last 5 years	No	2.41 *	0.96	1.13
	Yes	ref.	ref.	ref.
Births last 3 years	No	1.22	1.24	0.75
	Yes	ref.	ref.	ref.
Age at first intercourse	19 or older	0.29	0.33	0.63
	17-18	0.29	0.30 *	0.57
	14-16	0.30	0.29 *	0.50
	13 or younger	0.12	0.37	0.51
	Don't know/ Inconsistent	ref.	ref.	ref.
Birth in Past Year	Yes	1.13	1.58 **	1.55 *
	No	ref.	ref.	ref.
Ever had a terminated pregnancy	No	0.75	1.08	1.16
	Yes	ref.	ref.	ref.
Ever use of any method	Never used	1.02	1.21	1.31
	Used	ref.	ref.	ref.
Children at first use	0	1.40	1.36	1.56
	1	1.12	1.14	1.34
	2	1.57	1.24	1.34
	3	0.55	1.02	1.45
	4+	na	na	na
	Never used	ref.	ref.	ref.

Continued on following page.

Table 34, continued.

Characteristic		Decides about using methods		
		Other	Jointly	Husband
Current contraceptive method	Not using	0.82	1.03	0.94
	Pill	0.66	1.00	0.98
	Injections	0.82	1.28	1.11
	Sterilisation	0.60	1.50	1.14
	Other	ref.	ref.	ref.
Contraceptive need	Need to space	1.24	0.86	1.19
	Need to limit	1.17	0.86	1.35
	Using to space	1.44	1.13	1.27
	Using to limit	na	na	na
	Desire birth < 2 years	0.75	0.94	1.25
	In-fecund, menopausal	ref.	ref.	ref.
Ever Used Condoms	Ever	0.58	0.85	0.87
	Never	ref.	ref.	ref.
Partners past year	One or less	0.68	1.13	1.24
	Two or more	ref.	ref.	ref.
Relationship to last sex partner	Husband	1.87	1.00	0.85
	Other	ref.	ref.	ref.
Age a first birth		1.03	0.99	0.97
Last intercourse used condom	No	na	na	na
Main reason condom was not used at last intercourse	Don't know	0.40	1.32	1.41
	Perceived low degree of risk	2.33	1.15	1.71
	Respondent dislike	1.01	0.68	0.90
	Husband dislike	0.89	0.82	1.14
	Method ignorance	0.20 *	0.60	0.88
	Use ignorance	0.87	1.02	1.70
	Condom use anxieties	0.29	1.48	1.23
	Access-related	0.34	0.68	0.95
	Context of relationship	0.28	1.14	1.25
	Prefer sex "flesh to flesh"	0.84	0.94	0.99
	Other	0.55	0.88	0.84
	Fertility-related	ref	ref	ref.

*=p<.05, **=p<.01, ***=p<.001, N=2181

-2 Log Likelihood = 4863.407, Chi-Square = 172.766, df = 150, Sig. = .000, Pseudo R^2 - Nagelkerke = .085

There is a significant increase in the likelihood of others influencing the decision about the use of fertility control, relative to the woman, if she received a lot of (3.36) or no such information from relatives (2.28) during that time, than receiving some. There is also an increase the likelihood of the dominance of others if the woman got a lot of (3.16) or no (4.03) information about HIV/AIDS from watching television in the previous year, than if she got some.

7.6.2. Joint decision-making relative to the influence of the woman

The odds of joint decision-making is diminished (relative to the woman making the decision) if the woman got no information about HIV/AIDS from the husband (.61), television (.43) or pamphlets or posters (.64) during the previous year than if she did (Table 35).

Table 35. Odd ratios from multinominal logistic regression analysis examining the relationship between decision-making for fertility control and sources of information and communication, 1998 SADHS.

Characteristic		Decides about using methods		
		Other	Jointly	Husband
Has radio	Yes	1.01	1.03	0.81
	No	ref.	ref.	ref.
Has television	Yes	1.24	0.91	1.03
	No	ref.	ref.	ref.
Reads newspaper once a week	No	0.83	0.87	1.36
	Yes	ref.	ref.	ref.
Watches TV every week	No	2.40 **	1.11	1.37 * *
	Yes	ref.	ref.	ref.
Listens to radio every day	No	1.71 *	0.98	1.25
	Yes	ref.	ref.	ref.
Visited health facility last 12 months	No	0.84	1.12	0.94
	Yes	ref.	ref.	ref.
At health facility, told of family planning	No	3.92 **	1.08	1.11
	Yes	ref.	ref.	ref.
Heard about family planning on radio last months	No	0.66	0.79	1.04
	Yes	ref.	ref.	ref.
Heard about family planning on TV last months	No	1.00	0.82	0.89
	Yes	ref.	ref.	ref.
Heard about family planning from newspaper last months	No	0.75	0.82	0.61 **
	Yes	ref.	ref.	ref.
Heard about family planning from poster last months	No	3.33 *	1.12	1.89 **
	Yes	ref.	ref.	ref.
Heard about family planning on brochures last months	No	1.10	1.38 *	0.91
	Yes	ref.	ref.	ref.
Frequency of spousal discussions about family planning past year	More often	0.23 ***	4.08 ***	3.01 ***
	Once o twice	0.21 ***	2.28 ***	1.83 ***
	Never	ref.	ref.	ref.
Discussed Family Planning with sister(s)	No	1.15	1.34	1.77
	Yes	ref.	ref.	ref.
Discussed Family Planning with daughter(s)	No	0.49	0.99	2.69 *
	Yes	ref.	ref.	ref.
Discussed Family Planning with friends/neighbours	No	3.12 **	1.07	1.71 ***
	Yes	ref.	ref.	ref.

Continued on following page.

Table 35 continued.

Characteristic		Decides about using methods					
		Other		Jointly		Husband	
AIDS information obtained from partner(s)	None	1.20		0.61	**	0.88	
	A lot	0.94		1.13		1.03	
	Some	ref.		ref.		ref.	
AIDS: relatives	No	0.48	*	0.99		0.85	
	Yes	ref.		ref.		ref.	
AIDS information obtained from relatives	None	2.28	*	0.92		0.95	
	A lot	3.36	**	0.79		1.00	
	Some	ref.		ref.		ref.	
AIDS: radio	No	1.63		1.39	*	0.66	*
	Yes	ref.		ref.		ref.	
AIDS information obtained for radio	None	1.03		0.99		0.76	
	A lot	0.83		1.07		1.13	
	Some	ref.		ref.		ref.	
AIDS: television	No	0.26	***	0.43	***	0.76	
	Yes	ref.		ref.		ref.	
AIDS information obtained from TV	None	4.03	**	0.79		1.09	
	A lot	3.16	*	0.68	*	1.16	
	Some	ref.		ref.		ref.	
AIDS: newspaper or /magazines	No	1.41		1.26		1.22	
	Yes	ref.		ref.		ref.	
AIDS information obtained from Newspaper	None	0.83		1.20		1.32	
	A lot	1.28		1.47	**	1.22	
	Some	ref.		ref.		ref.	
AIDS: pamphlets/posters	No	0.42	**	0.64	***	0.72	*
	Yes	ref.		ref.		ref.	
AIDS information obtained from pamphlets Or posters	None	1.60		1.10		1.19	
	A lot	0.69		0.86		0.84	
	Some	ref.		ref.		ref.	
AIDS: clinic/health workers	No	1.17		1.09		1.07	
	Yes	ref.		ref.		ref.	
AIDS information obtained from health workers	None	1.19		1.24		1.03	
	A lot	1.17		1.04		0.59	**
	Some	ref.		ref.		ref.	
**=p<.05, **=p<.01, ***=p<.001, N=3081*							
-2 Log Likelihood = 6320.633, Chi-Square = 818.258, df = 123, Sig. = .000, Pseudo R^2 - Nagelkerke = .258							

There is also a significant decrease (.68) in the likelihood that the decision is jointly made, rather than the woman doing so, if she got a lot of HIV/AIDS-related information from the television than if she only got some of this type of information through television viewing.

There is a significant increase in the likelihood of joint decision-making - relative to female dominance in the decision about the use of fertility control - if the woman did not obtain any information about family planning from posters or pamphlets (1.38) in

the few months prior to the interview, than if she did. The model also illustrates significant increases in the likelihood of joint decision-making for the use of fertility control of the woman did not get any HIV/AIDS-related information from the radio than if she did (1.39) or if she got a lot of such information (1.47) rather than if she got some from this source.

Consistent with the findings from a number of studies, the examination reveals that the likelihood of joint decision-making is increased significantly if spousal communication about family planning occurred once or twice (2.28) or more often (4.08) during the previous year than not at all.

7.6.3. The influence of the husband relative to female dominance

The information in Table 35 also shows that the likelihood that the husband, and not the woman, influences the decision about whether (or not) to use fertility control is significantly increased if the woman discussed family planning with her husband once or twice (1.89) or more often (3.01) during the year before the interview than if she never did.[280]

The model reveals a significant increase (1.37) in the likelihood of male dominance in decision-making for the use of fertility control, if the woman does not watch television weekly, than if she does. There is also a significant increase (1.89) in the likelihood that the husband influences the decision about whether or not to use fertility control, if the woman obtained information about family planning from a poster(s) during the few months prior to the interview than if she did not.

The model also shows a significant increase in the likelihood of male dominance if the woman discussed family planning with her husband once or twice (1.83) or more often (3.01) during the year prior to the interview than if she had not. The likelihood of the decision about using fertility control being influenced by the husband (rather than by the woman) is also enhanced (2.69) if she did not discuss family planning with her daughter(s) or with a friends or neighbour (1.71) during the few months prior to the interview, than if she had done so.

[280] Qualitative studies designed to examine the context and content of spousal discussions about family planning can help to clarify the finding that joint decision-making and male dominance are both positively correlated to frequency of spousal communication on the issue.

The odds of male dominance is less probable (.61) if the woman did not obtain any HIV/AIDS-related information from reading the newspaper or from posters or pamphlets (.72) or from listening to the radio (.66) during the year prior to the interview than if she did. The examination however reveals that the likelihood of a significant increase in the dominance of the husband (.59) if the woman got such information from the clinic or a healthcare worker during the year prior to the interview, than if she had not.

7.7. The influence of HIV/AIDS knowledge and attitudes on decision-making for the use of fertility control

7.7.1. The influence others relative to the influence of the woman

The odds that others influence the decision about using fertility control, relative to the woman, increase significantly (2.59 -3.11) if the woman is ignorant about the fact that HIV-infection cannot be prevented by eating well, than if she is aware of this fact (Table 36). There is also a significant increase in the likelihood of others influencing the decision about using fertility control (6.10) if the woman does not know whether (or not) HIV infection can be prevented by using condoms during sexual intercourse, than if she knows that using condoms can prevent viral infection. The odds that others, rather than the woman, influence the decision about the use of fertility control is significantly increased (2.83) if the woman knows that a healthy-looking person can have AIDS than if she does not know whether this is true or false.

7.7.2. Joint decision-making vs. female dominance

Table 36 shows a significant increase in the likelihood (1.64) that the decision about using fertility control is jointly made, relative to the woman influencing the decision, if she knows that a healthy person can have AIDS, than if she is uncertain about whether or not this could occur.

The table also shows that joint decision-making for the use of fertility control is significantly increased by whether the woman endorses (2.11), or does not endorse (1.58), the idea of partner disclosure, than if she has no opinion on the issue.
There is a significant increase in the odds (.81) of joint decision-making for the use of fertility control if the woman believes that HIV infection can be hindered by avoiding mosquito bites, than if she is uncertain about whether or not this is so. There is also a decrease in the likelihood of joint decision-making for the use of fertility control (.077),

relative to the woman making the decision, if the woman believes that avoiding public toilets can assist in preventing HIV infection.

There is a significant increase in the likelihood of others influencing the decision about using fertility control (6.10) if the woman does not know whether (or not) HIV infection can be prevented by using condoms during sexual intercourse, than if she knows that using condoms does prevent viral infection.

7.7.3. The influence of the husband vs. female dominance

The likelihood of the influence of the husband in decision-making for the use of fertility control is significantly increased, relative to the influence of the woman, if she does not knows someone who is HIV positive, than if she does (1.56).

The odds of male dominance in decision-making for the use of fertility control are significantly increased (2.04) if the woman is uncertain that using condoms during sexual intercourse is a viable strategy for preventing HIV infection, than if she knows that condoms can be used to prevent the spread of the virus. There is also a significant increase in the odds that the man makes the decision about the use of fertility control if the woman believes that injecting with clean needles cannot stop HIV infection, than if she believes that it can do so (2.12).

Table 36 shows that the likelihood of the man, rather than the woman influencing the decision about the use of fertility control, is increased significantly (2.65) if the woman endorses the idea of mandatory reporting of AIDS cases, than of she holds no opinion on the issue. On the other hand, the likelihood of male dominance in the decision about using fertility is significantly diminished if the woman does not endorse the idea of mandatory reporting of HIV cases, than if she does.

The likelihood of male dominance, relative to female dominance, is decreased if the woman does not know that infection cannot be spread by sharing a razor blade with an infected person (.69) than if she does. There is also a significant decrease in male dominance if she is uncertain if avoiding mosquito or insect bites (.65), than if she knows insect or mosquito bites do not cause HIV infection.

Table 36. Odd ratios from multinominal logistic regression analysis examining the relationship between decision-making for fertility control and HIV/AIDS knowledge and attitudes, 1998 SADHS

Characteristic		Decides about using methods		
		Other	Jointly	Husband
Ever heard of AIDS	Yes	na	na	na
Knows some with HIV/AIDS	No	1.33	1.06	1.56 **
	Yes	ref.	ref.	ref.
Practice safer sex	Don't know	0.58	1.09	1.37
	Incorrect	0.58	1.06	0.99
	Correct	ref.	ref.	ref.
Sharing razor blade	Don't know	0.36	0.88	0.69
	Incorrect	1.03	0.64 *	0.33 ***
	Correct	ref.	ref.	ref.
Avoid touching	Don't know	1.74	0.87	0.90
	Incorrect	0.92	1.08	1.05
	Correct	ref.	ref.	ref.
Avoid mosquito bites	Don't know	1.01	0.75	0.65 *
	Incorrect	1.58	0.81 *	0.93
	Correct	ref.	ref.	ref.
Avoid by having a good diet	Don't know	2.59 **	1.14	1.21
	Incorrect	3.11 ***	1.21	1.13
	Correct	ref.	ref.	ref.
Avoid public toilets	Don't know	0.72	1.06	0.79
	Incorrect	0.63	0.77 *	0.80
	Correct	ref.	ref.	ref.
Avoid by sharing food	Don't know	1.16	1.08	1.18
	Incorrect	1.20	1.00	0.82
	Correct	ref.	ref.	ref.
A healthy person have AIDS	No	1.47	1.06	0.75
	Yes	2.83 **	1.64 ***	0.89
	Don't know	ref.	ref.	ref.
People with AIDS be told status	No	0.10	0.66	0.41
	Yes	0.05 *	0.37	0.26
	Don't know	ref.	ref.	ref.
People with HIV be told status	No	4.61	0.91	2.28
	Yes	10.01	1.54	2.64
	Don't know	ref.	ref.	ref.
HIV/AIDS patients tell partners	No	1.07	1.58	1.39
	Yes	1.54	2.11 *	1.30
	Don't know	ref.	ref.	ref.
AIDS be reported health authorities	No	1.53	1.08	2.65 *
	Yes	1.33	1.17	2.56
	Don't know	ref.	ref.	ref.
HIV be reported health authorities	No	0.69	0.89	0.39 *
	Yes	0.74	0.72	0.54
	Don't know	ref.	ref.	ref.
Use condoms	Don't know	6.10	1.11	2.04 **
	Incorrect	0.55	0.78	0.96
	Correct	ref.	ref.	ref.
Using clean needles	Don't know	1.10	0.47 *	1.24
	Incorrect	0.65	0.86	2.12 **
	Correct	ref.	ref.	ref.
**=p<.05, **=p<.01, ***=p<.001, N=2969*				
-2 Log Likelihood = 4212.516, Chi-Square = 285.705, df = 93, Sig. = .000, Pseudo R^2 - Nagelkerke = .102				

7.8. The influence of reproductive knowledge and attitudes on decision-making for the use of fertility control

7.8.1. The influence of others

The information in Table 37 shows a significant increase in the likelihood (6.41) that others influence the decision about using fertility control, relative to the woman, when she disapproves of, or if she is uncertain about whether she approves or disapproves of, family planning, than when she approves.

The likelihood that others make the decision about using fertility control is decreased significantly if the woman does not know of a source for obtaining contraception, than if she does know of one. The likelihood that others are dominant in deciding about the use of fertility is significantly decreased (.46) if the woman thinks that the ideal number of children is between two and three, than if she thinks that it is five or more.

The likelihood that others make the decision about using fertility control is decreased significantly if the woman knows that ovulation takes place during the mid-cycle (.27), or if she believes that it occurs at some other point in the cycle (.49), than if she is uncertain about when this occurs.

7.8.2. Joint decision-making relative to the influence of the woman

On the other hand, there is an increase in the probability that the decision about fertility control is jointly made, relative to the woman deciding, if the woman knows that ovulation takes place during the middle of the menstrual cycle (1.64), or thinks that it occurs at some other time in the cycle (1.58), than if she is uncertain at what point in the menstrual cycle this occurs.

Table 37 shows that there is a significant decrease in the likelihood of joint decision-making for the use of fertility control if the woman knows no source for condoms (.63) - or if she knows that they can be obtained from a day clinic (.68) - than if she knows that condoms can be obtained from a government hospital. The model shows also shows a significant decrease in the odds of joint decision-making, f the woman believes that one child (or no children) is ideal (.33), than of she believes that five is he ideal number to have.

Table 37. Odd ratios from multinominal logistic regression analysis examining the relationship between decision-making for fertility control and reproductive-related knowledge and attitudes model, 1998 SADHS

Characteristic		Decides about using methods		
		Other	Jointly	Husband
Ideal Number of Children	0-1	1.16	0.33 ***	0.51 *
	2-3	0.46 **	0.95	0.65 **
	4	0.76	0.97	0.90
	5+	ref.	ref.	ref.
Fertility preference	Have another	1.19	1.20	1.32
	Undecided	0.67	1.13	1.18
	No more	ref.	ref.	ref.
Attitude toward becoming pregnant	Happy	0.70	0.99	0.94
	Unhappy	1.03	1.15	1.14
	Would not matter	ref.	ref.	ref.
Approves of FP	Disapproves or don't know	6.41 ***	0.87	1.27
	Approves	ref.	ref.	ref.
Acceptability of radio Promotion	Not Acceptable/ don't know	0.47	0.63	2.42
	Acceptable	ref.	ref.	ref.
Acceptability of TV Promotion	Not Acceptable/ don't know	1.53	1.35	0.40 *
	Acceptable	ref.	ref.	ref.
Law on abortion	No	2.10 **	0.81	1.94 ***
	Yes	0.89	0.91	1.22
	DK	ref.	ref.	ref.
Knowledge of menstrual cycle	Correct	0.27 *	1.64 **	0.86
	Incorrect	0.49 **	1.58 ***	1.09
	Don't Know	ref.	ref.	ref.
Knowledge of condom	Never heard condom	1.63	0.96	1.05
	Knows for FP only	0.66	0.79	1.33
	Knows for STD only	1.50	1.04	2.05 **
	Knows for FP & STD	ref.	ref.	ref.
Source for BC	None	2.12 *	0.90	0.67
	Other	0.33	1.43	1.42
	Public	ref.	ref.	ref.
Source for Condom	Other/ don't know	1.15	0.63 **	1.35
	Day hospital	0.82	0.68 **	1.07
	FP Clinic	1.01	0.85	0.92
	Mobile Clinic	1.08	0.84	1.81 *
	Government Hospital	ref.	ref.	ref.
**=p<.05, **=p<.01, ***=p<.001, N=2649*				
-2 Log Likelihood = 3988.267, Chi-Square = 376.52, df = 69, Sig. = .000, Pseudo R^2 - Nagelkerke = .147				

7.8.3. The influence of the husband relative to the influence of the woman

The information in Table 37 shows that the likelihood of male dominance decreases significantly, relative to female dominance if the woman believes that one or no children (.51), or two to three children (.65), is ideal number, than if she thinks that it is five or more.

The probability of the husband influencing the decision about using fertility control is decreased significantly if the woman finds it unacceptable to use the television in order to promote family planning, or if she has no opinion on the issue (.40), than if she finds it acceptable.

There is a significant increase (1.94) in the likelihood that the husband, rather than the woman influences the decision about using fertility control, if she thinks that, under the conditions of the 1998-Termination of Pregnancy Act, a woman cannot voluntarily abort an existing pregnancy during the first trimester, than if she is unsure about whether or not the act provides for this.

The likelihood of male dominance in decision-making for the use of fertility control, relative to female dominance, is significantly increased (2.05) if the woman knows that condoms are used only to prevent STDs, than if she knows that the condom can be used to prevent both pregnancy and STDs. There is also a significant increase in the odds (1.81) that the husband, and not the woman, makes the decision as to whether or not fertility control should be used, if the woman knows that condoms can be obtained from a mobile clinic, than if she knows that they can be obtained from a government hospital.

7.9. Comparison of results from bivariate and multivariate data analyses

Excepting for the woman's age, province, level of literacy, employment, experience of abuse, type and number of unions, the findings from modelling the data appear consistent with the findings from bivariate examination

In multinomial regression analysis, childhood place of residence is relevant only for joint decision-making and the influence of the husband. The woman's birth order is associated with the influence of others, as well as that of the husband. The age of the respondent is relevant to the influence of others as well as to joint decision-making. The woman's education and the length of time since the first marriage are relevant only to the influence of others. The woman's age at first marriage is associated with joint decision-making only. Place of residence and occupation is relevant to all three categories of decision-making.

In the second model, the husband's age and education are relevant only to the influence of others. Whether or not the partner regularly provided money is also

relevant to the influence of others as well as joint decision-making for the use of fertility control. The husband's approval of family planning is relevant to the three decision-making domains.

All of the variables assessing the effect of husband-wife's comparative characteristics that are significant in the bivariate analysis are relevant for at least one decision-making domain in multinominal regression modelling. Specifically, husband-wife's comparative and relative ages are relevant only for joint decision-making, whereas comparative education is only relevant for the influence of others. The variable comparative fertility desires is relevant for both the influence of others and for joint decision-making. Comparative approval for family planning is associated with all three domains.

In multinominal regression modelling of the effects of the characteristics of the household, the head, and gender of the head, of the household, quintiles of wealth, as well as numbers of sons and daughters – all of which are significant in bivariate analysis – do not have an influence affect any domain.

In the model, the size of the household; whether or not the husband lives at home; the number of own children in the household, and own children at home are associated with the influence of others only. Male dominance and the influence of others are correlated with language preference. The number of children five years or younger living in the household is relevant only for joint decision-making.

The results from multinominal analysis show that only three of the variables assessing the effect of sexual and reproductive factors are correlated with decision-making for the use of fertility control among the women in this study - the woman's age at sexual debut, giving birth in the past five years or one year, and the reason for not using condoms at last sexual intercourse.

Giving birth in the last five years and the reason for non-condom use at last sexual intercourse are relevant only for the influence of others. Giving birth in the past year is relevant for joint decision-making, as well as the influence of the husband. The woman's age at sexual debut and giving birth in the past year are relevant to joint decision-making only.

In bivariate analysis, a significant relationship exists between decision-making for the use of fertility control and each predictor examined. In multinominal modelling, listening to the radio daily; being told about family planning at a health facility; obtaining information about HIV/AIDS from relatives, and the amount of information obtained from relatives, are relevant to the influence of others only.

In multinominal analysis, whether or not the woman watches television weekly is relevant only for the influence of others and the influence of the husband. Discussing family planning with a daughter(s), obtaining HIV/AIDS information from the radio, as well as the amount of HIV/AIDS information obtained from healthcare workers, are relevant to the influence the husband only.

Obtaining HIV/AIDS information from the television and the amount of information obtained from the television or newspapers are only relevant to the influence of others and joint-decision-making. The amount of HIV/AIDS information obtained from a husband or Husband(s), and obtaining information about family planning from brochures are relevant to joint decision-making only.

In the model, obtaining information on family planning from the radio is relevant to the influence of the husband and joint decision-making only. Frequency of spousal communication, and obtaining HIV/AIDS information from posters or pamphlets, are relevant for all three domains.

In bivariate analyses, there is a significant association between decision-making for the use of fertility control and all variables associated with HIV/AIDS knowledge and attitudes. In logistic regression, knowing someone who is HIV positive, mandatory reporting of AIDS and HIV cases, are relevant to the influence of the husband only. The variables ‘avoiding mosquito bites’ and ‘informing people with AIDS of their status’ are relevant to the influence of others only. Using condoms to prevent infection is associated with both the influence of others and the influence of the husband.

Sharing razor blades, avoiding mosquito bites and using clean needles, are relevant to the influence of the husband and joint decision-making. The variables ‘avoiding public toilets’ and ‘informing HIV-positive individuals of their status’ are relevant to joint decision-making only.

In bivariate examination, decision-making for the use of fertility control is not related to the woman's fertility preferences or attitude towards the prospect of a pregnancy in the following few months. Logistic regression analysis, that controlling for other variables; reveals that fertility preference, and the woman's attitude towards the prospects of pregnancy, is still not relevant. The comparison of the results from bivariate analyses and multinominal modelling shows that acceptability of the radio, in order to promote family planning - which is significant in bivariate analysis - is not relevant when other variables are controlled.

The ideal number of children; the woman's approval of family planning; acceptability of the television for promoting family planning; knowledge of the 1996-TOP Act; the ovulatory cycle; purpose of using condoms or knowledge of a source for condoms or birth control are significant in bivariate analyses and remain relevant in multinominal modelling.

The woman's approval of family planning, and knowledge of a source of contraception, is only relevant to the influence of others in bivariate. Acceptability of the television for promoting family planning, and knowledge of a source for condoms, are relevant to the influence of the husband only. Knowledge of the conditions under which an abortion can be obtained under the 1996-TOP Act is relevant to both the influence of others and the influence of the husband. Knowledge of the menstrual cycle is relevant to joint decision-making, as well as the influence of others.

The comparison shows that knowledge of a source of condoms is relevant to both joint decision-making and the influence of the husband. The ideal number of children is the only factor that is relevant for all three domains of decision-malign.

7.10. The final model

Binominal logistic regression, using the backward stepwise procedure is used in building a parsinomous model of decision-making among the women in this study. Variables excluded from consideration, the reason for their exclusion and those submitted for modelling, are specified in Appendix 5.2.

The final model includes: variables associated with the background and socio-economic characteristics of the woman; the husband's characteristics; the husband-wife's comparative characteristics; sexual and reproductive knowledge; information

and communication; HIV/AIDS knowledge and attitudes, as well as reproductive attitudes. Backward stepwise procedure is used to estimate the effect of each variable examined on the likelihood of the influence of the husband (male dominance) or joint decision-making relative to the influence of the respondent (female dominance) about the use of fertility control.[281]

7.10.1. Findings from final modelling of the data using backward stepwise procedure

The final model (Table 38) shows that childhood place of residence has a significant effect on both joint decision-making and female dominance. It shows that likelihood of joint decision-making, relative to female dominance, increases significantly (1.77) if the woman was raised in a town, rather than in a city or the countryside. The model shows a significant decrease (.417) in the influence of the man (male dominance), relative to the influence of the woman (female dominance), if the woman was raised in a city rather than in the countryside.

The woman's order of birth has a significant effect on both joint decision-making and the influence of the husband (male dominance). There is a significant increase in the likelihood of joint decision-making for the use of fertility control if the woman's birth order is fifth or higher than first or second (1.48). The likelihood that the husband influences the decision about whether (or not) to use fertility control decreases significantly if the woman's birth order is fifth or higher than first or second (.303). The finding that joint decision-making is more widespread among fifth or higher ordinal born individuals seems to be consistent with the assumption that the intergenerational transfer of fertility norms is more evident among lower than higher ordinal born individuals.

The odds of joint decision-making for the use of fertility control decreases significantly (.53) if the husband did not regularly provide money during the year prior to the interview, than if he did so. This might be explained by the fact that spousal communication about family planning is less frequent among women whose husbands did not regularly provide money during the year before the interview than among

[281] Because only a limited number of cases (N=146, 4.3%) of the initial 3427 cases are included in the 'Other' response category, they are not considered for final modelling.

those whose husbands did so.[282] The finding also appears to be related to the fact that approval of the husband and joint approval (or approval of the man only) for family planning are both higher among women whose husbands regularly provided money than among other women.[283] The approval of the woman only for family planning is higher among those whose husbands did not regularly provide money during this time than among those whose husbands did so.[284],[285]

Further examination of the data reveals that the proportion of women who have less education than their husbands is lower among those whose husbands did not regularly provide money during the year before the interview than among those who did. The finding is important because spousal communication about family planning is higher among women with less education than their husbands than among others.[286]

The head of the household, as well as its socio-economic status, emerges as significant predictors for dominance in decision-making. The likelihood of joint decision-making is significantly decreased (.64) if the woman is the head of the household, rather than the husband. This finding appears to be related to the fact that the proportion of women who co-reside with their husbands is lower among women who are living in households headed by themselves (67.7%) than among those who are living in households headed by the husband (71.9%) or someone else (71.1%).[287] This is because spousal communication about family planning is generally higher among women in a cohabiting relationship than among those who are not.[288] Approval of the husband and joint approval for family planning are higher among

[282] During that time, 68.6% of those whose husbands regularly provided money had such a discussion at least once compared to 65% of those whose husbands did not.
[283] 67.1% and 67.5% vs. 62.8% % and 62.6%, respectively.
[284] 21.5% vs. 17.9%
[285] The relationship between comparative approval for family planning and husband's provision of money is, however, marginally significant (p=. 073).
[286] In the few months before the interview, spousal communication about family planning is significantly higher among women who have less education than their husbands than among those who have either more or the same amount of education as their husbands (9% vs.6.5% and 4.8%, respectively). During that time 29.5% of those who have less education than their husbands had such a discussion more often (i.e., more than twice) compared to 18.4% of those who have more education than their husbands and 22% of those who have the same amount of education as their husbands. During this time, 38.4% of women who have more education than their husbands, 34.5% of those who have the same amount of education as their husbands and 25.8% of those who have less education than their husbands never discussed the issue with their husbands.
[287] This relationship is however marginally significant (p=. 086).
[288] During the year before the interview, the proportion of women discussing family planning with their husbands is higher among those whose husbands live in the same household as the woman does than among those whose husbands are staying elsewhere (69.1% vs.64.6%). In the few months before the interview 9.2% of women co-residing with their husbands had such a discussion compared to 3.7% of those who are not.

women who live with their husbands than among other women (respectively, 68.7% and 68.3% vs. 61.2% and 60.9%).

There is an increase in the likelihood of joint decision-making if the woman lives in household in the middle quintile of wealth than if she lives in a household in the two highest quintiles. Further examination shows that the proportion of women using fertility control is lower among those living in households in the middle quintile of wealth (45.9%) than among those in households in the two lowest (49.3%) or two highest ones (52.1%). This is probably because the proportion of women desiring a birth in the next two years is higher among those in households in the middle wealth quintile than among others women (21.5% vs. 14.32%-17.4%).

The association between joint decision-making and the socio-economic status of the household is explained by the fact that joint approval (or approval of the man only) for family planning is higher among women living in households in the middle wealth quintile than among those in the two lowest or highest wealth ones (69.9% vs. 64.6% and 65.2%, respectively). The proportion of women whose husbands approve of family planning is also higher among those in households in the middle wealth quintile than among those in other type of households (701% vs. 65.3%-65.4%).

Excepting for the husband's provision of money, none of the background and socio-economic factors associated with the woman or husband, independently, affect decision-making. However, the husband-wife's comparative education and fertility desires both affect joint decision-making.

The odds of joint decision-making is significantly decreased (.28) if the husband wants fewer children than the woman does, or if she is uncertain about his fertility desires (.45), than if both want the same number of children. This finding is consistent with findings from other studies (e.g., Bankole & Singh, 1989).

In the final model, dominance in decision-making for the use of fertility control is significantly affected by the woman's fertility desires. The likelihood of joint decision-making increases significantly, relative to female dominance, if the woman has four or five children that are alive, than if she has six or more living children.

Table 38 shows a significant correlation between dominance in decision-making and contraceptive need. There is a significant increase in the likelihood that the decision

about using fertility control is jointly decided upon - rather than the woman solely influencing the decision - if the woman is using fertility control in order to limit births (2.02), than if she is infecund or menopausal.

There is a significant decrease in joint decision-making, relative to the woman making the decision, if the reason for non-condom use at last intercourse is: condom-use dislike (.43); access-related (.3); preferring sex flesh to flesh (.36), or some other reason (.41), than if it is fertility-related.

Table 38 shows a significant increase in the odds that the husband is dominant in making the decision about the use of fertility control (4.449), if the woman does not know whether (or not) the condom was used the last time that she had sexual intercourse, than if it is fertility-related. The table shows a significant decrease in joint decision-making if the woman has not obtained information about family planning from newspapers during the months prior to the interview (.64), than if she has. There is also a significant decrease in the likelihood (.395) that the husband, and not the woman, influences the decision if the woman did not get information about family planning from reading the newspaper or magazine during the year prior to the interview, than if she had.

The examination reveals a significant increase in the likelihood of joint decision-making, relative to female dominance, if the woman discussed family planning once or twice (2.09) or more often (4.24) during the year prior to the interview, than if she never had such a discussion. The likelihood that the husband influences the decision about using fertility control is also increased if the woman does not listen to the radio daily, (2.169) than if she does. The information in the model shows that likelihood of male dominance in decision-making for the use of fertility control is also increased significantly if the woman discussed family planning with her husband once or twice (2.126) or more often (4.176) during the year prior to the interview than if she had never done so. The reason for the similarity in the findings cannot be inferred from the available data. An analysis based on qualitative data would be useful in clarifying this finding.

There is a significant reduction in the odds that the decision about the use of fertility control is jointly made - rather than the woman influencing the decision - if the woman did not obtain information about HIV/AIDS from the television (.29) during the year prior to the interview. The finding of a significant decrease in the likelihood of joint

decision-making appears to be related to the finding that among the women in this study, frequency of spousal communication is significantly lower among women who were not exposed to such information from watching the television than among those who were.[289]

The proportion of women in this study who have less education than their husbands is higher among those who were exposed to HIV/AIDS-related information through watching the television during the year before the interview than among other women (76.1% vs. 67.1%).[290] It is also found that joint approval for family planning is lower among women not getting HIV/AIDS-related information from watching the television than among those who did (58.4% vs. 69.7%). The decrease in the likelihood of joint decision-making is possibly related to the fact that the proportion of women who want the same number of children as their husbands is lower among those who were not exposed to such information from the television than among those who were (51.1% vs. 59.4%)

The decrease in the likelihood of male dominance in decision-making for the use of fertility control among women who were not exposed to HIV/AIDS information from the television seems also to be related to husband-wife's comparative fertility desires. It is found that the proportion of women whose husbands want more children than the woman wants is higher among those not getting HIV/AIDS information from the television than among those who did. This finding appears to be consistent with the finding in Bankole and Singh's (1989) study showing that male dominance is more likely when the man wants more children than the woman does.

The influence of the husband in the decision about the use of fertility control is also decreased significantly if the woman did not obtain HIV/AIDS-related information from the television (.451) during the year prior to the interview, than if she had done so.

The decrease in the likelihood of joint decision-making and the influence of the male about using fertility control is probably related to the finding of a significant association

[289] During that time, 70.5% of women who got such information from the television, discussed family planning with their husbands at least once, compared to 62.2% of those who did not. 26.1% of those who got such information from the television had such a discussion more than twice compared to 22.1% of those who did not. In the few months before the interview, the proportion of women discussing family planning with their husbands is higher among women getting HIV/AIDS-related information from watching television than among other women (8.7% vs. 5.1%).

[290] In this study, spousal communication about family planning is higher among those who have less education than their husbands than among other women.

between the dependent variable and cohabitation status. Among the women in this study, the influence of the husband is higher among those who do not live with their husbands than among those who do (19.4% v s. 14.9%) and it is found that the proportion of women who

There is a significant decrease in the likelihood of joint decision-making if the woman did not obtain HIV/AIDS-related information from pamphlets or brochures (.44) in the few months prior to the interview, than if she had. Conversely, there is a significant increase in the likelihood (1.71) of joint decision-making if the woman obtained such information from healthcare workers during that time.

The likelihood of joint decision-making increases significantly (1.82) if the woman obtained a lot of information about HIV/AIDS from a partner(s) during the year prior to the interview, than if she only received some of this type of information. On the other hand, the likelihood of joint decision-making is significantly decreased (.48) if she received no such information from a partner (s), than if she had received some.

The likelihood of joint decision-making about fertility control is also increased significantly (2.08) if the woman does not know whether (or not) having a good diet (eating well) can be used to stop HIV infection, than if she knows that this is not a sound strategy. On the other hand, the likelihood that the husband influences the decision about using fertility control is decreased (.51) if the woman thinks that dieting is a viable strategy for stopping HIV infection.

The odds of joint decision-making is decreased if the woman thinks that having between two and three children is ideal (.25), than if she feels that five or more children is the ideal number to have. The likelihood of male dominance is decreased (.475) significantly if the husband wants more children than the woman does (.139), or if she is uncertain of how many children he wants. The likelihood of joint decision-making is also reduced, (.45) if the known source of condoms is a day hospital, rather than a government hospital. On the other hand, the likelihood that the husband, rather than the woman, is dominant in decision-making for the use of fertility control (2.54) increases if the woman knows another source of condoms, or does not know where to obtain them, than if the source is the government hospital.

Not going to school significantly reduces the odds (.364) that the husband, rather than the woman, is dominant in making the decision about using fertility control. This

finding might be explained by the fact that proportion of women who are employed is higher among those not attending school than among those who are. This is important because women's employment is seen as an indictor of women's autonomy in decision-making.

The number of unions that the woman has had and the duration of time lapsed since the first marriage, are both predictive of the influence of the man in decision-making for the use of fertility control, relative to the woman influencing the decision.

The information in Table 38 shows a significant increase (5.118) in the probability that the husband is dominant in deciding if fertility control should be used, relative to the woman, if she has had only one union (marriage), than if she has had more than one. There is also a significant increase in the likelihood of male dominance in decision-making for the use fertility control if the length of time since the first marriage is between 5 and 9 years (2.725), 10 and 14 years (2.734), or 15 and 19 years (2.076), than if it 20 years or longer.

There is a significant decrease in the likelihood that the husband influences the decision about using fertility control if the woman has the same amount of education as her husband (.282), than if she does not know how much education he has.

The odds that the husband influences the decision about using fertility control, relative to the woman, decrease significantly if her last sexual partner is the husband, rather than another man (.552). The influence of the husband is also increased significantly (2.74) if she knows that the condom can be used to prevent pregnancy, than if she knows that it can be used to prevent both pregnancy and STDs. There is a significant increase in the likelihood that the husband influences the decision about using fertility control if the woman does not listen to the radio daily (2.169) than if she does.

The likelihood of that the husband influences the decision about using fertility control is significantly decreased if the woman endorses the idea of mandatory reporting of HIV cases than if she holds no opinion on the issue (.156). The odds of the man influencing the decision, rather than the woman doing so, increases tremendously if the woman endorses the idea of mandatory reporting of AIDS cases (8.053).

7.10.2. Factors increasing the likelihood of joint decision-making

Being raised in a town; living in a household in the middle wealth quintile; having between four and five living children; using fertility control to limit births; discussing family planning with the husband or getting a lot of HIV/AIDS information from a partner (or husband) during the year before the interview increases the likelihood of joint decision-making. The likelihood of joint decision-making is also increased if the woman did not get any such information from healthcare workers during that time.[291]

The finding of a significant association between joint decision-making and use of fertility control in order to limit births appears to be related to the number of children that the woman has. It is found that the proportion of women using fertility control in order to limit births is higher among women who have between four and five living children (49.9%) than among those who have one or none (8.5%), two and three (39.4%) or six or and more (42.9%). This finding appears to support the claim of Zulu women (Harrison & Montgomery, 2001) that women are able to negotiate use of fertility control with their husbands when they have at least five children. In general, the proportion of women using fertility control to limit births is higher among those whose husbands want less than or the same number of children as the woman does than among those whose husband want more (39.3% and 36.9%, respectively) children than the women does or among those who do not know their husbands' fertility desires (33.9% and 33.2%) fertility desires.

Factors having a negative effect on joint decision-making include: urban residence; unemployment; husband's irregular provision of money; head of the household; the socio-economic status of the household; occupation; husband wanting more children than the woman does or uncertainty about husband's fertility desires.

The woman or husband's dislike of condoms, condom access-related problems, preferring sex flesh-to-flesh or other reasons given for not using condoms at last sexual intercourse also minimise the likelihood of joint decision-making. The finding of a negative relationship between joint decision-making and the reasons women give for non-condom use at last sexual intercourse is consistent with findings from prior studies showing that socio-cultural norms and attitudes related to condoms are barriers to couple communication about sexual and reproductive-related matters.

Unacceptability of the radio for promoting family planning and a day hospital as the known source for condoms also has a negative effect on joint decision-making.

Not getting any HIV/AIDS-related information from the husband or the television or pamphlets or getting a lot of such information from relatives during the year before the interview decrease the likelihood of joint decision-making. The finding that joint decision-making for the use of fertility control is less likely if the woman got no information about HIV/AIDS from a sexual partner /husband, the television or pamphlet during the year before the interview is not at all surprising. A number of studies have shown a positive association between joint decision-making for the use of fertility control and exposure to such information from the media and in discussion with others. It is however surprising to find a negative association between joint decision-making and obtaining such information from relatives. Without knowing the nature of discussions about HIV/AIDS between the woman and her relatives, the reason for this latter finding is unclear and qualitative studies can shed light on this issue.

7.10.4. Factors increasing the likelihood of male dominance

There is an increase in male dominance increases if the woman does not know if the condom was used at last intercourse; does not listen to the radio daily; works in a professional, technical or managerial occupation, had only one union and if the time lapsed since the first marriage is between five and nineteen years. The finding that male dominance is increased if the woman does not know if the condom was used might simply point to her lack of experience in sexual matters and might be explained by the fact that she has been only one union.

The finding of a positive correlation between male dominance and the woman's occupation appears to be similar to the finding that cultural norms are more important than women's work status in decision-making (c.f. LaLiberte-Richmond, 1967). In the transitional state, some women are likely to adhere to traditional cultural norms ascribing decision-making power to males. A longitudinal study, using qualitative and quantitative data collection techniques is necessary to evaluate the extent to which

[291] This is probably related to the fact that South African health service providers lack sufficient knowledge about reproductive health issues (c.f. Mbabane, 2002).

social change has an impact on the patterns of dominance in decision-making for the use of fertility control among women in this society.[292]

The likelihood of male dominance is also significantly increased, relative to female dominance, if spousal communication about family planning occurred at least once during the previous year, or if she knows a source other than the family planning clinic, government hospital, day hospital or mobile clinic for condoms or knows no such source as well as if she knows the condom as a device for family planning only.

For family planning specialists and policy makers, the finding of a positive correlation between male dominance and the woman knowing that the condom is used only as a measure against conception is important: Promoting the condom for pregnancy and STI prevention might enhance couple communication. Such discussions are likely to lead to an increase in joint decision-making..

7.10.5. Factors decreasing the likelihood of male dominance

The final model shows that the husband's desired for fewer children than the woman wants or the woman's uncertainty of the husband's desires both reduce the likelihood of male dominance in decision-making. A decrease in the likelihood of male dominance is also associated with being raised in a city; fifth or higher birth order; living in an urban area, and not in attendance at an educational institution.

Male dominance is less widespread among women who were raised in cities or those living in an urban environment because women living in an urban environment are generally more exposed to information about family planning and participate in networks favouring female autonomy in. Since the intergenerational transmission of fertility norms is generally less pronounced among higher ordinal born individuals, they are probably more likely than lower ordinal born ones to make the decision themselves or in conjunction with the man. [293]

[292] LaLiberte-Richmond's study was conducted among Hispanic migrants in the U.S.A. Similar to Black women in South Africa, they are perceived to be experiencing transition (from traditional to modern).

[293] This should be verified in a further study.

Table 38. Odds ratios from multinomial logistic regression estimating the effect of predictor variables on dominance in decision-making for the use of fertility control among married Black South women, 1998 SADHS

Characteristic		Decision about using methods			
		Jointly		Husband	
Childhood place of residence	City	1.59		0.417	*
	Town	1.77	*	0.51	
	Countryside	.		.	
Respondent's Order of Birth	Third & Fourth	0.98		0.701	
	Fifth & Higher	1.48	*	0.303	***
	First & Second	.		.	
Urban/Rural	Urban	0.18	***	0.457	*
	Rural	.		.	
Respondent still in school	No	0.65		0.364	***
	Yes	.		.	
Respondent's occupation	Not working	0.63	*	1.187	
	Professional, technical & managerial	0.76		3.226	*
	Clerical, Sales & Services	1.44		0.621	
	Skilled manual	1.92		1.727	
	Unskilled manual	.		.	
Marital duration (grouped)	0-4	1.41		1.445	
	5-9	1.1		2.725	**
	10-14	1.21		2.734	**
	15-19	1.35		2.076	*
	20+	.		.	
Number of unions	Once	1.12		5.118	**
	More than once	.		.	
Husband's occupation	Clerical, sales & services	1.07		0.58	
	Manual, Skilled	1.19		0.917	
	Manual, Unskilled	1.77		1.711	
	Non-numeric	2.36		3.26	
	Professional, technical & managerial	.		.	
Husband's regular provision of money	Not regularly provided	0.53	**	0.867	
	Regularly provided	.		.	
Head of household	Else	1.36		1.037	
	Head	0.64	*	0.665	
	Husband	.		.	
Preferred Language	Nguni	0.53		0.933	
	Sotho	0.87		0.812	
	Other Bantu	1.19		1.291	
	Non-Bantu	.		.	
Quintiles of wealth index	Two lowest quintiles	1		0.892	
	Middle quintile	1.53	*	1.669	
	Two highest quintiles	.		.	

Continued on next page.

Table 38, continued.

Characteristic		Decision about using methods			
		Jointly		Husband	
Comparative education	Less	1.41		0.769	
	More	1.85		0.533	
	Same	1.75		0.282	*
	Can't compare	.		.	
Comparative fertility desires	Husband wants more	0.28	***	0.475	**
	Husband wants less	0.57		2.802	
	Uncertain	0.45	**	0.139	***
	Both want same	.		.	
Live Births	0-1	0.5		9.195	
	2-3	0.54		0.625	
	4-5	0.61		0.493	
	6+	.		.	
Living children	0-1	2.11		0.075	
	2-3	1.84		0.874	
	4-5	2.46	*	1.571	
	6+	.		.	
Contraceptive need	Unmet need to space	1.44		1.245	
	Unmet need to limit	0.96		1.252	
	Using to space	1.79		1.597	
	Using to limit	2.02	**	1.026	
	Desire birth < 2 yrs.	0.95		1.438	
	In-fecund, menopausal	.		.	
Relationship to last sex partner	Husband	1.07		0.552	*
	Other	.		.	
Main reason condom was not used	Don’t know	1.9		4.449	*
	Perceived degree of risk	0.91		3.115	
	Respondent dislike	0.43	*	2.311	
	Partner dislike	0.44	*	1.92	
	Method ignorance	0.73		1.499	
	Use ignorance	0.67		3.654	
	Condom use anxieties	0.7		2.34	
	Access-related	0.3	**	0.893	
	Context of relationship	0.55		1.965	
	Prefer sex "flesh to flesh"	0.36	*	0.483	
	Other	0.41	*	0.949	
	Fertility-related	.		.	
Listens to radio every day	No	1.13		2.169	**
	Yes	.		.	
Heard about family planning on newspaper last months	No	0.64	*	0.395	**
	Yes	.		.	
Heard about family planning on poste last months	No	0.92		9.418	***
	Yes	.		.	
Heard about family planning on brochures last months	No	1.22		0.348	*
	Yes	.		.	
Frequency family planning discussions past year.	More often	4.24	***	4.176	***
	Once or twice	2.09	***	2.126	**
	Never			.	

Continued on next page.

Table 38, continued.

		Decision about using methods			
		Jointly		Husband	
AIDS: partner	No	0.98		0.558	*
	Partner	.		.	
AIDS information obtained from partner(s)	None	0.48	**	0.664	
	A lot	1.82	*	1.037	
	Some	.		.	
AIDS information obtained from relatives	None	1.25		0.967	
	A lot	0.51	**	0.752	
	Some	.		.	
AIDS: radio	No	1.33		0.603	
	Radio	.		.	
AIDS: television	No	0.29	***	0.451	**
	Television	.		.	
AIDS: pamphlets/posters	No	0.44	***	0.786	
	Pamphlets/posters	.		.	
AIDS: clinic/health workers	No	1.71	**	1.033	
	Clinic/health worker	.		.	
Avoid by having a good diet	Don't know	2.08	**	1.026	
	Incorrect	1.44		0.51	*
	Correct	.		.	
Can a healthy person have AIDS	No	0.73		0.554	
	Yes	1.16		0.613	
	Don't' know	.		.	
AIDS be reported health authorities	No	3.09		8.053	**
	Yes	1.74		1.748	
	Don't know	.		.	
HIV be reported health authorities	No	0.39		0.156	**
	Yes	0.55		0.869	
	Don't know	.		.	
Ideal Number of Children	0-1	0.25	*	0.679	
	2-3	1.24		1.053	
	4	1.51		1.323	
	5+	.		.	
Acceptability of radio Promotion	Not Acceptable/Don't' know	0.4	*	1.119	
	Acceptable	.		.	
Law on abortion	No	0.8		1.712	
	Yes	0.75		0.923	
	Don't know	.		.	
Knowledge of condom	Never heard condom	0.9		0.588	
	Knows for FP only	1.03		2.74	**
	Knows for STD only	0.7		1.811	
	Knows for FP & STD	.		.	
Source for Condom	Other/Don't know	0.93		2.54	*
	Day hospital	0.45	***	1.208	
	FP Clinic	1.01		1.48	
	Mobile Clinic	0.86		1.883	
	Government Hospital	.		.	
*=p<.05, **=p<.01, ***=p<.001, N=1269					
-2 Log Likelihood = 1834.026, Chi-Square = 744.291, df = 184, Sig. = .000, Pseudo R^2 – Nagelkerke = 0.511					

7.11. The final model compared to the individual models

7.11.1a. Background and socio-economic characteristics

A comparison of the model estimating the effect of the background and socio-economic characteristics of the woman with the final model, demonstrates that a number of variables that are significant in the individual model are absent from the final model, namely: age, education, level of literacy, employment status and age at first marriage. The comparison shows that, in the individual model, the number of unions had no effect on the dependent variable, but was highly significant in final model.

In the individual and final models, residence during childhood is shown to have an influence on both joint decision-making (p=. 001) and the influence of the husband (p=. 01 and p=. 05). In the final model, in both decision-making domains, the variables are not as strongly correlated as in the individual model. The comparison also shows that, in the individual model, the influence of the husband is associated with being raised in a city or town, whereas in the final model, being raised in a town is unrelated to male dominance in decision-making for the use of fertility control.

Respondent's birth order is relevant to both models and, in the individual model, it is correlated with the influence of the man (and others) but not with joint decision-making. In the final model, the association between the influence of the husband and birth order is stronger than in the individual model.

In both models, place of residence is relevant to joint decision-making and to the influence of the man (male dominance). In the final model, joint decision-making is more strongly correlated with place of residence, while the strength of the relationship between male dominance and place of residence remains the same.

In both models, being in school only affects the influence of the man. This is also the case in the final model, but the correlation between male dominance and being in school is stronger in the final model than in the individual one.

Occupation is shown to affect joint decision-making and the influence of the husband in both models. In the individual model, joint decision-making is associated with both not working and being in a professional, technical or managerial occupation.

However, in the final model, joint decision-making is associated solely with not working. The comparison shows that in the individual model, the influence of the man is associated with not working and also working in a professional, technical or managerial occupation. In the final model, male dominance is uncorrelated with unemployment, but it is associated with working in a professional, technical or managerial occupation and not as strongly correlated as before.

In the individual model, the duration of time lapsed since the first union is a significant predictor for male dominance, and remains so in the final model. The comparison shows that, in the individual model, the influence of the man is related to four or fewer years since the first marriage, but in the final model it is no longer predictive of male dominance. In the final model, 5 to 9 years, 10 to 14 years and 15 to 19 years since the first marriage emerge as significant predictors for male dominance.

7.11.1b. Husband's characteristics

In the individual model, the husband's age, education, occupation, approval for family planning and his provision of money all are significant predictors in decision-making for the use of fertility control among the women in this study. The husband's occupation, and whether or not he regularly provided are the only two variables estimating the effect of the characteristics of the man on decision-making for the use of fertility control that are included in the final model.

In the individual model, the husband's occupation (unskilled manual) is relevant to the influence of the man. A comparison of the two models shows that, in the final model, the husband's occupation has no effect on the dependent variable. In the initial model, the husband's provision of money is relevant to joint decision-making, and remains so in the final model. However, in the final model, the magnitude of the relationship between the two is less strong than in the individual model.

7.11.1c. Characteristics of the household

A comparison of the individual model estimating the effect of the characteristics of the household on dominance in decision-making for the use of fertility control, reveals that a number of variables that are significant in the individual model are not included in the final model. In fact, only three variables associated with the household are included in the final model: head of the household, language preference and wealth

quintiles. Language preference, which is significant in the individual model, is not relevant in the final model. However, the comparison shows that, the head of the household and its socio-economic status, which are not significant in the individual model, are significant in the final model.

7.11.1d. Husband-wife's comparative characteristics

In the individual model, estimating the effect of the husband-wife's comparative characteristics on decision-making for the use of fertility control, all of the variables examined (relative age, comparative age, comparative education, comparative approval for family planning and comparative fertility desires) are all predictive of dominance in decision-making for the use of fertility control. Only comparative education and fertility desires are included in the final model.

In the initial model, comparative education is not relevant for joint decision-making or male dominance (i.e. husband's influence).[294] In the final model, joint decision-making is also uncorrelated with husband-wife's comparative education. The comparison shows that, in the individual model, comparative fertility desires have a significant effect on all decision-making domains, and, it is still relevant to both joint decision-making and the influence of the husband in the final model.

In the individual model, uncertainty about the number of children desired by the husband is predictive of male dominance. However, in the final model, male dominance is associated with the woman's uncertainty of husband's fertility desires as well as his desire for more children than she wants. The strength of the relationship between the husband's influence in decision-making and uncertainty of the husband's desires remains unchanged in the final model.

In the individual model, joint decision-making is related to the husband wanting more or fewer children than the woman wants and to uncertainty about his desires. In the final model, the strength of the relationship between joint decision-making and the husband wanting more children than the woman does is unchanged, but the correlation between joint decision-making and uncertainty of his desires is less strong.

[294] In the individual model, comparative age is relevant to the influence of others (c.f. Table 35).

7.11.1e. Sexual and reproductive-related factors

The comparison of the model estimating the effect of sexual and reproductive factors on decision-making for the use of fertility control shows that use of condoms at last sexual intercourse is the only factor that is significant in both models. In the individual model, method ignorance as the reason for non-condom use at last sexual intercourse is predictive of the influence of others only. With the removal of this response category, the reason for non-condom use is significant for both joint decision-making and the influence of the husband in deciding about fertility control.

A comparison of the model estimating the effects of sexual and fertility-related factors on decision-making with the final model shows three variables that are not significant in the individual model are consequential in the final model: living children, contraceptive need and relationship to last sexual partner. On the other hand, age at sexual debut, giving birth in the past five years, or in the past year – which are significant in the individual model - have no effect on decision-making for the use of fertility control in the final model.

7.11.1f. Exposure - information and communication

As many of the variables assessing the effect of information and communication as well as HIV/AIDS knowledge and attitudes are shown to affect the dependent variable in the individual and final models, a summary of the findings are replicated in Table 39, in order to facilitate the discussion.

Four variables that are significant in the model assessing the effect of information and communication on the dependent variable are not in the final model: weekly viewing of television; obtaining information about family planning (FP) from a health facility; discussing FP with a daughter(s), and discussing FP with friends and neighbours. Of the variables retained in the final model, listening to the radio daily, which is non-significant in the initial model, becomes significant in the final model (Table 39).

In the initial model, obtaining information on FP from a newspaper is only associated with a male pattern of dominance. However, in the final model, it affects both joint decision-making and the influence of the husband. The strength of the effect of the influence of the man is unchanged in the final model.

In the initial model, obtaining FP information from posters is significant to the influence of the husband (and the influence of others), and, in the final model, it is also associated with the influence of the husband, and not with joint decision-making. In the final model, the magnitude of the effect on the independent variable is increased.

In the initial model, obtaining family-related information from a poster or brochure is significant for joint decision-making only. However, in the final model, it is relevant to the influence of the man only. The comparison of the two models shows that, in both models, frequency of husband-wife discussions about family planning is highly significant for all decision-making domains – whether they occur once or twice (p= .001) or more often (p= .000). In the final model, the correlation between the influence of the husband and having such discussions once or twice is weakened (p= .01).

The information in the table shows that seven of the HIV/AIDS communications items are retained in the final model. Two items in the initial model – obtaining HIV/AIDS information from a relative (s) and amount of HIV/AIDS information from the television - are not in the initial model. Obtaining HIV/AIDS from a healthcare worker is not included in the final model. The table shows that, in the final model, obtaining HIV/AIDS is significant in the initial model, but non-significant the final model.

The comparison shows that, in the initial model, obtaining HIV/AIDS information from a partner(s) or the husband is non-significant, but in the final model it is significant for the influence of the husband. In both the initial and final models, the amount of HIV/AIDS information is relevant for joint decision-making.

In the initial and final models, the variable amount of HIV/AIDS information from a relative(s) is significant to joint decision-making. In the initial model, obtaining HIV/AIDS from the television is significant to joint decision-making (and the influence of others), but not for the influence of the man. However, in the final model, obtaining HIV/AIDS information from the television is highly correlated with joint decision-making and male dominance. In both the initial and final models, obtaining HIV/AIDS information from pamphlets or posters has an effect on joint decision-making, but not the influence of the husband.

The information in Table 39 shows that two of the items estimating the effect of HIV/AIDS knowledge on the dependent variable are significant in the individual model are included in the final model – avoid by having a god diet and healthy looking

person can have AIDS. In the initial model, the variable avoid by having a good diet is non-significant for both joint decision-making and the influence of the husband (it is, however, significant for the influence of others). In the final model, the variable is significantly correlated with both joint decision-making and male dominance. In the initial model, the variable healthy looking person c an have AIDS is correlated with joint decision-making as well as the influence of others, but uncorrelated with both joint decision-making or male dominance in the final model

Table 39. Comparison of the findings from the individual and final models on variables estimating the effect of information and communication as well as HIV/AIDS knowledge and attitudes on decision-making for fertility control

Variable	Initial	In final	Significant in final
FP information from paper	Significant	Yes	Yes
FP information from poster	Significant	Yes	Yes
FP information from brochure	Significant	Yes	Yes
Frequency of discussions on FP	Significant	Yes	Yes
Amount of HIV information from partner(s)	Significant	Yes	Yes
Amount of HIV information from relative(s)	Significant	Yes	Yes
HIV/AIDS information from television	Significant	Yes	Yes
HIV/AIDS information from pamphlets or posters	Significant	Yes	Yes
Mandatory reporting AIDS cases	Significant	Yes	Yes
Mandatory reporting of HHIV cases	Significant	Yes	Yes
Radio daily	Non-significant	Yes	Yes
Got HIV/AIDS information from a partner(s)	Non-significant	Yes	Yes
HIV/AIDS information from healthcare workers	Non-significant	Yes	Yes
HIV/AIDS information from radio	Significant	Yes	No
Avoid by having a good diet	Significant	Yes	No
Healthy looking person can have AIDS	Significant	Yes	No
Weekly viewing of television	Significant	No	
FP information from health facility	Significant	No	
People with AIDS should be told status	Significant	No	
Partner disclosure	Significant	No	
Discuss FP with daughters	Significant	No	
Discuss FP with friends or neighbours	Significant	No	
Got HIV/AIDS information from relative(s)	Significant	No	
Avoid public toilets	Significant	No	
Knows HIV positive individual(s)	Significant	No	
Sharing razor blade	Significant	No	
Avoid mosquito bites	Significant	No	
Amount of HIV information from television	Significant	No	
Amount of HIV information from newspaper	Significant	No	

Two of the four variables associated with HIV/AIDS attitudes -mandatory reporting of AIDS cases, and mandatory reporting of HIV cases - which are significant in the initial model, are retained in the final model. The comparison shows that in the initial and

final models, both factors are relevant for the influence of the husband only, but the magnitude of their effect increases in the final model.

7.12.1h. Reproductive knowledge and attitudes

The comparison of the initial and final models shows that one variable not in the initial model – acceptability of the radio for promoting family planning - is included in the final model (c.f. Tables 38 and 39). Four variables having a significant effect on the dependent variable are excluded from the final model: approval for family planning; acceptability of the television for promoting family planning; knowledge of the menstrual cycle, and knowledge of a source for contraception. Knowledge of the 1996-TOPAct (law on abortion) is correlated with male dominance (and the influence of others in the initial model). The final model shows that it is uncorrelated with male dominance, as well as joint decision-making.

The comparison further shows that, in the initial model, the variable ideal number of children is significant for joint decision-making, and for the influence of the husband (as well as of others). In the final model, the ideal number of children has an effect on joint decision-making only, but the magnitude of its effect is somewhat reduced.

The comparison finds that knowledge of the purpose of and a source of condoms is significant in the initial and final models. In both models, however, the two variables are correlated with male dominance only.

Chapter 8

8. Summary and conclusions

Although there is a growing body of studies on fertility and contraception among Black South Africans, nothing is known about the factors affecting decision-making for the use of fertility control among women in this society. Therefore, the primary aim of this study is to determine the factors affecting the patterns of dominance in decision-making for the use of fertility control among reproductive-aged (15-49 years) Black South African women.

This study is based on information collected from currently married Black women (15-49 years) who participated in the 1998 South African Demographic and Health Survey (SADHS). The 1998 SADHS is a representative national survey that includes women between 15 and 49 years of age from all racial groups. Comparisons of the 1998 SADHS with the 1998 OHS, the 2001-2002 Migration Survey, the 2004 GHS and the 2005 Labour Force Survey, on two key demographic variables – the woman's age and her age at first marriage - show that Black women in this study are typical of married Black South African women of a comparable age.

The goal of the reproductive health approach to family planning, emphasising the participation of men in reproductive decisions, as well as prevention and treatment of STIs (including HIV), cannot be realised without knowing the factors affecting the patterns of dominance in decision-making about such matters. This study is undertaken in order to assess the relative importance of the background and the socio-economic characteristics of the woman; the characteristics of the husband; husband-wife's comparative characteristics; the household characteristics; sexual and reproductive-related factors as well as information and communication about family planning and HIV/AIDS, and reproductive and HIV/AIDS-related knowledge and attitudes in decision-making for the use of fertility control among married Black South African women between 15 and 49 years.

A three-step approach is used to assess the relationship between dominance in decision-making for the use of fertility control and the various categories of predictor variables employed in this study. In the first step, bivariate analysis is used, in order to determine the association between the dependent and each predictor variable

examined. The results obtained through bivariate analyses are presented and discussed in Chapter 6, in terms of the hypotheses established in Chapter 3.

In the second step (Chapter 7), separate regression models, associated with each category of predictor variables, are constructed in order to estimate which variables have a significant effect on the dependent variable. At the third step, binominal logistic regression, using the backward stepwise procedure, is performed in order to specify the variables that are critical to a joint or male versus a female pattern of dominance in decision-making for the use of fertility control among the women in the study.

8.1. Assessment of the hypothesis from the findings in the individual models

Most women in this study report that the decision about use of fertility control is either decided solely by the woman (40.2%) or jointly with the husband (39.2%). In the model estimating the effects of the background and socio-economic characteristics of the woman on dominance in decision-making for the use of fertility control, the assumption that the background and socio-economic characteristics of the woman has a significant effect on the dependent variable (Hypothesis 1b) is confirmed by the finding that the significant predictors in dominance in decision-making for the use of fertility control are: childhood place of residence, birth order, age, education, school attendance, current place of residence, occupation, age at first marriage, and time lapsed since the first marriage. The null hypothesis (1a) is supported by the finding that the dependent variable is unrelated to the mother's children, province of residence, level of literacy, type or number of unions, or experience of abuse.

The second model, which estimates the relationship between dominance in decision-making for the use of fertility control and the husband's characteristics, found no evidence in support of the assumption that the husband's characteristics do not have an effect on the patterns of dominance in decision-making for the use of fertility control among the women in this study (Hypothesis 2a). The finding that all of the variables assessing the effect of the husband's characteristics are significant predictors in decision-making for the use of fertility control appears to provide support for the assumption that the characteristics of the husband has a significant effect on the dependent variable (Hypothesis 2b).

The third model, which measures the relationship between the dependent variable and husband-wife's comparative characteristics, provides no support for the null hypothesised relationship between the dependent variable and the husband-wife's

comparative characteristics (Hypothesis 3a). There is ample support for the alternate assumption that the husband-wife's comparative characteristics have a significant effect on the patterns of dominance in decision-making for the use of fertility control among the women in this study (Hypothesis 3b), as shown by the finding of a significant association between the dependent variable and husband-wife's relative difference in ages as well as their comparative age, education, approval of family planning, and fertility desires.

In the fifth model, estimating the effect of sexual and reproductive factors on decision-making for the use of fertility control, the assumption that sexual and reproductive factors have no effect on the dependent variable (Hypothesis 5a) appears to be supported by the finding that dominance in decision-making for the use of fertility control is not related to the woman's age at the first birth, the numbers of births, children, sons, daughters or children at the first use of a method of fertility control. The assumption is also supported by the finding of an insignificant association between the dependent variable and having given birth in the previous three years; the abortion experience; past or current use of fertility control, as well as the woman's contraceptive need; history of condom use, the relationship with the last partner, or the number of partners in the past year

The finding of a significant relationship between the dependent variable and the woman's age at the time of her sexual debut, her having given birth in the previous year or in the last five years, and the main reason for not using condoms during the most recent act of intercourse, provide some support for the assumption that sexual and reproductive factors have a significant effect on the dependent variable (Hypothesis 5b).

In the model estimating the effects of the characteristics of the household on the patterns of dominance in decision-making for the use of fertility control, the findings that the dependent variable is not affected by the head of the household, the gender of the head, its socio-economic status or the number of sons or daughters in the household, appear to provide evidence in support of the null hypothesis (4a): that the characteristics of the household have no effect on the dependent variable. The finding of a significant association between the dependent variable and the size of the household, the age of its head, the home language, the husband's co-residency and the number of children aged five years or younger, as well as the number of own children residing in the household appear to support the assumption that the

characteristics of the household have a significant influence on the patterns of dominance in decision-making for the use of fertility control among the women in this study (Hypothesis 4b).

The finding that the patterns of dominance in decision-making for the use of fertility control is unrelated to whether or not the household has a radio or television, regularly reads the newspaper, has visited a health facility during the previous year, has heard about family planning on the radio or on television in the few months prior to the interview or has discussed family planning with a sister, lend support to the assumption that information and communication have no effect on the patterns of dominance in decision-making for the use of fertility control among the women in this study (Hypothesis 6a). This assumption also appears to be supported by the finding that dominance in decision-making for the use of fertility control is not related to obtaining HIV/AIDS-related information from a sexual partner, friend, healthcare worker or from a newspaper or magazine during the year before the interview, as well as the amount of such information obtained from a friend, the radio or from pamphlets or brochures during that time..

In this model, support for the alternate hypothesis (6b) comes from the finding that the dependent variable is associated with regular exposure to the radio and television. The finding of a significant association between the patterns of dominance in decision-making for the use of fertility control and obtaining information about family planning from a health facility, and from posters or brochures; discussing family planning with a daughter, friend or neighbour in the previous few months, and the frequency of spousal discussions abut family planning, also appear to lend support to the alternate hypothesis. Further support for the assumption is provided by the finding of a significant relationship between the dependent variable and obtaining information about HIV/AIDS from relatives, the radio, television, pamphlets or brochures, as well as the amount of such information obtained from a sexual partner, relative, healthcare worker, television, newspaper, or from pamphlets or brochures.

In Chapter 3 it is assumed that reproductive knowledge and attitudes do not affect the patterns of dominance in decision-making for the use of fertility control (Hypothesis 7a); or that, alternatively, the patterns of dominance in decision-making for the use of fertility control are significantly affected by reproductive knowledge and attitudes (Hypothesis 7b).

In the model assessing the effect of HIV/AIDS knowledge and attitudes on the dependent variable, support for the null hypothesis (7a) is derived from the finding that dominance in decision-making for the use of fertility control is not related to whether or not the woman knows that HIV infection can be prevented through safer sex practices, and that the virus is not transmitted through touching or sharing food with an infected person; or whether or not she feels that a person testing positive for the virus should be informed of her/his status.

The alternate hypothesis (7b) is supported by the finding that dominance in decision-making for the use of fertility control is related to whether or not the woman knows an individual who is HIV positive, that the virus can be transmitted by sharing a razor blade with an infected person or that a healthy looking person can have AIDS. This hypothesis also finds support in the finding of a significant relationship between the dependent variable and whether or not the woman knows that maintaining a good diet or avoiding public toilets or mosquito bites does not prevent HIV infection, and that using condoms during sexual intercourse can prevent the spread of the virus. The alternate hypothesis is further supported by the finding that all the HIV/AIDS attitude items have a significant effect on the patterns of dominance in decision-making for the use of fertility control.

In the model estimating the effect of reproductive knowledge and attitudes on the dependent variable, hypothesis (7a) is supported by the finding that the patterns of dominance in decision-making are unrelated to the woman's fertility preferences (or desires), or to her attitude towards the prospects of a pregnancy in the following few months or whether or not she endorses the idea of using the radio as a medium for promoting family planning.

The alternate hypothesis (7b) is supported by the finding that dominance in decision-making for the use of fertility control is affected by approval of family planning, endorsement of using the television as a medium for promoting family planning, as well as having the ideal number of children. It is also supported by the finding of a significant association between the dependent variable and whether or not the woman knows the timing of her ovulation, the conditions of the 1998 TOP-Act or the purpose of using condoms, in addition to a known source of contraception and condoms).
Support for the assumption that knowledge and attitudes have a significant effect on the patterns of dominance in decision-making for the use of fertility control is demonstrated by the following findings: whether or not the woman knows that

infection cannot be avoided by dieting (good nutrition) is predictive of both joint decision-making and the influence of the husband. The assumption is also supported by the finding of a significant association between the influence of the husband and whether or not the woman endorses the idea of mandatory reporting of HIV or AIDS cases.

8.1.2. The most influential predictors in the patterns of dominance in decision-making for the use of fertility control: Findings from separate modelling of the data

The model estimating the effects of the background and socio-economic characteristics of the woman on the dependent variable accounts for approximately 14 percent of the variation in decision-making for the use of fertility control among the women in this study (Pseudo R^2 – Nagelkerke = .138). In this model, the influence of others in the decision about fertility control is most strongly correlated with having no education or primary education, and working in a professional, technical or managerial occupation. Joint decision-making is most strongly correlated with being raised in a township and currently living in an urban area. The influence of the husband is most strongly associated with working in a professional, technical or managerial occupation.

The second model, which estimates the effects of the characteristics of he husband on the dependent variable accounts for 19 percent (Pseudo R^2 - Nagelkerke = .191) of the variation in decision-making for the use of fertility control among the women in this study. The influence of others in the decision about fertility control is most strongly correlated with having a husband who is between 30 and 39 years of age or who has no education.[295] Joint decision-making is most strongly associated with the husband's approval of family planning. Male dominance is most strongly correlated with the woman's uncertainty of the husband's approval of family planning.

The model estimating the importance of husband-wife's comparative characteristics on the dependent variable, accounts for approximately 22 percent of the explained variation (Pseudo R^2 - Nagelkerke = .224) in decision-making for the use of fertility

[295] Most women whose husbands have no education are likely not to be well educated and less likely to have a great amount of knowledge or information about family planning. Therefore, they are more likely to be influenced by those who they perceive to have a great deal of expert or informal power, such as the family planning nurse, for example.

control among married Black South African women, 15-49 years. In this model, the influence of others is most strongly associated with approval of the woman solely for family planning. Joint decision-making is most strongly associated with joint approval (or approval of the man only) and joint disapproval of family planning. The influence of the husband is most strongly correlated with joint disapproval of family planning.

Among the women in this study, less than 10 percent (Pseudo R^2 - Nagelkerke = .068) of the variation in decision-making for the use of fertility control is explained by the model estimating the effects of the aspects of the household on the dependent variable. In this model, the husband's co-residency is the best predictor for the influence of others. Joint decision-making is most strongly correlated with one to two children, aged five years or younger, living in the household. The influence of the husband is most strongly associated with speaking a Nguni or Sotho dialect in the household.

In the model estimating the effects of sexual and reproductive factors on the patterns of dominance in decision-making for the use of fertility control also accounts for less than 10 percent of the variance explained in the dependent variable (Pseudo R^2 - Nagelkerke = .085). In the model, the influence of others is most strongly related to having given birth within the previous five years. Joint decision-making and male dominance are both most strongly correlated with having given birth in the past year.

The sixth model, estimating the effects of information and communication on the dependent variable, accounts for approximately 26 percent (Pseudo R^2 - Nagelkerke = .258) of the variation in decision-making for the use of fertility control among the women in this study. In this model, the influence of others is most strongly correlated with the following: not being told about family planning at the health facility; not discussing family planning with friends or neighbours; receiving a lot of information about HIV/AIDS from relatives, and not from the media. Joint decision-making and the influence of the husband (male dominance) are both strongly associated with frequency of spousal discussions about family planning during the prior year.

The seventh model, accounting for only 10 percent of the variation (Pseudo R^2 - Nagelkerke = .102) in the dependent variable, estimates the effects of HIV/AIDS knowledge and attitudes on the patterns of dominance in decision-making for the use of fertility control among the women in this study.

The influence of others in decision-making for the use of fertility control is most strongly correlated with the woman's uncertainty about whether or not using condoms during sexual intercourse can prevent HIV infection. Joint decision-making is most significantly associated with the woman's endorsement of the idea of partner notification (i.e., that the person receiving a positive diagnosis for HIV should notify her/his sexual partner of her/his status). The influence of the husband (male dominance) is most strongly associated with the woman not knowing that injecting with clean needles can stop HIV infection.

The eight model, estimating the effects of reproductive knowledge and attitudes on the patterns of dominance in decision-making for the use of fertility control, accounts for close to 15 percent (Pseudo R^2 - Nagelkerke = .147) of the variation in decision-making for the use of fertility control among the women in this study. In this model, the influence of others, or the husband, is most strongly correlated with not knowing about the conditions of the 1996-TOP Act. Joint decision-making is most strongly associated with thinking that ovulation occurs at some time other than mid-cycle.

8.2. The final model

The final model, derived through backward stepwise analysis, is constructed in order to determine the factors associated with a joint or a male pattern of dominance versus a female pattern in decision-making for the use of fertility control among the women in this study. Variables that would contribute to a reduction in sample size or estimation problems are excluded from this part of the examination (c.f. Appendix 5). The final model accounts for over half of the variation (Pseudo R^2 – Nagelkerke = 0.511) in decision-making for the use of fertility control among currently married Black South African women of reproductive age.

In the final model, joint decision-making for the use of fertility control is most strongly correlated with spousal discussions about family planning, which occurred on more than two occasions during the year prior to the interview. The influence of the husband is most strongly correlated with not obtaining information about family planning from posters or brochures in the few months prior to the interview.

8.2.1. Assessment of the hypotheses from the results in the final model

The assumption that the characteristics of the husband do not affect the patterns of dominance in decision-making for the use of fertility appears to be confirmed by the finding of an insignificant association between the dependent variable and the husband's occupation. The alternate hypothesis is justified by the finding that, in the final model, the husband's irregular provision of money has a negative effect on joint decision-making.

The finding that the type of language spoken in the household is not a significant predictor for dominance in decision-making appears to support the null hypothesised association between the dependent variable and the characteristics of the household. The finding that joint decision-making is affected by the head of the household, as well as the socio-economic status of the household, lends some support to the alternate hypothesis that the characteristics of the household affect the pattern of dominance in decision-making for the use of fertility control.

The null hypothesis that sexual and reproductive factors do not affect the patterns of dominance in decision-making for the use of fertility control appears to be partially supported by the finding that the dependent variable is not associated with the number of live births. The alternate hypothesis of a significant association between the dependent variable and sexual and reproductive factors finds support in the finding that joint decision-making is related to the number of living children and the unmet need for contraceptives as well as the main reason for not using condoms during the most recent act of sexual intercourse. The assumption is also supported by the finding that, in the model, the influence of the husband is predicted by the woman's relationship with her last sexual partner and the main reason for non-condom use during the last act of intercourse.

The finding that the influence of the husband in decision-making for the use of fertility control is affected by the husband-wife's comparative education appears to support the alternate hypothesis that the comparative characteristics of the couple have an influence the dependent variable. The finding that the husband-wife's comparative fertility desires are a significant predictor in the model, lends even more support to the assumption that the couple's comparative characteristics have a significant effect on the patterns of dominance in decision-making for the use of fertility control among the women in this study.

Partial support for the assumption that information and communication have no significant effect on the patterns of dominance in decision-making for the use of fertility control is derived from the finding that obtaining HIV/AIDS-related information during the year prior to the interview is not a significant predictor in the model.

The assumption that information and communication have a significant effect on the patterns of dominance in decision-making for the use of fertility control is confirmed by the finding that, in the model, joint decision-making for the use of fertility control is predicted by whether or not the woman obtained information about family planning from reading the newspaper during the few months prior to the interview, as well as the frequency of spousal communication on this issue during the previous year. The assumption is also confirmed by the finding that the influence of the husband in deciding about fertility control is predicted by whether or not the woman listens to the radio daily, obtains information about family planning from reading the newspaper, or from posters or brochures, during the few months prior to the interview, as well as the frequency of husband-wife discussions about family planning during the year prior to the interview.

The assumption that information and communication are significant in the patterns of dominance in decision-making for the use of fertility control is supported by the finding that the amount of HIV/AIDS-related information obtained from a sexual partner (or husband); a relative, a healthcare worker, television, and pamphlets or brochures have a significant effect on joint decision-making. The assumption is further supported by the finding that the influence of the husband is related to whether or not the woman obtained HIV/AIDS information from a partner, as well as the amount of such information obtained from the television

The finding that the patterns of dominance in decision-making for the use of fertility control is unrelated to whether or not the woman knows the conditions of the 1996-TOP Act or that a healthy looking person can have AIDS appear to lend some support to the null hypothesis that knowledge and attitudes have no effect on the dependent variable.

Support for the assumption that knowledge and attitudes have a significant effect on the patterns of dominance in decision-making for the use of fertility control is demonstrated by the finding that whether or not the woman knows that infection

cannot be avoided by dieting (eating well) is predictive of both joint decision-making and the influence of the husband.

The assumption is also supported by the finding of a significant association between the influence of the husband and whether or not the woman endorses the idea of mandatory reporting of HIV or AIDS cases. The finding that joint decision-making is related to the ideal number of children; whether or not the woman endorses the use of radio as a medium for promoting family planning or whether or not she knows the purpose of using condoms. The finding that both the joint decision-making and the influence of the husband are affected by the known source of condoms also appears to confirm the hypothesis.

The finding that joint decision-making is significantly more likely among women who were raised in a town than among those who were raised in the countryside appears to be related to the fact: that the husband's approval, as well as joint approval, for family planning are both higher among women who were raised in towns than among those who were raised in the countryside (76.7% and 76.4% vs. 62.6% and 62.2% respectively).[296] It is found that the proportion of women who want the same number of children as their husbands is also higher among women who were raised in towns (65.9%) than among those who were raised in the countryside (54.1%).[297] The finding can be explained in terms of the frequency of spousal communication about family planning during the year prior to the interview: During that time 34.6 percent of women who were raised in the countryside never discussed family planning with their husbands, compared to 22.2 percent of those who were raised in towns.[298] The finding might also be explained in terms of current place of residence also appears to be an important factor, as 80 percent of women who were raised in cities currently reside in urban areas, compared to 26.2 percent of those who were raised in the countryside. This is because

In the model, the influence of the husband in decision-making for the use of fertility control is less likely if the woman was raised in a city than if she was raised in the

[296] The proportion of women whose husbands approve of family planning (74.2%) or who jointly approve of family planning (73.4%) is somewhat lower among those who were raised in cities than among those who were raised in towns.
[297] The proportion of women wanting the same number of children as their husbands is also lower among those who were raised in cities (65.9%) than among those who were raised in towns.
[298] During this time, the proportion of women not discussing family planning with their husbands is slightly higher among those who were raised in the countryside than among those who were raised in cities; (33%) of those who were raised in cities never discussed family planning with their husbands.

countryside. Current place of residence also appears to be a significant factor in explaining this finding: Most women who were raised in cities currently live in urban areas where spousal communication about family planning is generally higher than among women living in rural areas.[299]

The fact that the proportion of women who have at least a secondary education is higher among those who were raised in cities than among those who were raised in the countryside might also account for the reduced likelihood of the dominance of the husband in the decision about fertility control: 73 percent of women who were raised in cities have secondary or higher education, compared to 42.4 percent of those who were raised in the countryside.[300] This association is consistent with the basic premise of the modernisation thesis (Cleland & Wilson, 1978), which postulates a change in normative orientation as a result of educational exposure. In other words, women who are exposed to western style education are less likely to adhere to traditional gender-related norms that ascribe decision-making autonomy to males.

This finding can also be explained by the fact that employment, which is used as an indicator of female autonomy, is higher among women who were raised in cities than among those who were raised in the countryside (38.1% vs. 27.1%, respectively). Amongst the women in this study, the proportion of women who want the same number of children as their husbands is higher among those who are currently employed (60.5%) than among those who are not (55.2%). This is important, as it is generally assumed that joint decision-making for the use of fertility control is more likely to occur if the couple's fertility desires are the same.

The finding also appears to be related to the fact that the husband's approval for family planning, as well as joint approval for family planning, are both higher among women who were raised in cities than among those who were raised in the countryside. As already indicated, spousal communication about family planning is more frequent among women who were raised in cities than among their rural counterparts.

[299] Women living in urban areas are generally better-educated than their rural counterparts, and are more exposed to knowledge and information about family planning; they participate in more social networks favouring ideas about family size limitation than do their counterparts in rural areas.
[300] The proportion of women who have secondary or higher education is also lower among those who were raised in towns (65.3%) than among those who were raised in cities.

The finding that joint decision-making for the use of fertility control is significantly increased, and that the influence of the husband significantly decreased, if the woman's birth order is fifth – or anything higher than first or second - is consistent with findings from previous studies showing that the intergenerational transfer of family size norms is strongest among firstborns than among children born later (Hendershot, 1969; Tomeh 1972; Johnson & Stokes, 1976; Booth & Kee, 2006).

Theoretically, the relationship between fertility preference and order of birth is explained in terms of differential socialisation: lower ordinal born individuals are more dependent than higher ordinal born individuals (Tomeh, 1972). It is found that during the few months prior to the interview, the proportion of women not discussing family planning with friends or neighbours is higher among first and second ordinal born women than among fifth and higher ordinal born women (79.4% vs. 74.9%).[301] The finding appear to be consistent with that of Thompson and Spanier (1978) who found that the degree of involvement with sexual partners is inversely related to the degree of involvement with friends.

The finding that joint decision-making is significantly more likely if the woman was raised in a city, rather than in the countryside, appears to be related to the fact that the husband's approval, as well as joint approval, for family planning are both higher among women who were raised in cities than among those who were raised in the countryside (76.7% and 76.4% vs. 62.6% and 62.2% respectively).[302]

It is found that the proportion of women who want the same number of children as their husbands is also higher among women who were raised in towns (65.9%) than among those who were raised in the countryside (54.1%).[303] The finding may also be explained in terms of the finding that during the year before the interview, 34.6 percent of women who were raised in the countryside never discussed family planning with their husbands, compared to 22.2 percent of those who were raised in cities.[304]

[301] During that time 75.1% of third and fourth ordinal born women did not have such a discussion.
[302] The proportion of women whose husbands approve of family planning (74.2%) or who jointly approve of family planning (73.4%) is somewhat lower among those who were raised in cities than among those who were raised in the countryside.
[303] The proportion of women wanting the same number of children as their husbands is also lower among those who were raised in cities (65.9%) than among those who were raised in the countryside.
[304] During this time, the proportion of women not discussing family planning with their husbands is slightly higher among those who were raised in the countryside than among those who were raise in cities (33%) of those who were raised in cities never discussed family planning with their husbands.

In the final model, the influence of the husband is significantly decreased if the woman has less education than he does than if she does not know how educated her husband actually is. The influence of the husband is also decreased if the woman desires the same number of children as he does or if she is uncertain about the number of children that her husband wants. The finding appears to be explained by the fact that the proportion of women discussing family planning with their husbands during the few months prior to the interview is significantly higher among those who have less education than their husbands have than among those who do not know how much education their husbands have (9 % vs. 3.9%).[305]

Joint approval for family planning is higher among women who have the same amount of education as the husband does, than among those who do not (68.5% vs. 47.8%).[306] The proportion of women who want the same number of children as their husbands is higher among those who have less education than their husbands do, than among those who do not know how much education their husbands have.

The findings that a decrease in the likelihood of joint decision-making is associated with the reasons for the lack of condom use during the most recent act of sexual intercourse appears to be due to social and cultural norms, as well as attitudes surrounding condom use or sexuality. In the literature review these are identified as barriers to women's inability to negotiate sexuality and contraception (including condom use).

The resource access hypothesis – which emphasises that the most important variable is people's ability to access resources (Handwerker, 1989) - can be used to explain the finding that male dominance in decision-making for the use of fertility control is significantly increased if the woman does not know of a source for condoms.[307]

This study finds that joint decision-making for the use of fertility control increases if the woman got information about HIV/AIDS from a sexual partner (or husband) during the year prior to the interview. Moreover, joint decision-making decreased if the woman

[305] 6.5% of those with more education than their husbands and 4.8% of those with the same education as their husbands had such a discussion in the months prior to the interview.
[306] Joint approval is also higher among those who have both less (72.2%) and more (58.2%) education than their husbands
[307] At least in the South African context, the resource access hypothesis might be more appropriately used to explain condom use behaviour than fertility control in general because family planning is more institutionalised than condom-related services: Condoms are associated with STIs, HIV and illness so many "respectable" ladies might prefer not to know about them.

did not obtain such information from a partner, from television or from pamphlets or posters during this time. These findings are consistent with the assumption of diffusion theorists, which state that the spread of ideas about family planning through interpersonal channels - as well as through social interaction with significant others - are essential to fertility decline.[308]

Joint decision-making for the use of fertility control is increased among women who did not obtain information about HIV/AIDS from a healthcare worker during the year prior to the interview. This is surprising as the opposite is anticipated. Nonetheless, it probably points to an existing problem in the South African health care system, which is mentioned in a previous study (Mbananga, 2002): In general, healthcare workers in South Africa do not possess sufficient technical knowledge to improve the situation.

The study also finds that the influence of the husband in decision-making for the use of fertility control is diminished if the woman did not get any information about HIV/AIDS from him during the year prior to the interview. Place of residence may be a factor accounting for this finding: the proportion of women who did not get any information about HIV/AIDS from their husbands (during the year prior to the interview) is higher among those living in rural areas (59.9%) than among their counterparts in urban areas (51.3%).

The finding might also be related to how many children are considered to be ideal and the frequency of spousal communication about family planning: 54 percent of women who did not speak to their husbands about this issue consider four or more children to be ideal, compared to 49.5 percent of those who did speak to their husbands. It is, therefore, inferred that among Black South African women, spousal discussions about issues of reproduction are more likely to occur in the presence of norms for smaller families. In the year prior to the interview, 34.6 percent of the women who did not obtain information about HIV/AIDS from their husbands also did not discuss family planning with them, compared to 29.6 percent of those who did.

[308] A problem in interpreting the results is that the meaning of a lot or some information about HIV/AIDS cannot be measured. Questions about the specific information that was obtained might give a clearer of not just what works but why and perhaps how it works. Such information would undoubtedly enhance our understanding of the role of the media in disseminating information and educating about public health issues.

8.3. Usefulness of the findings

The findings from study assist in filling the knowledge gap in the growing body of literature on reproductive health (i.e. fertility and contraception) in South Africa. The findings can be used to inform the development of reproductive health and HIV/AIDS policy, as well as educational and information material in these areas. The findings provide theoretical insights that might be used in the disciplines of sociology, socio-demography and gender studies in the sub-Saharan African context. The findings from this study also indicate some areas for further investigation. The findings from this study can be used as baseline for further studies on sexual and reproductive decision-making in the South African context.

8.4. Further studies

The factors influencing decision-making for the use of fertility control among Black South African women of reproductive age (15-49 years) - at the national level - is highlighted in this study. In order to acquire a fuller understanding of reproductive decision-making in the South African context, a number of areas need to be investigated.

The finding that women (and their husbands) who live in male-headed households generally have higher socio-economic status (measured by education, employment and the socio-economic status of the household) than those in female-headed households is consistent with the findings from other studies showing that female-headed households are poorer than male-headed ones (Katapa,2006). Nonetheless, in the 1998 SADHS, there is no objective standard by which to measure the head of the household. Moultrie and Timæus (2001, p.211) point to this dilemma by stating that “the concept of the household remains beset with conceptual and definitional problems. The foremost of these is to define what constitutes a household. A second problem relates to the definition of the household headship and a third to the manner in which female-headed households are conceptualised”. It is, for example, important to know whether the basis for headship is a function of financial contribution, age, gender or some other factor or a combination of factors. Theoretically and practically speaking, it is possible that a household can be headed by more than one individual, especially if an objective set of criteria is used. The DHS questionnaire should therefore also include an item (or set of items) designed to capture such information.
This study – in addition to many others - focuses on Black women. There is, however, a definite need to investigate the reproductive behaviour of members of other racial

groups. As there are obvious differences between racial groups, as well as between provinces and different linguistic or ethnic (tribal) groups, there is a need to study contraceptive behaviour in general – and particularly decision-making - at the local level. Such studies may provide information to those interested in ethnic and cultural comparisons. Family planners, as well as HIV/AIDS specialists and policy makers, can use such information as a guide to design and implement informational and educational material and services that are congruous with the community wherein they work.

There is also a need to understand the various factors affecting decision-making for the use of fertility control, including condom use among men. A study that includes both individuals in the relationship provides more information than analysing just one gender. It has been pointed out that "[t]he failure to involve men in research on and programmes for fertility in sub-Sahara Africa has serious implications, not only for family planning, but also for the reliability of estimates obtained from data collected only from females" (Bankole, 1995, p.317). A couple-study can provide information about the extent of agreement on sexual and reproductive decision-making, and provide information that family planning personnel can use in designing and implementing strategies to involve men in family planning.

Studies on sexual and reproductive decision-making among people who are infected and affected by the HIV pandemic are needed - especially among discordant couples. Such studies are important, not only for the theoretical insight they can provide, but also by providing information of a practical nature to the health community.

Qualitative studies on reproductive decision-making should be conducted at the local level, in order to generate hypotheses that could be tested at a later stage, with the use of standardised open- and closed-ended items. Such studies provide information that cannot be obtained by the use of a DHS-type questionnaire.

Due to the fact that the 1998 SADHS was not designed for the purpose for which it is used in this study, there is a shortage of variables on decision-making in other domains that are known to be associated with decision-making autonomy among women. It is suggested that items that are generally used to assess female autonomy in decision-making should be included in the next SADHS.

A single item on contraceptive discontinuance is not sufficient, as the women are only asked about discontinuance that has occurred during the previous year. Knowing whether the woman is a habitual discontinuer and the factors associated with each episode of discontinuance might provide information that leads to a clearer understanding of contraceptive behaviour among Black South African women, in general.

Although the 1998 SADHS asks the respondents if they have ever terminated a pregnancy, they are not asked to state the reasons for making the abortion decision or the factors leading to the decision. It is recommended that the next SADHS includes items on abortion (termination of pregnancy) designed to provide information on the reason(s) for the decision, the woman's age, and other socio-demographic factors that are relevant to each instance of the abortion experience, as well as an item assessing who is dominant in making the decision. Knowing the factors affecting the abortion decision adds to our understanding of reproductive decision-making in the South African context.

Although the 1998 SADHS includes an item asking whether the last child or current, pregnancy is (was) 'wanted at the time', 'wanted later', or 'not wanted', an item evaluating whether such a pregnancy is due to method failure, or to non-use of fertility control (attributable to an unmet need for family planning) or non use of fertility control (attributable to the woman or couple planning to have a child) is not included in the questionnaire. It is recommended that such items are included in the next SADHS. Knowing whether the patterns of dominance in decision-making for the use of fertility control is affected by a pregnancy due to method failure and /or the method in use at the time augments our understanding of contraceptive behaviour in the South African context.

The question about the mother's children, although valuable, could be misleading, as not all individuals are raised by their biological mothers, and/or with siblings. The environment wherein the individual is raised is probably more significant than genetic factors, and items assessing this type of information should be included in similar studies.

The finding of a significant association between approval for family planning and comparative fertility desires is consistent with prior studies showing that approval for and the prevalence in use of fertility control is higher when the woman wants the

same number of children that the husband wants (Bankole, 1995; Bankole & Singh, 1998). However, since the children belonging to the husband or wife do not necessarily share both biological parents, participants in the next SADHS should be asked whether the spouse is the biological parent of all the respondent's children. The answer to this and related questions on family formation and re-formation might provide important information on social change and trends in contemporary South African society, a society experiencing social and political transformation.

Appendix 1.Total fertility and contraceptive rates in selected sub-Saharan African countries

Table.1.1. Total fertility rates (TFR), sub-Saharan African countries, 1990 and 2000. UNICEF end decade databases.

Country	TFR 1990	TFR 2000
Angola	7.2	7.2
Botswana	5.1	4.1
Burkina Faso	7.3	6.8
Burundi	6.8	6.8
Cameroon	5.9	4.9
Cape Verde	4.3	3.4
Central African Republic	5.6	5.1
Chad	6.7	6.7
Comoros	6.2	5.2
Congo	6.3	6.3
Cote d'Ivoire	6.3	4.9
Democratic Republic of the Congo	6.7	6.7
Djibouti	6.3	5.9
Equatorial Guinea	5.9	5.9
Eritrea	6.2	5.5
Ethiopia	6.9	6.8
Gabon	5.1	5.4
Gambia	5.9	5.0
Guinea	6.6	6.1
Guinea Bissau	6.0	6.0
Kenya	6.1	4.4
Lesotho	5.2	4.6
Liberia	6.8	6.8
Libya	4.9	3.6
Madagascar	6.3	5.9
Malawi	7.3	6.5
Mali	7.0	7.0
Mauritius	2.2	2.0
Mozambique	6.5	6.1
Namibia	6.0	5.1
Niger	8.1	8.0
Nigeria	6.5	5.7
Reunion	Not available	Not available
Rwanda	6.9	6.0
São Tomé and Príncipe	Not available	Not available
Senegal	6.3	5.3
Seychelles	Not available	2.0
Sierra Leone	6.5	6.5
Somalia	7.3	7.3
South Africa	3.6	3.0
Sudan	5.5	4.7
Swaziland	5.6	4.6
Tanzania	6.1	5.3
Togo	6.3	5.6
Uganda	7.1	7.1
Zambia	6.3	5.9
Zimbabwe	5.8	4.8

Table 1.2. Proportion of women in union, aged 15-49, who are using contraception or whose partner is using contraception, UNICEF end decade databases, UN common databases

Country	Survey Year	percent	Survey
Botswana	1996	47.6	National Fertility/Family Planning/Health Survey
Burkina Faso	1999	11.9	Demographic and Health Survey
Cameroon	1998	19.3	Demographic and Health Survey
Cote d'Ivoire	1999	15.0	Demographic and Health Survey
Ethiopia	2000	8.1	Demographic and Health Survey
Ghana	1999	22.0	Demographic and Health Survey
Guinea	1999	6.2	Demographic and Health Survey
Kenya	1998	39.0	Demographic and Health Survey
Lesotho	1992	23.2	Demographic and Health Survey
Malawi	1996	21.9	Demographic and Health Survey
Mali	1996	6.7	Demographic and Health Survey
Niger	1998	8.2	Demographic and Health Survey
Nigeria	1999	7.4	Demographic and Health Survey
Rwanda	1992	21.2	Demographic and Health Survey
Senegal	1997	12.9	Demographic and Health Survey
South Africa	1998	56.3	Demographic and Health Survey
Sudan	1993	8.3	Arab/Gulf Family/Child Health Survey
Uganda	1995	14.8	Demographic and Health Survey
Tanzania	1999	24.2	Demographic and Health Survey
Zambia	1996	25.0	Demographic and Health Survey
Zimbabwe	1999	53.5	Demographic and Health Survey

Appendix 2. Comparison of the 1998 SADHS with other National Surveys conducted between 1998 and 2005 on age and age at marriage

Table 2.1. Distribution of women in the surveys by selected characteristics of the respondents according to ethnicity, 1998 SADHS, 1998 OHS, 2001-2002 Migration Study, 2004 GHS and 2005 LFS.

Variable	SADHS	OHS	GHS	LFS	Migration
%Blacks	77.0	78.3	76.2	78.5	56.9
Urban	55.4	50.9	58.1	N/A	66.0
%Blacks	47.3	40.9	49.4		43.2
%Non-Blacks	82.2	86.2	83.2		96.0
Average age	29.3	26.3	28.0	27.2	39.4
Blacks	28.9	25.4	28.5	26.4	26.0
Non-Blacks	30.9	31.8	29.1	31.3	30.1
Ever-married	50.5	83.2	34.8	35.9	37.8
%Blacks	47.0	88.8	35.7	28.0	28.2
%Non-Blacks	61.9	63.8	41.3	45.6	45.1
Median age at marriage	21.0	24.0	N/A	N/A	24.0
Blacks	20.0	23.0			23.0
Non-Blacks	21.0	23.0			24.0
Married or cohabiting	42.2	15.9	26.8	28.2	30.8
%Blacks	38.5	18.6	28.7	21.3	21.6
%Non-Blacks	54.3	10.9	33.0	38.2	37.5
Age category					
%14 and younger		33.9	22.6	32.3	29.5
%15 to 49 years	100.0	50.8	65.0	52.0	54.8
%50 and older		15.3	12.4	15.6	15.7
Average age		29.3	26.3	27.3	39.5
Age – Blacks					
%14 and younger		36.2	22.4	33.9	32.6
%15 to 49 years	100.0	50.5	65.6	52.0	54.1
%50 and older		13.3	12.0	14.1	13.3
Average age		28.9	24.9	26.2	39.7
Age - Non- Blacks					
%14 and younger		25.6	23.7	26.6	25.3
%15 to 49 years	100.0	51.9	62.5	52.3	55.8
%50 and older		22.5	13.9	21.1	18.9
Average age		30.9	31.4	31.3	39.3

Table 2.2. Distribution of women 15 to 49 by selected characteristics, 1998 SADHS, 1998 OHS, 2001-2002 Migration Study, 2004 GHS and 2005 LFS

Variable	SADHS	OHS	GHS	LFS	Migration
% Urban	55.4	55.2	53.2	N/A	67.2
% Ever-married	50.4	79.0	39.7	34.7	38.7
Median age at marriage	20.0	22.0	N/A	N/A	23.0
% Married or cohabiting	42.2	19.9	35.7	32.7	34.8

Table 2.3. Independent Samples Tests among women 15- 49 years in the 1998 SADHS and other survey, 1998 SADHS, 1998 OHS, 2001-2002 Migration Study, 2004 GHS and 2005 LFS.

Variable	Levene's test F	t-test (2-tailed sig.)	Kolmogorov-Smirnov Z
Age			
SADHS & OHS	1.086**	2.895	2.600
SADHS & GHS	80.008	-1.777**	3.132
SADHS & Migration	6.880	-15.281	5.075
SADHS & LFS	.025**	-16.588	2.170
Age – Urban			
SADHS & OHS	5.315	-8.240	2.077
SADHS & GHS	71.595	3.392	3.624
SADHS & Migration	12.445	-1.156**	3.361
Age – Rural			
SADHS & OHS	1.457**	2.569	2.049
SADHS & GHS	37.107	-6.767	3.471
SADHS & Migration	.154**	1.218**	3.755
Age at marriage			
Age at marriage	3.221**	-14.168	7.582
SADHS & OHS	2.102**	-14.894	6.185
SADHS & Migration			
Age at marriage -Urban			
SADHS & OHS	.086**	1.647**	4.084
SADHS & Migration	41.149	-13.029	3.788
Age at marriage- Rural			
SADHS & OHS	.899**	-13.731	6.641
SADHS & Migration	14.956	-11.744	4.826

** Non-significant at .050-level.

Table 2. 4. Independent Samples Tests of age among Black women, 15 to 49 years, in the surveys according to place of residence,1998 SADHS, 1998 OHS, 2001-2002 Migration Study, 2004 GHS and 2005 LFS.

Variable	Levene's test F	t- (2-tailed sig.)	Kolmogorov-Smirnov Z
Age			
SADHS & OHS	.282**	2.695**	2.154
SADHS & Migration	.000**	1.223**	1.451
SADHS & GHS	57.977	-2.959	2.629
SADHS & LFS	19.376	-.371**	1.928
Age- Urban			
SADHS & OHS	.556**	1.300**	1.557
SADHS & Migration	.680**	.517	.887**
SADHS & GHS	46.458	1.503**	2.538
Age- Rural			
SADHS & OHS	.774**	2.197	1.802
SADHS & Migration	1.269**	.260**	1.146**
SADHS & GHS	17.314	-5.499	2.623

** Non-significant at .050-level.

Table 2. 5. Distribution of Black women, 15 to 49 years, in the Sub-sample and other surveys by selected characteristics of the respondents, 1998 SADHS, 1998 OHS, 2001-2002 Migration Study, 2004 GHS and 2005 LFS.

Variable	Sub-sample	Other Blacks	OHS	Migration	GHS	LFS
Urban	43.5	49.8	45.5	44.9	46.6	N/A
Average age (yrs.)	34.4	25.4	28.5	28.6	29.4	28.9
% Ever-married	100.0	13.9	84.8	31.5	38.6	34.0
Median age at marriage (yrs.)	20.0	20.0	21.0	23.0	N/A	N/A
% Married or cohabiting	100.0	0.0	22.8	26.2	34.5	29.0

Table 2.6. Independent Samples Tests of age and age at marriage among ever-married and currently married Black women, 15-49 years, 1998 SADHS, 1998 OHS, 2001-2002 Migration Study, 2004 GHS and 2005 LFS.

Ever-married	Levene's test	t-test	KS-test
Age-All			
Sub-sample & Other Blacks	2.396**	-9.811	4.446
Sub-sample & OHS	213.531	51.300	19.122
Sub-sample & Migration	2.010**	-6.698	3.172
Sub-sample & GHS	16.941	-18.930	6.142
Sub-sample & Migration	2.420**	-13.344	6.243
Age-Urban			
Sub-sample & Other Blacks	1.486**	-7.830	3.264
Sub-sample & OHS	124.527	35.755	13.085
Sub-sample & Migration	6.249	-3.974	2.232
Sub-sample & GHS	4.526	-9.710	3.654
Age-Rural			
Sub-sample & other Blacks	.158**	-5.692	3.017
Sub-sample & OHS	95.658	37.198	14.003
Sub-sample & migration	.007**	-5.105	2.237
Sub-sample & GHS	54.899	-16.720	4.975
Age at marriage			
Sub-sample & Other Blacks	.038**	1.972	1.184**
Sub-sample & OHS	12.720	-7.020	3.187
Sub-sample & Migration	13.292	-7.190	3.693
Age at marriage – Urban			
Sub-sample & Other Blacks	.002**	2.784	1.865
Sub-sample & OHS	1.874**	-2.838	.092**
Sub-Sample & Migration	.428**	-4.213	3.390
Age at marriage – Rural			
Sub-sample & Other Blacks	.294**	1.211**	.845**
Sub-sample & OHS	2.389**	-8.076	3.405
Sub-Sample & Migration	26.083	-5.751	4.975
Currently married			
Age-All			
Sub-sample & OHS	50.658	1.455**	1.243**
Sub-sample & Migration	3.319**	-3.790	2.037
Sub-sample & GHS	10.769	10.769	5.281
Sub-sample & Migration	3.313**	-8.723	4.370
Age-Urban			
Sub-sample &OHS	4.423**	-1.924**	1.285**
Sub-sample & migration	7.655	-7.779	2.999
Age-Rural			
Sub-sample & OHS	.955**	.955	1.583
Sub-sample & migration	47.773	-15.312	4.411
Age at marriage			
Sub-sample & OHS	4.863	-7.831	3.164
Sub-sample & Migration	8.606	-6.755	3.535
Age at marriage- Urban			
Sub-sample & OHS	.016**	-3.995	1.201**
Sub-sample & Migration	.042**	-4.444	1.768
Age at marriage- Rural			
Sub-sample & OHS	.667**	-8.571	3.411
Sub-sample & Migration	20.009	-5.058	3.083

** Non-significant at .050-level.

Table 2.7. Independent Samples Tests for age among currently married Black women, 15-49 years, according to province of residence, 1998 SADHS, 1998 OHS, 2001-2002 Migration Study, 2004 GHS and 2005 LFS.

Province/Survey	Levene's test F	t- (2-tailed sig.)	Kolmogorov-Smirnov Z
Western Cape			
Sub-Sample & OHS	2.621**	-1.594**	.947**
Sub-Sample & Migration	.421**	-1.313**	.930**
Sub-Sample & GHS	.044**	-1.884**	.821**
Sub-Sample & LFS	.519**	-.311**	.406**
Eastern Cape			
Sub-Sample & OHS	.399**	.043**	.724**
Sub-Sample & Migration	.237**	-2.060	.972**
Sub-Sample & GHS	6.169	-5.723	2.341
Sub-Sample & LFS	.003**.	-3.816	1.914
Northern Cape			
Sub-Sample & OHS	1.509**	-.586**	.652**
Sub-Sample & Migration	1.426**	-.761**	.762**
Sub-Sample & GHS	.046**	-1.548**	.982**
Sub-Sample & LFS	2.164**	-.871**	1.005**
Free State			
Sub-Sample & OHS	10.361	-.816**	1.215**
Sub-Sample & Migration	1.235**	-1.578**	1.053**
Sub-Sample & GHS	2.197**	-3.810	2.211
Sub-Sample & LFS	3.091**	-2.042	1.509**
KwaZulu-Natal			
Sub-Sample & OHS	5.508	5.124	2.579
Sub-Sample & Migration	1.798**	-3.794	1.758
Sub-Sample & GHS	1.307**	-4.100	1.889
Sub-Sample & LFS	2.772**	-3.200	2.460
North West			
Sub-Sample & OHS	6.832	1.406**	.986**
Sub-Sample & Migration	17.856	-.861**	1.579
Sub-Sample & GHS	.019**	-5.700	2.752
Sub-Sample & LFS	2.483**	-3.775	2.032
Gauteng			
Sub-Sample & OHS	1.788**	-2.093	1.234**
Sub-Sample & Migration	.277**	-.138**	.402**
Sub-Sample & GHS	6.075	-.971**	1.126**
Sample & LFS	.679**	-.304**	.519**
Mpumalanga			
Sub-Sample & OHS	.868**	-.458**	.648**
Sub-Sample & Migration	.608**	-.184**	.644**
Sub-Sample & GHS	.470**	-2.494	1.417
Sub-Sample & LFS	.343**	-1.784**	1.157**
Limpopo			
Sub-sample and OHS	.898**	-8.912	1.452
Sub-sample & Migration	.001**	-.590**	.457**
Sub-Sample & GHS	3.458**	-7.846	3.187
Sub-Sample & LFS	.004**	-6.554	2.685

** Non-significant at .050-level

Table 2.8. Independent Samples Tests for age at marriage among currently married Black women, 15-49 years, in the surveys according to province of residence, 1998 SADHS, 1998 OHS, 2001-2002 Migration Study, 2004 GHS and 2005 LFS.

Province/Survey	Levene's test F	t- (2-tailed sig.)	Kolmogorov-Smirnov Z
Western Cape			
Sub-Sample & OHS	.926**	-.991**	1.347**
Sub-Sample & Migration	.546**	-.983**	.650**
Eastern Cape			
Sub-Sample & OHS	7.111	-5.080	2.497**
Sub-Sample & Migration	.682**	-5.077	2.461
Northern Cape			
Sub-Sample & OHS	19.379	5.447	2.866
Sub-Sample & Migration	1.228**	-1.591**	.985**
Free State			
Sub-Sample & OHS	4.260	1.943**	1.750
Sub-Sample & Migration	1.517**	-4.915	1.750
KwaZulu-Natal			
Sub-Sample & OHS	.218**	.769**	1.693
Sub-Sample & Migration	.250**	-1.544**	1.111**
North West			
Sub-Sample & OHS	.973**	-.697**	.871
Sub-Sample & Migration	1.580**	.319**	.698**
Gauteng			
Sub-Sample & OHS	3.461**	.448**	. 588**
Sub-Sample & Migration	.105**	-2.204	1.157**
Mpumalanga			
Sub-Sample & OHS	.477**	-5.053	2.547
Sub-Sample & Migration	1.708**	-4.965	2.238
Limpopo			
Sub-Sample & OHS	45.851	-8.912	3.466
Sub-Sample & Migration	24.787	-1.267**	.631**

** Non-significant at .050-level.

Table 2.9. Independent Samples Tests for age among currently married Black women, 15 to 49 years, in urban areas according to province of residence, 1998 SADHS, 1998 OHS, 2001-2002 Migration Study, 2004 GHS and 2005 LFS.

URBAN	Levene's test F	t- (2-tailed sig.)	Kolmogorov-Smirnov Z
Western Cape			
Sub-Sample & OHS	4.322	.034**	.591**
Sub-Sample & Migration	.289**	-.822**	.769**
Sub-Sample & GHS	.875**	-1.084**	.766**
Eastern Cape			
Sub-Sample & OHS	5.698	1.385**	1.134**
Sub-Sample & Migration	.455**	-.080**	.595**
Sub-Sample & GHS	6.273	-.691**	.913**
Northern Cape			
Sub-Sample & OHS	.365**	.545**	.794**
Sub-Sample & Migration	1.781**	-.651**	.736**
Sub-Sample & GHS	.090**	-1.201**	.825**
Free State			
Sub-Sample & OHS	.874**	-.091**	.515**
Sub-Sample & Migration	1.386**	-1.900**	1.022**
Sub-Sample & GHS	1.299**	-2.475	1.452
KwaZulu-Natal			
Sub-Sample & OHS	2.918**	2.550	1.522
Sub-Sample & Migration	1.337**	-1.130**	.782**
Sub-Sample & GHS	.505**	-2.755	1.530
North West			
Sub-Sample & OHS	7.068	.578	.885**
Sub-Sample & Migration	8.765	-1.043**	1.560
Sub-Sample & GHS	.386**	-4.777	2.625
Gauteng			
Sub-Sample & OHS	4.825	.282**	.705**
Sub-Sample & Migration	.210**	-.169**	.452**
Sub-Sample & GHS	5.945	-.553**	.910**
Mpumalanga			
Sub-Sample & OHS	.463**	1.539**	1.038**
Sub-Sample & Migration	.580**	-.241**	.579**
Sub-Sample & GHS	.008**	-1.833**	1.216**
Limpopo			
Sub-Sample & OHS	.415**	-2.058	.998**
Sub-Sample & Migration	.402**	-1.006**	.771**
Sub-Sample & GHS	.178**	-3.288	1.392**

** Non-significant at .050-level.

Table 2.10. Independent Samples Tests for age at marriage among currently married Black women, 15-49 years, in urban areas according to province of residence, 1998 SADHS, 1998 OHS, 2001-2002 Migration Study, 2004 GHS and 2005 LFS

URBAN	Levene's test F	t- (2-tailed sig.)	Kolmogorov-Smirnov Z
Western Cape			
Sub-Sample & OHS	.174**	-.751**	.983**
Sub-Sample & Migration	.642**	-.899**	.585**
Eastern Cape			
Sub-Sample & OHS	.986**	-.573**	.388**
Sub-Sample & Migration	2.261**	-.948**	1.022**
Northern Cape			
Sub-Sample & OHS	3.315**	1.175**	.968**
Sub-Sample & Migration	1.652**	-1.609**	.949**
Free State			
Sub-Sample & OHS	.034**	-2.263	1.236**
Sub-Sample & Migration	.849**	-4.006	1.630
KwaZulu-Natal			
Sub-Sample & OHS	.777**	.567**	1.173**
Sub-Sample & Migration	.510**	-.826**	.457**
North West			
Sub-Sample & OHS	.160**	-1.060**	.551**
Sub-Sample & Migration	4.219	2.471	.996**
Gauteng			
Sub-Sample & OHS	.349**	.577**	.491**
Sub-Sample & Migration	.014	-1.949**	1.246**
Mpumalanga			
Sub-Sample & OHS	.331**	-2.944	1.498
Sub-Sample & Migration	.003**	-2.241	1.415
Limpopo			
Sub-Sample & OHS	1.272**	-2.391	1.580
Sub-Sample & Migration	-*	-*	-*

-* Insufficient cases for comparison.
** Non-significant at .050-level.

Table 2.11. Independent Samples Tests for age among currently married Black women in rural areas according to province of residence, 1998 SADHS, 1998 OHS, 2001-2002 Migration Study, 2004 GHS and 2005 LFS

RURAL	Levene's test F	t- (2-tailed sig.)	Kolmogorov-Smirnov Z
Western Cape			
Sub-Sample & OHS	. .038**	-4.008	1.739
Sub-Sample & Migration	-*	-*	-*
Sub-Sample & GHS	13.998	-2.241	1.033**
Eastern Cape			
Sub-Sample & OHS	. .002**	-.018**	.460**
Sub-Sample & Migration	.359**	-2.151	.910**
Sub-Sample & GHS	41.267	-6.466	2.481
Northern Cape			
Sub-Sample & OHS	. .035**	-1.374**	.686**
Sub-Sample & Migration	-*		-*
Sub-Sample & GHS	.052**	-1.212**	.709**
Free State			
Sub-Sample & OHS	3.955	-1.468**	1.118**
Sub-Sample & Migration	.054**	.570**	.767**
Sub-Sample & GHS	.878**	-3.005	1.695
KwaZulu-Natal			
Sub-Sample & OHS	2.119**	5.007	2.298
Sub-Sample & Migration	1.485**	-3.710	1.587
Sub-Sample & GHS	7.446	-3.086	1.465
North West			
Sub-Sample & OHS	2.660**	1.302**	.915**
Sub-Sample & Migration	8.988		1.040**
Sub-Sample & GHS	.622**	-3.558	1.937
Gauteng			
Sub-Sample & OHS	.070**	-3.659	1.600
Sub-Sample & Migration	.381**	-1.839**	.816**
Sub-Sample & GHS	.397**	-2.710	1.449
Mpumalanga			
Sub-Sample & OHS	. .017**	-1.054**	.769**
Sub-Sample & Migration	.390**	.040**	.406**
Sub-Sample & GHS	1.155**	-1.715**	.955**
Limpopo			
Sub-Sample & OHS	.044**	-2.241	.965**
Sub-Sample & Migration	.042**	-.371**	.443**
Sub-Sample & GHS	2.737**	-6.874	2.860

-* Insufficient cases for comparison.
** Non-significant at .050-level.

Table 2.12. Independent Samples Tests for age at marriage among currently married Black women, 15-49 years, in rural area, 1998 SADHS, 1998 OHS, 2001-2002 Migration Study, 2004 GHS and 2005 LFS

RURAL	Levene's test F	t- (2-tailed sig.)	Kolmogorov-Smirnov Z
Western Cape			
Sub-Sample & OHS	1.729**	-.823**	1.099**
Sub-Sample & Migration	-*	-*	-*
Eastern Cape			
Sub-Sample & OHS	5.944	-3.026	1.649
Sub-Sample & Migration	5.961	-4.253	2.194
Northern Cape			
Sub-Sample & OHS	12.959	.977**	.955**
Sub-Sample & Migration	-*	-*	-*
F**ree State**			
Sub-Sample & OHS	.520**	-.195**	.654**
Sub-Sample & Migration	1.575**	-2.127	1.033**
KwaZulu-Natal			
Sub-Sample & OHS	.138**	.758**	1.487**
Sub-Sample & Migration	1.464**	-1.450**	1.570
North West			
Sub-Sample & OHS	.235**	.377**	1.012**
Sub-Sample & Migration	.200**	-.369**	.635**
Gauteng			
Sub-Sample & OHS	2.144**	-2.258	1.732
Sub-Sample & Migration	6.447	-1.219**	.930**
Mpumalanga			
Sub-Sample & OHS	.122**	-4.503	2.278
Sub-Sample & Migration	1.639**	-4.542	1.735
Limpopo			
Sub-Sample & OHS	38.969	-7.661	3.307
Sub-Sample & Migration	25.891	-1.324**	.714

-* Insufficient cases for comparison.
** Non-significant at .050-level.

Table 2.13. Internal consistency of the data, 1998 SADHS

Category	Test statistic	Items	Estimate of reliability
Household durables	KR/20	10	.6882
Exposure to and communication about:			
Family planning from the media	KR/20	5	.7745
Family planning discussions	KR/20	6	.2331
HIV/AIDS from media and individuals	KR/20	8	.8621
Initial source of information on contraception	KR/20	11	-1.1102
Amount of HIV/AIDS information received in the past year	Goodness of fit	8	.7617
Knowledge			
Source for birth control or condom	Goodness of fit	2	.5507
HIV/AIDS prevention strategies	Goodness of fit	9	.9141
Attitudes			
Contraceptive	KR/20	4	.6892
HIV/AIDS	KR/20	6	.6899

Appendix 3. Items from the 1998 SADHS used in this study

Section 1. Background and socio-economic characteristics of the woman

3.1. Background characteristics.

No	QUESTIONS AND FILTERS	CODING CATEGORIES
102	First I would like to ask some questions about you and your household For most of the time until you were 12 years old, did you live in a city, in a large town, on a farm or in rural areas?	City Town Rural/Farm
901	Now I would like to ask some questions about your brothers and sisters, that is, all of the children born to your natural mother, including those who are living with you, those living elsewhere and those who have died How many children did your mother give birth to, including you?	NUMBER OF BIRTHSTO NATURAL MOTHER
903	How many of these births did your mother have before you were born?	NUMBER OF PRECEDING BIRTHS

3.2. Age, education & place of residence

No	QUESTIONS AND FILTERS	CODING CATEGORIES
106	How old were you at your last birthday? COMPARE AND CORRECT 105 AND/OR 106 IF INCONSISTENT	AGE IN COMPLETED YEARS
109	What is the highest (standard/year) you completed?	Less than one year completed Less than one year completed Sub a/class 1 Sub b/class 2 Standard 1 Standard 2 Standard 3 Standard 4 Standard 5 Standard 6 Standard 7 Standard 8 Standard 9 Standard 10 Further studies incomplete Diploma/other post-school completed Further degree complete
111	Are you currently attending school?	Yes (Skip to 114) No
114	Can you read and understand a letter or newspaper in your home language easily, with difficulty, or not at all?	EASILY WITH DIFFICULTY NOT AT ALL (Skip to 116)
121	What is the name of the place in which you usually live? (NAME OF PLACE)_____ Is that a large city, town, or rural area /farm?	 City Town Rural/Farm
122	In which PROVINCE is that located?	Province

3.3. Employment

No	QUESTIONS AND FILTERS	CODING CATEGORIES
1009	Aside from your own housework, are you currently working for money?	YES (Skip to 1012) NO
1010	As you know, some women take up jobs for which they are paid in cash or kind. Others sell things, have a small business or work on the family farm or in the family business. Are you currently doing any of these things or any other work?	YES NO (Skip to 1011)
1011	Have you done any work in the last 12 months?	YES NO
1012	What is your occupation, that is, what kind of work do you mainly do?	OCCUPATION
1015	Do you do this work for a family business, are you employed by someone outside the family, or are you self-employed?	FOR FAMILY MEMBER FOR SOMEONE ELSE SELF-EMPLOYED
1016	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUR THE YEAR SEASONALLY/PART OF THE YEAR ONCE IN A WHILE

3.4. Marriage

<table>
<tr><th>No</th><th colspan="2">QUESTIONS AND FILTERS</th><th>CODING CATEGORIES</th></tr>
<tr><td colspan="4">Now I am going to ask you some sensitive questions about your marital and sexual relations All information you give me is completely confidential</td></tr>
<tr><td>502</td><td colspan="2">Are you currently married or living with a man?</td><td>YES, CURRENTLY MARRIED
YES, LIVING WITH A MAN (Skip to 507)
NO, NOT IN UNION</td></tr>
<tr><td>508</td><td colspan="2">Does your husband have any other wives besides yourself?</td><td>YES
NO (Skip to 511)
DON’T KNOW (Skip to 511)</td></tr>
<tr><td>509</td><td colspan="2">How many other wives does he have?</td><td>NUMBER OF OTHER WIVES
DON’T KNOW</td></tr>
<tr><td rowspan="2">512</td><td>Check 511: MARRIED/LIVED WITH A MAN ONLY ONCE</td><td>Check 511: MARRIED/LIVED WITH A MAN MORE THAN ONCE</td><td rowspan="2">MONTH
DON’T KNOW MONTH

YEAR
DON’T KNOW YEAR</td></tr>
<tr><td>In what month and year did you start living with your husband/partner?</td><td>Now we will talk about your first husband/partner
In what month and year did you Start living with him?</td></tr>
<tr><td>513</td><td colspan="2">How old were you when you started living with him?</td><td>AGE: _____ years.</td></tr>
</table>

3.5. Experience of abuse

No	QUESTIONS AND FILTERS	CODING CATEGORIES
702	Now I would like to ask you some difficult questions about how you have been treated in your life by other people	YES NO
703	Over the last year, has anyone ever kicked, bitten, slapped, hit you with a fist, threaten you with a weapon, such as a knife, a stick, or a gun, or thrown something at you?	YES (Skip to 705) NO NO ANSWER
704	Have any of your boyfriends or husbands ever kicked, bitten, slapped, hit you with a fist, threaten you with a weapon, such as a knife, a stick, or a gun, or thrown something at you?	YES (Skip to 707) NO NO ANSWER (Skip to 712)
705	Can you tell me who has done this to you?	CURRENT HUSBAND/PARTNER FORMER HUSBAND/PARTNER BOYFRIEND FATHER BROTHER SON DAUGHTER MOTHER FATHER-IN-LAW MOTHER-IN-LAW OTHER MALE RELATIVE OTHER FEMALE RELATIVE MANAGER/FOREMAN/EMPLOYER ASSAILANT OTHER (SPECIFY) NO ANSWER
710	When you were pregnant, has anyone ever kicked, bitten, slapped, hit you with a fist, threaten you with a weapon, such as a knife, a stick, or a gun, or thrown something at you?	YES NO NEVER BEEN PREGNANT
712	Has anyone ever forced you to have sexual intercourse against your will by threatening, holding you down or hurting you in some way?	YES (Skip to 715) NO
713	Has anyone ever persuaded you to have sexual intercourse when you did not want to?	YES NO (Skip to 718)
715	Did this happen before you were 15 years old?	YES NO NO ANSWER (Skip to 718)
718	Before you were 15 years old, did any man touch you against your will in a sexual way, such as unwanted touching, kissing, grabbing or fondling?	YES NO NO ANSWER (Skip to 721)
721	Before you were 15 years old, did any man force you to touch his private parts against your will?	YES NO NO ANSWER (Skip to 724)

Section 2. Husband's characteristics

3.6. Husband's characteristics

No	QUESTIONS AND FILTERS	CODING CATEGORIES
1002	How old was your husband/partner on his last birthday?	AGE
1003	Did your (last) husband/partner ever attend school?	YES NO (Skip to 1005)
1004	What was the highest (standard/year) he completed at school?	LESS THAN ONE YEAR COMPLETED LESS THAN ONE YEAR COMPLETED SUB A/CLASS 1 SUB B/CLASS 2 STANDARD 1 STANDARD 2 STANDARD 3 STANDARD 4 STANDARD 5 STANDARD 6 STANDARD 7 STANDARD 8 STANDARD 9 STANDARD 10 FURTHER STUDIES INCOMPLETE DIPLOMA/OTHER POSTSCHOOL COMPLETE FURTHER DEGREE COMPLETE
1005	Does your husband/partner currently work?	YES NO DON'T KNOW
1006	What is your husband/partner's occupation? That is, what kind of work does he mainly do?	HUSBAND'S OCCUPATION

Section 3. Husband-wife's comparative characteristics

3.7. Comparative characteristics

No.	Comparative characteristics	CODING CATEGORIES
621	Spouses/partners do not always agree on everything Now I want to ask you about your husband's/partner's views on family planning Do you think that your husband/partner approves or disapproves of couples using a method to avoid pregnancy?	APPROVE DISAPPROVE NO OPINION
623	Do you think your husband/partner wants the same number of children that you want, or does he want more or fewer than you want?	SAME NUMBER MORE CHILDREN FEWER CHILDREN DON'T KNOW
624	Who makes the decisions about using methods to avoid pregnancy?	REPONDENT DECIDES HUSBAND/PARTNER DECIDES JOINTLY OTHER (SPECIFY)

Section 4. Characteristics of the household

3. 8. Socio-economic characteristics of the household

No	QUESTIONS AND FILTERS	CODING CATEGORIES
25	What is the main source of drinking water for members of your household?	PIPED WATER (TAP) IN DWELLING PIPED WATER (TAP) IN SITE/YARD PUBLIC TAP WATER CARRIER/TANKER BOREHOLE/W ELL DAM/RIVER/STREAM/SPRING RAIN-WATER TANK BOTTLED WATER OTHER
26	How long does it take you to get there, get water, and come back?	MINUTES ON PREMISES
28	What kind of toilet facility does your household have?	FLUSH TOILET (OWN) FLUSH TOILET (SHARED) BUCKET LATRINE PIT LATRINE NO FAC ILITY/BUSH/FIELD OTHER
29	Does your household have: Electricity? A radio? A television? A telephone? A refrigerator? A personal computer (PC)? A washing machine?	YES NO ELECTRICITY 1 2 RADIO 1 2 TELEVISION 1 2 TELEPHONE 1 2 REFRIGERATOR 1 2 PC 1 2 WASHING MACHINE 1 2
30	What does your household use for cooking and heating? **RECORD ALL MENTIONED**	ELECTRICITY GAS PA RAF FIN WOOD COAL ANIMAL DUNG OTHER
32	MAIN MATERIAL OF THE FLOOR	EARTH/SAND/DUNG BARE WOOD PLANKS CEMENT VINYL CARPET CERAMIC TILES PARQUET OR POLISHED WOOD OTHER
33	MAIN MATERIAL IN THE WALLS **RECORD OBSERVATION**	PLASTIC/CARDBOARD MUD MUD AND CEMENT CORRUGATED IRON/ZINC PREFAB BARE BRICK/CEMENT BLOCK PLASTER/FINISHED OTHER (SPECIFY)
35	Does any member of your household own: A bicycle? A motorcycle? A car? A donkey or a horse? Sheep or cattle?	YES NO BICYC LE 1 2 MOTORCYCLE 1 2 CAR 1 2 DONKEY/HORSE 1 2 SHEEP/CATTLE 1 2

3.9 The living environment

Now we would like some information about the people who usually live in your household or who are staying with you now.		
No	**QUESTIONS AND FILTERS**	**CODING CATEGORIES**
1	Total in household	TOTAL
2	Please give me the names of the persons who usually Live in your household and guests of the household who stayed here last night, starting with the head of the Household.	
	How old is (Name)	AGE
3	What is the relationship of (NAME) to the head of the Household?	01 = Head 02 = Wife 03 = Son or daughter 04 = Son-in-law or daughter-in-law 05 = Grandchild 06 = Parent 07 = Parent-in-law 08 = Brother or sister 09 =Niece/nephew 10 =Other relative 11 = Adopted/Foster/Step child 12 = Not related 98 = Don't know
4	Does (Name) usually live here?	YES NO
1022	CHECK 502: CURRENTLY MARRIED YES, LIVING WITH A MAN Who mainly decides how the money you earn will be used: You, your husband/partner, you and your husband/partner jointly, or someone else?	RESPONDENT DECIDES HUSBAND/PARTNER DECIDES JOINTLY WITH HUSBAND/PARTNER SOMEONE ELSE DECIDES JOINTLY WITH SOMEONE ELSE
507	Is your husband/partner living with you now or is he staying elsewhere?	LIVING WITH HER STAYING ELSEWHERE
1023	Do you usually work at home or away from home?	HOME AWAY
1024	CHECK 222 AND 223: Is a child living at home who is age 5 or less?	YES NO (Skip to 026)
1025	Who usually takes care of (NAME OF YOUNGEST CHILD AT HOME) while you are working?	RESPONDENT HUSBAND/PARTNER OLDER FEMALE CHILD OLDER MALE CHILD OTHER RELATIVES NEIGHBORS FRIENDS SERVANTS/HIRED HELP CHILD IS IN SCHOOL INSTITUTIONAL CHILD CARE HAS NOT WORKED SINCE LAST BIRTH OTHER (SPECIFY)

Section 5. Sexual and reproductive

3.10. Sexual

No	QUESTIONS AND FILTERS		CODING CATEGORIES
514	How old were you when you had your first period?		AGE
519	How old were you when you first had sexual intercourse?		AGE FIRST TIME WHEN MARRIED
516	Check 302: KNOWS CONDOM	CHECK 302: DOES NOT KNOW CONDOM	YES (Skip to 516B) NO DON'T KNOW (Skip to 516B)
	The last time you had sex was a condom used?	Some men use a condom, which means that they put a rubber sheath on their penis during sexual intercourse. The last time you had sex was a condom used?	
516B	In the last 12 months, with how many different men have you had sexual intercourse?		NUMBER

3.11. Fertility

No	QUESTIONS AND FILTERS	CODING CATEGORIES
201	Now I would like to ask about all the births you have had during your life Have you ever given birth?	YES NO
202	Do you have any sons or daughters to whom you have given birth who are living with you?	YES NO
203	How many sons live with you? And how many daughters live with you? IF NONE, RECORD '00'	SONS AT HOME DAUGHTERS AT HOME
204	Do you have any sons or daughters to whom you have given birth who are alive but do not live with you?	YES NO
205	How many sons are alive but do not live with you? And how many daughters are alive but do not live with you? IF NONE, RECORD '00'	SONS ELSEWERE DAUGHTERS ELSEWHERE
206	Have you ever given birth to a boy or girl who was born alive but later died? IF NO, PROBE: Any baby who cried or showed signs of life but survived only a few hours or days?	YES NO
207	How many boys have died? And how many girls have died? IF NONE, RECORD '00'	BOYS DEAD GIRLS DEAD
208	Women sometimes have pregnancies that do not result in a live born child That is, a pregnancy can end very early, in a miscarriage or an abortion or the child can be born dead Have you had any such pregnancy that did not result in a live birth?	YES NO
209	In all, how many such pregnancies have there been?	PREGNANCY LOSSES _____
210	SUM ANSWERS TO 203, 205, 207 AND 209, AND ENTER TOTAL IF NONE, RECORD '00'	TOTAL _____
212	CHECK 210: ONE OR MORE NO PREGNANCIES	 No (Skip to 234)
234	Are you pregnant now?	YES NO UNSURE

3.16. Contraception

Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy			
No	**QUESTIONS AND FILTERS**		**CODING CATEGORIES**
305	Have you ever used anything or tried in any way to delay or avoid getting pregnant?		YES NO
307	What have you used or done?		
308	Now I would like to ask you about the first time that you did something or used a method to avoid getting pregnant What was the first method you ever used?		PILL IUD INJECTIONS DIAPHRAGM/FOAM/JELLY CONDOM FEMALE STERILIZATION MALE STERILIZATION RHYTHM/ CALENDER METHOD WITHDRAWAL HERB/REMEDIES OTHER (SPECIFY)
309	How many living children did you have at that time, if any? IF NONE, RECORD '00'		NUMBER OF CHILDREN
309A	How old were you when you first used something to avoid getting pregnant?		AGE
311	CHECK 303: WOMAN NOT STERILISED WOMAN NOT STERILISED		STERILISED (Skip to 314A)
312	Check 234: NOT PREGNANT OR UNSURE	Check 234: PREGNANT	PREGNANT (SKIP to 331)
313	Are you currently doing something or using any method to delay or avoid getting pregnant?		YES NO
314 314A	Which method are you using? CIRCLE '06' FOR FEMALE STERILIZATION		Pill IUD Injections Diaphragm/Foam/Jelly Condom Female sterilization Male sterilization Rhythm, calendar method Withdrawal Herb/Remedies Other (Specify)
330B	Over the last 12 months have you had a break in your contraceptive use for any reason?		YES NO (Skip to 335)

No	QUESTIONS AND FILTERS	CODING CATEGORIES
330C	Over the last 12 months, why have you had a break in your contraceptive use?	WAS PREGNANT NO BOYFRIEND/ SEXUALLY INACTIVE WANTED TO SEE MENSTRUATION HEALTH REASONS OTHER (SPECIFY)
331	What are the main reasons you are not using a method of contraception to avoid pregnancy? RECORD ALL MENTIONED What is the main reason?	FERTILITY-RELATED REASONS NOT HAVING SEX INFREQUENT SEX MENOPAUSAL/HYSTERECTOMY INFERTILE POSTPARTUM/BREASTFEEDING WANTS (MORE) CHILDREN PREGNANT OPPOSITION TO USE RESPONDENT OPPOSED HUSBAND/PARTNER OPPOSED OTHERS OPPOSED RELIGIOUS PROHIBITION LACK OF KNOWLEDGE KNOWS NO METHOD KNOWS NO SOURCE METHOD-RELATED REASONS HEALTH CONCERNS FEAR OF SIDE EFFECTS LACK OF ACCESS/TOO FAR COST TOO MUCH INCONVENIENT TO USE INTERFERES WITH BODY'S NATURAL PROCESSES OUT OF STOCK OTHER (SPECIFY) DON'T KNOW
516A	If not, what are the reasons why you didn't use one? RECORD ALL MENTIONED What is the Main Reason?	WANTS CHILDREN PERCEIVED LOW OR NO RISK OF STD/HIV RESPONDENT DISLIKE PARTNER DISLIKE CULTURAL/RELIGIOUS PROHIBITION DID NOT KNOW CONDOMS DID NOT KNOW HOW TO USE CONDOM BAD PREVIOUS EXPERIENCE WITH CONDOM INCONVENIENT TO USE LACK OF SPONTANEITY DID NOT KNOW SOURCE OF CONDOMS EMBARRASSED TO GET INCONVENIENT TO GET DIDN'T HAVE A CONDOM COST TOO MUCH NO/LESS SENSATION WITH CONDOM SUGGESTS LACK OF TRUST OF PARTNER SUGGESTS LACK OF LOVE OF PARTNER FEAR OF LOSING IT INSIDE WASTES SPERM RUBBER SMELL PARTNER OR SELF HAS BURNING/DISCOMFORT WHEN USING CONDOM PREFER SEX 'FLESH TO FLESH' CONDOM USE NOT COOL/MANLY/TRENDY OTHER (SPECIFY) DON'T KNOW **MAIN REASON:**

Section 6. Information and communication

3.17. General media

No	QUESTIONS AND FILTERS	CODING CATEGORIES
115	Have you read a newspaper or magazine in the last week?	Yes No
116	Do you usually listen to a radio every day?	Yes No
117	Do you usually watch television at least once a week?	Yes No

3.18. Media exposure to family planning

No	QUESTIONS AND FILTERS	CODING CATEGORIES		
616	In the last few months have you heard about family planning and sterilization:		YES	NO
	On the radio?	RADIO	1	2
	On the television?	TELEVISION	1	2
	In a newspaper or magazine?	NEWSPAPER OR MAGAZINE	1	2
	From a poster?	POSTER	1	2
	From leaflets or brochures?	LEAFLETS OR BROCHURES	1	2

3.19 Communication about family planning

No	QUESTIONS AND FILTERS	CODING CATEGORIES
309B	From whom did you first get information about methods to avoid pregnancy?	MOTHER SISTER FATHER OTHER RELATIVE FRIEND TEACHER NURSE DOCTOR POSTER/LEAFLET/MAGAZINE RADIO/TELEVISION OTHER (SPECIFY)
309E	Did your parent(s) or guardian give advice on contraceptives or explain how to use them?	
335	Have you visited any type of health facility for any reason in the last 12 months?	YES NO
336	Did any staff member at the health facility speak to you about family planning methods?	YES NO
618	In the last few months have you discussed the practice of family planning with your friends, neighbours, or relatives?	YES NO
619	With whom? Anyone else? **RECORD ALL MENTIONED**	HUSBAND/PARTNER MOTHER FATHER SISTER(S) BROTHER(S) DAUGHTER MOTHER-IN-LAW FRIENDS/NEIGHBOURS
622	How often have you talked to your husband/ partner about family planning in the past year?	NEVER ONCE OR TWICE MORE OFTEN

3.20. Media exposure to information and communication about HIV/AIDS.

No	QUESTIONS AND FILTERS	CODING CATEGORIES			
802A	During the past year did you hear about HIV/AIDS from the watching TV?		**YES**		**NO**
	Listening to the radio?		1		2
	Reading a newspaper or magazine?		1		2
	Pamphlets or Brochures?		1		2
	Relatives?		1		2
	RECORD ALL MENTIONED		1		2
802B	How much information about HIV/AIDS did you obtain from each of the following sources: **Answer each question with a lot, some or none**		**A LOT**	**SOME**	**NONE**
	a) TV?	TV	1	2	3
	b) Radio?	RADIO	1	2	3
	c) Newspaper?	NEWSPAPER	1	2	3
	d) Pamphlets?	PAMPHLETS	1	2	3
	e) Health Workers?	HEALTH WORKERS	1	2	3
	f) Friends?	FRIENDS	1	2	3
	g) Partner(s)?	PARTNER(S)	1	2	3
	h) Relatives?	RELATIVES	1	2	3

Section 7. HIV/AIDS-related knowledge & attitudes

3.21. HIV/AIDS knowledge

No	QUESTIONS AND FILTERS	CODING CATEGORIES			
801	Have you ever heard of an illness called AIDS?	YES NO			(Skip to 901)
803	I am going to read out some statements about protection against HIV/AIDS For each statement, please tell me whether you think it is true or not People can protect themselves from HIV/AIDS by: a) having a good diet b) Practising safer sex c) avoiding public toilets d) using condoms during sexual intercourse e) avoiding touching a person who has AIDS f) avoiding sharing food with a person who has AIDS g) avoiding being bitten by mosquitoes or similar insects h) making sure any injection they have is done with a clean needle I) avoid sharing razor blades		**TRUE**	**NOT TRUE**	**DK**
		DIET	1	2	8
		SAFER SEX	1	2	8
		AVOID TOILETS	1	2	8
		CONDOMS	1	2	8
		AVOID TOUCH	1	2	8
		AVOID SHARED FOOD	1	2	8
		AVOID MOSQUITOS	1	2	8
		CLEAN INJECTION	1	2	8
		AVOID RAZOR	1	2	8

3.22. HIV/AIDS-related attitudes.

No	QUESTIONS AND FILTERS	CODING CATEGORIES			
804	Do you think that a person infected with the AIDS virus always shows symptoms or can such a person look perfectly healthy?	ALWAYS SHOWS SYMPTOMS CAN LOOK HEALTHY DON'T KNOW			
804A	I am going to ask you some questions about the need for people to be informed about their HIV/AIDS status:		**YES**	**NO**	**DK**
	a) Should people with AIDS be told about their status?	TOLD ABOUT AIDS	1	2	8
	b) Should people diagnosed HIV positive be told about their status?	TOLD ABOUT HIV	1	2	8
	c) Should HIV/AIDS patients tell their partner(s) about their status?	TELL PARTNERS	1	2	8
	d) Should the reporting of AIDS status to health authorities be made mandatory by law?	REPORT AIDS	1	2	8
	e) Should the reporting of HIV status to health authorities be made mandatory by law?	REPORT HIV	1	2	8
805	Do you personally know someone who has been diagnosed with HIV/AIDS or who has died of AIDS?	YES NO			(Skip to 901)

Section 8. Reproductive-related knowledge and attitudes

3.23. Fertility & contraceptive knowledge

No	QUESTIONS AND FILTERS	CODING CATEGORIES
337	During which times of the monthly cycle does a woman have the greatest chance of becoming pregnant?	DURING HER PERIOD RIGHT AFTER HER PERIOD HAS ENDED THE MIDDLE OF THE CYCLE JUST BEFORE HER PERIOD BEGINS OTHER (SPECIFY) DON'T KNOW
338	I would like to ask you a question about the law on abortion in South Africa Does the present law allow a woman in early pregnancy, which is up to 12 weeks, to have an abortion?	YES NO DON'T KNOW
302	Have you ever heard of CONDOM :Men can put a rubber sheath on their penis during sexual intercourse	YES NO
332	Do you know of a place where you can obtain a method of family planning?	YES NO (Skip to 335)
333	Where is that? IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(NAME OF PLACE)	PUBLIC SECTOR GOVERNMENT HOSPITA DAY HOSPITAL/CLINIC/ COMMUNITY HEALTH CENTER FAMILY PLANNING CLINIC MOBILE CLINIC COMMUNITY HEALTH WORKER OTHER PUBLIC (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC PHARMACY PRIVATE DOCTOR/GYNECOLOGIST OTHER PRIVATE MEDICAL (SPECIFY) OTHER SOURCE SHOP CHURCH FRIEND/RELATIVE OTHER(SPECIFY)
517	Do you know of a place where you can get condoms?	YES NO
518	Where is that? IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE PROBE TO IDENTIFY THE TYPE OF SOURCE (NAME OF PLACE)	PUBLIC SECTOR GOVERNMENT HOSPITAL DAY HOSP/CLINIC COMMUNITY HEALTH CENTER FAMILY PLANNING CLINIC MOBILE CLINIC COMMUNITY HEALTH WORKER OTHER PUBLIC (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC PHARMACY PRIVATE DOCTOR OTHER PRIVATEMEDICAL (SPECIFY) OTHER SOURCE SHOP CHURCH FRIENDS/RELATIVES OTHER (SPECIFY)

3.24. Fertility-related attitudes.

No	QUESTIONS AND FILTERS			CODING CATEGORIES
236	At the time you became pregnant, did you want to become pregnant then, did you want to wait until later, or did you not want to have anymore children at all?			THEN LATER WANT NO MORE CHILDREN
405	At the time you became pregnant with (NAME), did you want to become pregnant then, did you want to wait until later, or did you want no (more) children at all?			THEN (Skip to 407) LATER NO MORE (Skip to 407)
601	CHECK 314: STERILISED		NOT STERILISED	NOT STERILISED (Skip to 612)
602	CHECK 234: NOT PREGNANT OR UNSURE		CHECK 234: PREGNANT	
	Now I have some questions About the future Would you like to have a/ another) child, or would you prefer not to have any (more) children?		Now I have some questions About the future After the child you are expecting now, would you like to have another child, or would you prefer not to have any more children?	HAVE (A/ANOTHER) CHILD NO MORE/NONE (Skip to 604) SAYS SHE CAN'T GET PREGNANT (Skip to 606) UNDECIDED/DON'T KNOW (Skip to 604)
603	CHECK 234: NOT PREGNANT OR UNSURE		CHECK 234: PREGNANT	
	How long would you like to wait from now before the birth of a/another) child?		After the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS YEARS SOON/NOW SAYS SHE CAN'T GET PREGNANT OTHER (SPECIFY) DON'T KNOW
604	CHECK 234: NOT PREGNANT OR UNSURE		CHECK 234: PREGNANT	PREGNANT (Skip to 607)
605	If you became pregnant in the next few weeks, would you be happy, unhappy, or would it not matter very much?			HAPPY UNHAPPY WOULD NOT MATTER
606	Check 313 NOT URRENTLY USING	Check 313: NOT ASKED	Check 313: CURRENTLY USING	CURRENTLY USING (Skip to 612)
612	CHECK 216: HAS LIVING CHILDREN		CHECK 216: NO LIVING CHILDREN	NUMBER OTHER (SPECIFY)
	If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? PROBE FOR A NUMERIC RESPONSE		If you could choose exactly the number of children to have in your whole life, how many would that be? PROBE FOR A NUMERIC RESPONSE	

3.25. Contraceptive-related knowledge

No	QUESTIONS AND FILTERS	CODING CATEGORIES
607	Do you think you will use a method to delay or avoid pregnancy within the next 12 months?	YES NO DON'T KNOW
608	Do you think you will use a method to delay or avoid pregnancy at any time in the future?	YES NO DON'T KNOW
614	Would you say that you approve or disapprove of couples using a method to avoid getting pregnant?	APPROVE DISAPPROVE NO OPINION
615	Is it acceptable or not acceptable to you for information on family planning to be provided: On the radio? On the television?	ACCEPTABLE – NOT ACCEPTABLE – DK RADIO 1 2 8 TELEVISION 1 2 8

Appendix 4. Sample characteristics: Background & socio-economic; husband's, husband-wife's comparative; household; information & communication; reproductive-related; knowledge & attitudes

Table 4.1. Distribution of the women by selected characteristics of the household according to the gender of its head, 1998 SADHS.

Variable	N	Male	Female	%/Mean Total
%**Urban**	3427	52.4	24.9	43.5
Average size	3427	5.3	5.4	5.3
%Husband living in house (%)	3387	91.4	28.2	70.8
%Secondary or higher education (%)	3427	53.0	44.2	50.1
%Gender of head	3427	67.5	32.5	100.0
Relationship to head				
%Self	782		70.2	22.8
%Wife	2037	88.1		59.4
%Daughter	163	2.7	9.0	4.8
%Daughter-in-law	320	6.1	16.0	9.3
%Other	125	3.1	4.8	3.7
Average age of head (yrs.)	3424	43.8	43.6	43.7
Wealth quintile				
%Lowest	732	17.7	28.9	21.4
%Second	793	22.9	23.7	23.1
%Middle	786	22.2	24.5	22.9
%Fourth	552	18.2	11.7	16.1
%Highest	565	19.0	11.2	16.5
Number of durable items				
%0-1	1120	34.6	32.2	33.3
%2-3	1060	30.8	32.0	31.5
%4-5	844	24.2	25.7	25.1
%6 or more	342	10.3	10.0	10.2
Children 5 years or younger (Average)	3427	.8	1.1	.9
Own children living at home (Average)	3427	2.3	2.5	2.3
Son living at home (Average)	3427	.69	.75	.71
Daughters living at home (Average)	3427	1.1	1.2	1.1
Type of language spoken at home				
%Nguni	1843	50.4	56.4	53.8
%Sotho	1258	43.2	31.7	36.7
%Other Bantu	216	1.3	10.1	6.3
%Non-Bantu	110	5.0	1.8	3.2
Place of work				
%At home	351	35.2	30.5	32.5
%Away from home	730	64.8	69.5	67.5
Decides about spending money				
%Respondent	724	63.1	72.3	65.5
%Partner	43	4.2	3.1	3.9
%Jointly with partner	235	23.3	15.6	21.3
%Someone else	36	3.4	2.8	3.2
%Jointly with someone else	67	6.0	6.2	6.1

Due to rounding, some percentages may not add to exactly 100.

Table 4.2. Percentage distribution of the women by their background characteristics according to place of residence during childhood, 1998 SADHS.

Variable	N	Country	Town or city	% Total
Mother's children				
1-3	716	19.8	23.6	20.9
4-6	1402	40.4	41.9	40.9
7-8	784	24.1	19.9	22.9
9+	523	15.7	14.7	15.3
Birth order				
First and second	1547	45.6	44.8	45.2
Third and fourth	1027	29.6	30.3	30.0
Fifth or higher	851	24.7	24.9	24.8
Childhood place of residence				
Countryside	2388	42.3	92.2	70.4
Town or city	1002	57.7	7.8	29.6

Due to rounding, some percentages may not add to exactly 100.

Table 4.3. Percentage distribution of the women by employment and occupation according to place of residence, 1998 SADHS.

Variable	N	Urban	Rural	% Total
Employment status				
Employed	1025	45.7	17.9	30.0
Unemployed	2394	54.3	82.1	70.0
Employed				
Western Cape	77	42.9	14.3	27.3
Eastern Cape	838	44.8	15.2	29.2
Northern Cape	132	44.4	15.4	27.3
Free State	348	47.5	25.7	33.3
KwaZulu-Natal	447	45.7	17.0	29.1
North West	309	45.5	15.7	26.5
Gauteng	363	47.8	22.8	33.9
Mpumalanga	385	44.3	17.5	29.6
Limpopo	520	46.3	16.3	30.4
Occupation				
Professional, technical or managerial	163	18.2	11.4	15.2
Clerical	66	8.1	3.7	6.2
Sales	28	2.5	2.8	2.6
Services	57	6.0	4.5	5.3
Skilled manual	107	11.9	7.5	10.0
Unskilled manual	649	53.4	70.1	60.7

Due to rounding, some percentages may not add to exactly 100.

Table 4.4. Percentage distribution of the women by husband-wife's comparative characteristics according to current place of residence, 1998 SADHS.

Variable	N	Urban	Rural	%Total
Relative ages (number of years)				
0-2	745	26.8	17.9	21.7
3-5	993	29.8	28.3	29.0
6-9	666	18.6	20.1	19.4
10 or more	675	15.8	22.7	19.7
Undetermined	348	9.0	11.0	10.2
Comparative ages				
Older	185	6.4	4.6	5.4
Same	170	6.8	3.6	5.0
Younger	2871	81.7	85.4	83.8
Can't Compare	201	5.1	6.5	5.9
Comparative education				
Woman has Less than husband	2152	75.6	52.9	62.8
More has more than husband	618	12.6	22.3	18.0
Same as husband	168	3.9	5.7	4.9
Can't compare	489	7.9	19.2	14.3

Due to rounding, some percentages may not add to exactly 100.

Table 4.5 Distribution of the women by their sexual histories according to current place of residence, 1998 SADHS.

Variable	N	Urban	Rural	%/Mean Total
Age at menarche (yrs.)				
%13 or younger	550	18.6	14.3	16.2
%14-16	2325	64.3	71.5	68.4
%17-18	381	12.3	10.4	11.2
%19 or older	144	4.7	3.9	4.2
Average	3400	15.5	15.0	15.1
Median	3400	16.0	15.0	15.0
Age at sexual debut (yrs.)				
Average	3360	17.4	17.0	17.2
Median	3360	17.0	17.0	17.0
Number of partners past year				
%None	58	2.5	1.9	2.2
%One	2499	93.7	94.6	94.2
%Two or more	96	3.8	3.5	3.6
Total	2653	1104	1549	100.0
Last sexual partner				
%Husband	2469	78.5	86.0	82.9
%Other regular partner	482	19.9	13.6	16.2
%Casual acquaintance	15	.8	.3	.5
%Someone just met	1		.1	.0
%Other	11	.8	.1	.4
Total	2978	1226	1752	100.0
Use condoms with last partner				
%No	2413	89.0	92.3	90.9
%Yes	230	10.7	7.2	8.7
%Don't know	11	.3	.5	.4
Total	2654	1105	1549	100.0

Due to rounding, some percentages might not add to exactly 100.

Table 4.6 Average age at sexual debut by province of residence, 1998 SADHS.

Province	N	Mean	Median	Std. Dev.
Western Cape	58	17.60	17.00	2.561
Eastern Cape	749	16.92	17.00	2.393
Northern Cape	105	17.46	18.00	1.907
Free State	304	17.20	17.00	2.582
KwaZulu-Natal	383	17.85	18.00	2.591
North West	277	17.47	17.00	2.230
Gauteng	311	17.26	17.00	2.533
Mpumalanga	343	16.43	16.00	2.450
Limpopo	479	17.18	17.00	2.420
Total	3009	17.17	17.00	2.466

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Table 4.7. Distribution of the respondents by their fertility behaviours according to current place of residence, 1998 SADHS.

Variable	N	Urban	Rural	%/Mean Total
Average number of live births				
Among all women in the study				
Median	3427	3.0	3.6	3.0
Mean	3427	2.8	3.7	3.3
Std. Dev.	3427	1.9	2.4	2.2
Among those who ever gave birth				
Median	3211	3.0	4.0	3.0
Mean	3211	3.1	3.9	3.5
Std. Dev.	3211	1.7	2.3	2.1
%**Terminated at least one pregnancy**	3427	14.9	18.2	16.7
Number of pregnancy losses				
%One	406	71.5	70.3	70.7
%Two or more	168	28.5	29.7	29.3
Age at first birth (yrs.)				
Average	3214	20.1	19.6	19.8
Median	3214	19.0	19.0	19.0
Living children of living children				
Median	3427	3.0	3.0	3.0
Mean	3427	3.1	2.6	3.3
Std. Dev.	3427	1.6	1.7	1.7
Had births				
%Past five years	3427	40.9	54.7	48.7
%Past three years	3427	26.2	38.9	33.4
%Past year	3427	11.0	15.8	13.7
%Birth interval four or more years	2343	81.6	78.9	79.9
Pregnant				
%Not pregnant or uncertain if pregnant	3242	95.7	93.7	94.6
%Yes	186	4.2	6.3	5.4

Due to rounding, some percentages might not add to exactly 100.

Table 4.8. Percentage distribution of TOPs among the women by history of abuse by selected characteristics according to husband-wife's relative difference in ages, 1998 SADHS

Variable	Relative ages	Abused	Not abused	p-value
Childhood place of residence				
City	3 to 5	38.9	8.3	.002
Town	3 to 5	38.5	10.4	.002
Countryside	6 to 9	5.3	18.7	.000
Place of residence				
Urban	3 to 5	17.0	14.2	.005
Rural	6 to 9	25.0	17.9	.042
Rural	10 or more	29.6	15.8	.020
Head of household				
Male	3 to 5	16.5	11.2	.016
Female	6 to 9	16.7	10.2	.011
Two lowest quintiles	Two or less	14.7	9.5	.022
	6 to 9	13.8	0.0	.000
	10 or more	20.3	10.1	.029
Middle quintile	Two or less	30.6	12.4	.011
Two highest quintiles	3 to 5	25.5	10.0	.005
Age cohort				
25 to 29	Two or less	30.0	12.0	.049
30 to 34	10 or more	41.7	11.5	.015
25 to 29	3 to 5	26.9	12.8	.030
Older than partner	3 to 5	54.5	9.4	.002
Younger than partner	3 to 5	15.8	10.6	.049
	6 to 9	4.9	12.5	.014
	10 or more	19.7	12.7	.037
No education	Two or less	50.0	5.3	.039
	3 to 5	44.4	10.7	.026
Primary education	3 to 5	31.0	15.6	.027
	6 to 9	0.0	15.6	.029
Secondary education	10 or more	12.0	16.8	.043
Type of union				
Consensual	3 to 5	18.6	14.5	.002
One union	3 to 5	23.8	15.3	.002
	6 to 9	6.0	18.0	.006
	10 or more	26.1	16.6	.026
Husband lives at home	3 to 5	25.6	14,4	.011
Husband not living in house	Two or less	34.4	17.1	.026

Due to rounding, some percentages might not add to exactly 100.

Table 4.9. Percentage distribution of the women by average age at birth of the first child by selected background and socio-economic characteristics according to place of residence, 1998 SADHS

Variable	N	Median	Urban	Rural	All
Childhood place of residence					*
City	344	19	20.43	19.83	20.38
Town	587	19	19.84	19.40	19.76
Countryside	2247	19	20.09	19.61	19.73
Province					
Western Cape	73	19	19.27	19.60	19.47
Eastern Cape	791	19	20.41	19.35	19.84
Northern Cape	126	19	19.67	19.31	19.45
Free State	324	19	19.87	19.47	19.61
KwaZulu-Natal	418	19	19.87	19.57	19.69
North West	293	19	20.36	19.93	20.08
Gauteng	331	19	20.03	19.64	19.81
Mpumalanga	370	19	19.95	19.86	19.90
Limpopo	488	19	20.12	19.75	19.92
Age group			***	***	***
15-19	26	17	17.50	16.75	16.81
20-24	279	18	18.44	18.06	18.19
25-29	551	19	19.64	19.16	19.36
30-34	657	19	19.90	18.99	19.40
35-39	749	19	20.41	19.91	20.14
40-44	544	20	20.81	20.55	20.67
45-49	408	20	20.33	20.89	20.66
Education			***		***
No education	439	19	19.53	19.62	19.60
Primary	1197	19	19.39	19.41	19.40
Secondary or higher	1578	19	20.51	19.80	20.18
In school					
Yes	2457	19	20.05	19.56	19.79
No	749	19	20.28	19.71	19.88
Type of union			**	**	**
Formal	2544	19	20.24	19.71	19.93
Consensual	670	19	19.61	19.14	19.36
Age at first marriage			***	***	***
10-18	1072	18	18.21	18.06	18.10
19-24	1381	20	20.14	20.42	20.29
25-46	761	20	21.41	21.28	21.36
Employed				**	
Yes	948	19	19.96	19.73	19.64
No	2258	19	20.20	19.01	19.88
Total	3214	19	20.10	19.60	19.81

*** p=. 000, ** p=. 010 or lower, *p=. 050 or lower.

Table 4.10. Percentage distribution of the women by age at birth of the first child by initial source of information according to place of residence during childhood, 1998 SADHS

Initial source	N	Median	City	Town	Countryside	%Total
Mother						
No	1765	19.00	20.12	19.72	19.74	19.79
Yes	546	19.00	20.47	20.27	19.85	20.00
Sister						
No	2070	19.00	20.15	19.73	19.81	19.84
Yes	241	19.00	20.89	20.73	19.45	19.85
Father						
No	2309	19.0	20.21	19.87	19.77	19.84
Yes	2	20.50		17.00	24.00	20.50
Other relative						
No	2227	19.00	20.24	19.87	19.77	19.84
Yes	84	19.00	19.45	19.57	19.86	19.77
Friend						
No	2070	19.00	20.19	19.85	19.79	19.85
Yes	241	19.00	20.33	19.92	19.61	19.73
Teacher						
No	2206	19.00	20.19	19.79	19.78	19.83
Yes	105	19.00	20.33	21.30	19.49	19.91
Nurse						
No	1157	19.00	20.19	20.26	19.72	19.92
Yes	1154	19.00	20.45	19.38	19.82	19.76
Doctor						
No	2243	19.00	20.52	19.85	19.78	19.84
Yes	68	19.00	19.90	20.33	19.49	19.68
Poster						
No	2307	19.00	20.21	19.86	1623	19.83
Yes	4	21.50			4	22.00
Radio or television						
No	2291	19.00	20.20	19.88	19.76	19.83
Yes	20	19.00	21.00	15.50	20.88	20.35
Other						
No	2205	19.00	20.22	19.88	19.76	19.84
Yes	106	19.00	19.25	19.33	19.88	19.81

Table 4.11. Distribution of the women by whether they have ever uses fertility control according by selected background and socio-economic characteristics according to place of residence, 1998 SADHS.

Variable	N	Urban	Rural	p. (U/R)	%/Mean Total	p. (All)
%Ever used	3427	88.5	72.8	.000	79.7	.000
Childhood place of residence		(.000)	(.000)			.000
%City	374	82.8	53.3	.000	80.5	
%Town	623	86.9	51.7	.000	80.1	
%Countryside	2384	78.0	69.1	.000	71.4	
Mother's children		(.756)	(.768)			.593
%1-3	713	81.5	69.5	.000	75.5	
%4-6	1399	83.4	68.0	.000	74.2	
%7-8	783	81.8	68.5	.000	74.2	
%9 or more	521	80.4	65.7	.000	72.0	
Respondent's order of birth		(.801)	(.202)			.235
%First & second	1543	81.8	68.9	.000	74.5	
%Third & fourth	1024	83.1	69.5	.000	75.3	
%Fifth or higher	849	81.5	64.7	.000	72.0	
Age (yrs)		(.017)	(.000)			.000
%15-19	71	90.0	54.1	.031	59.2	
%20-24	337	88.3	74.7	.002	79.5	
%25-29	603	89.5	80.5	001	84.5	
%30-34	670	91.2	78.9	.000	84.5	
%35-39	765	90.9	74.9	.000	82.2	
%40-44	555	86.3	67.6	.000	76.4	
%45-49	417	80.9	59.2	.000	68.2	
Average age	3418	34.9	33.8	.001	34.4	
Education		(.000)	(.000)			.000
%No education	449	68.4	57.8	. .038	60.1	
%Primary	1261	83.9	71.9	.000	76.2	
%Secondary	1542	92.1	79.5	.000	86.3	
%Higher	175	98.2	98.2	.118	96.6	
Literacy		(.121)	(.004)			.001
%Reads with ease easy	2465	82.7	70.1	.000	76.1	
%Reads with difficult or illiterate	944	79.7	63.9	.000	69.1	
Type of union		(.002)	(.094)			.133
%Formally married	2644	90.0	72.1	.000	73.6	
%Consensual	774	84.2	75.6	.006	75.7	
Number of unions		(.018)	(.283)			.031
%One	3150	82.6	68.2	.000	74.5	
%More than one	250	73.5	65.5	.115	68.8	

Table 4.12. Descriptive statistics for the woman's age at first use of a method of fertility control by selected background and socio-economic characteristics, 1998 SADHS.

Variable	Median	Mean	N	F	p.
Childhood place of residence				8.653	.000
City	19.00	19.80	302		
Town	19.00	19.72	499		
Countryside	19.00	20.65	1699		
Mother's children				.158	.925
1-3	19.00	20.36	538		
4-6	19.00	20.38	1034		
7-8	19.00	20.25	579		
9+	19.00	20.46	377		
Respondent's order of birth				2.815	.060
First & Second	19.00	20.58	1149		
Third & Fourth	19.00	20.02	771		
Fifth & Higher	19.00	20.36	608		
Province				2.284	.020
Western Cape	18.00	18.39	56		
Eastern Cape	19.00	20.13	627		
Northern Cape	20.00	21.06	87		
Free State	20.00	21.05	258		
KwaZulu-Natal	19.00	20.05	335		
North West	19.00	20.33	223		
Gauteng	19.00	20.40	265		
Mpumalanga	20.00	20.49	278		
Limpopo	19.00	20.53	400		
Current place of residence				18.371	.000
Urban	19.00	20.77	1218		
Rural	19.00	19.91	1311		
Wealth quintile				3.788	.023
Lowest2	19.00	20.66	1088		
Middle	19.00	20.22	580		
Highest2	19.00	20.06	861		
Age group				1.115	.351
15-19	19.00	19.96	42		
20-24	20.00	20.97	267		
25-29	19.00	20.29	509		
30-34	19.00	20.20	564		
35-39	19.00	20.19	625		
40-44	20.00	20.64	422		
45-49	19.00	20.20	277		
Level of education				.892	.445
No education	19.00	20.50	134		
Primary	19.00	20.57	824		
Secondary	19.00	20.22	1443		
Higher	19.00	20.27	128		

Table 4.13. Descriptive statistics for number of children at first use of a method of fertility control according to background and socio-economic characteristics of the women, 1998 SADHS.

Variable	N	Mean	F	p.
Childhood place of residence			131.843	.000
City	370	1.23		
Town	625	1.46		
Countryside	2379	2.45		
Language group			1.153	.326
Nguni	1836	1.850		
Sotho	1256	1.839		
Other Bantu	214	1.793		
Non-Bantu	110	1.930		
Mother's children			1.750	.155
1-3	713	2.05		
4-6	1398	2.12		
7-8	781	1.14		
9+	522	1.29		
Respondent's order of birth			,464	.629
First & Second	1543	2.14		
Third & Fourth	1025	2.17		
Fifth & Higher	846	2.09		
Current place of residence			285.989	.000
Urban	1484	1.55		
Rural	1932	2.50		
Province			1.980	.002
Western Cape	77	1.74		
Eastern Cape	838	2.02		
Northern Cape	132	2.14		
Free State	349	2.43		
KwaZulu-Natal	449	2.27		
North West	306	2.08		
Gauteng	360	2.07		
Mpumalanga	386	1.98		
Limpopo	521	2.26		
Age group			1.550	.158
15-19	51	1.00		
20-24	235	1.21		
25-29	433	.98		
30-34	477	.97		
35-39	571	1.00		
40-44	416	.92		
45-49	318	1.12		

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Table 4.14. Average age and number of children at first use of a method of fertility control by first source of information on contraception according to place of residence, 1998 SADHS

Initial source	N	Urban	Rural	%/Mean Total	p.
Average age at first use of fertility control by initial source of information					
Mother		(.000)	(.000)		.000
No	1878	21.25	21.14	21.19	
Yes	587	17.79	17.25	17.48	
Sister		(.036)	(.002)		.000
No	2208	20.54	20.37	20.44	
Yes	257	19.31	19.03	19.13	
Other relative		(.004)	(.009)		.000
No	2377	20.53	20.28	20.39	
Yes	88	17.98	18.25	18.13	
Friend		(.015)	(.002)		.000
No	2208	20.58	20.35	20.45	
Yes	257	19.30	18.90	19.09	
Teacher		(.001)	(.000)		.000
No	2352	20.55	20.32	20.42	
Yes	113	18.02	17.92	17.96	
Nurse		(.000)	(.000)		.000
No	1242	18.73	18.45	18.57	
Yes	1223	22.16	22.00	22.07	
Doctor		(.000)	(.000)		.000
No	2393	20.24	20.13	20.18	
Yes	72	25.83	23.39	24.61	
Another source		(.034)	(.031)		.002
No	2350	20.35	20.15	20.23	
Yes	115	22.02	21.60	21.78	
Average number of children at first use by initial source of information					
Mother		(.188)	(.136)		.157
No	1378	1.00	.99	.99	
Yes	457	.95	.85	.89	
Sister		(.030)	(.058)		.174
No	1636	.99	.93	.95	
Yes	199	.96	1.17	1.09	
Other relative		(.060)	(.471)		.448
No	1772	1.00	.95	.97	
Yes	63	.52	1.12	.84	
Friend		(.762)	(.456)		.731
No	1649	.99	.95	.96	
Yes	186	.94	1.05	1.00	
Teacher		(.951)	(.570)		.696
No	1750	.99	.95	.97	
Yes	85	.97	1.06	1.02	
Nurse		(.068)	(.315)		.648
No	960	.90	.99	.95	
Yes	875	1.08	.91	.98	
Doctor		(.957)	(.018)		.075
No	1786	.98	.94	96	
Yes	49	1.00	1.56	131	
Another source		(.336)	(.776)	.	.946
No	1747	.99	.95	97	
Yes	88	.76	1.11	.98	

Table 4.15. Distribution of the women by the prevalence of first method used by selected socio-demographic characteristics, 1998 SADHS.

Variable	N	Pill	IUD	Injection	Other	p.
Age at first use (yrs.)						.788
Median	2037	19.14	18.78	19.26	19.07	
Average	2037	20.14	20.12	20.35	20.49	
Number of children at first use						.000
%0	727	31.8	6.6	53.9	7.7	
%1	1031	27.9	3.8	62.3	6.0	
%2	408	26.0	3.7	64.7	5.6	
%3	240	25.0	2.1	65.4	7.5	
%4 or more	309	20.4	.6	61.2	17.8	
Childhood place of residence						.000
%City	346	30.6	9.5	55.2	4.6	
%Town	563	25.8	5.3	63.1	5.9	
%Countryside	1788	27.3	2.6	61.0	9.1	
Current place of residence						.000
%Urban	1188	25.9	4.0	61.8	8.2	
%Rural	1533	28.9	4.0	59.6	7.6	
Mother's children						.814
%1 to 3	564	28.5	4.3	60.6	6.6	
%4 to 6	1111	28.4	3.9	59.5	8.3	
%7 to 8	630	26.5	3.3	62.1	8.1	
%9 or more	415	25.8	5.1	61.0	8.2	
Age at sexual debut (yrs.)						.800
Median	2721	16.92	17.05	16.92	16.78	
Average	2721	17.00	17.00	17.00	16.00	
Age at birth of first child (yrs.)						.000
Median	2603	19.00	19.50	19.00	19.00	
Average	2603	20.08	20.66	19.47	19.97	
Age						.000
%15-19	42	14.3		66.7	19.0	
%20-24	267	14.2	1.1	77.9	6.7	
%25-29	508	21.9	1.8	73.0	3.3	
%30-34	568	23.9	4.4	64.8	6.9	
%35-39	627	33.7	5.6	53.7	7.0	
%40-44	425	34.4	5.9	49.9	9.9	
%45-49	284	36.3	4.2	43.3	16.2	
Education						.229
%No education	154	22.7	2.6	63.6	11.0	
%Primary	851	28.1	4.2	59.6	8.1	
%Secondary	1565	28.6	4.0	59.9	7.4	
%Higher	151	19.2	4.0	68.9	7.9	

Table 4.16. Percentage distribution of the women by method discontinuation during the past year by selected socio-demographic characteristics according to place of residence, 1998 SADHS

Variable	N	Urban	Rural	U/R sig.	% Total	p.
Age group (yrs.)		(.564)	(.775)			.686
15-24	167	15.5	19.8	.307	18.0	
25-29	231	25.7	26.2	.528	26.0	
30-34	286	21.2	22.0	.493	21.7	
35-39	317	19.2	26.2	.095	23.3	
40-44	225	24.2	21.6	.387	22.7	
45-49	167	18.2	24.6	.215	21.6	
Total	1080	35.3	33.6	.001	34.4	
Education		(.750)	(.035)			.516
No education	83	16.3	37.5	.026	26.5	
Primary	441	19.7	26.6	.058	23.8	
Secondary	796	22.3	20.2	.259	21.1	
Higher	73	19.2	27.7	.307	24.7	
Employment status		(.024)	(.386)			.058
Unemployed	940	23.2	24.1	.412	19.8	
Employed	449	15.9	22.8	.043	23.7	
Place of work		(.072)	(.384)			.558
Home	172	11.1	25.0	.017	19.2	
Away from home	301	20.2	22.7	.352	21.6	
Occupation		(.544)	(.273)			.319
Prof., Technical & Managerial	75	16.7	12.8	.442	14.7	
Clerical, sales & services	136	16.3	25.3	.160	21.1	
Skilled manual	64	7.7	23.7	.089	17.2	
Unskilled Manual	225	18.8	27.4	.087	23.6	
Education		(.750)	(.035)			.516
No education	83	16.3	37.5	.026	26.5	
Primary	441	19.7	26.6	.058	23.8	
Secondary	796	22.3	20.2	.259	21.1	
Higher	73	19.2	27.7	.307	24.7	
Employment status		(.024)	(.386)			.058
Unemployed	940	23.2	24.1	.412	19.8	
Employed	449	15.9	22.8	.043	23.7	
Place of work		(.072)	(.384)			.558
Home	172	11.1	25.0	.017	19.2	
Away from home	301	20.2	22.7	.352	21.6	
Ever abused		(.147)	(.031)			.285
No	1288	21.5	22.5	.376	22.1	
Yes	160	15.6	32.5	.010	24.4	
Head of the household		(.843)	(.869)			.788
Woman	316	21.1	21.3	.475	22.6	
Husband	816	21.9	23.3	.544	21.2	
Else	259	24.2	23.1	.357	23/6	
Gender of the household		(.187)	(.160)			.339
Male	941	22.7	24.3	.352	22.8	
Female	452	23.9	20.9	.099	21.7	
Wealth quintile		(.881)	(.716)			.648
Lowest two	601	20.1	22.5	.273	21.5	
Middle quintile	306	22.2	25.7	.283	24.2	
Highest two	486	21.2	23.7	.296	22.6	
Discontinued	1393	20.9	23.6	.134	22.5	.134

Table 4.17. Percentage distribution of the women by contraceptive discontinuance by marriage and partner-related factors according to place of residence, 1998 SADHS.

Variable	N	Urban	Rural	U/R sig.	%Mean /Total	p.
Cohabitation status		(.196)	(.242)			.118
Husband lives in household	228	22.0	24.3	.281	23.3	
Husband lives elsewhere	80	18.4	21.6	.252	20.2	
Type of union		(.249)	(.351)			.465
Formal	1086	21.5	24.6	.110	22.4	
Consensual	307	23.2	21.4	.530	22.8	
Number of unions		(.449)	(.249)			.376
One	1281	20.7	24.1	.083	22.6	
Two or more	97	22.9	19.4	.436	20.6	
Years since first marriage		(.009)	(.002)			.000
No	382	10.23	12.75	.001	11.4	
Yes	141	7.66	9.69	.054	8.7	
Type of marriage		(.507)	(.292)			.601
Monogamy	682	21.2	22.9	.274	22.1	
Polygamy	66	14.9	30.3	.046	23.9	
Don't know	37	24.2	29.7	.404	27.1	
Husband's occupation		(.654)	(.429)			.207
Clerical, sales & services	240	21.6	29.0	.125	25.8	
Manual skilled	467	19.4	21.0	.377	20.3	
Manual unskilled	545	21.0	21.5	.493	21.3	
Professional, technical &	76	24.3	30.8	.356	27.6	
managerial	65	24.1	33.3	.297	29.2	
Non-numeric						
Husband's age		(.312)	(.981)			.759
18-29	145	8.9	11.1	.300	22.1	
30-39	471	40.3	32.8	.373	23.8	
40-49	464	32.3	35.4	.279	23.1	
50 or older	227	14.5	14.3	.220	19.8	
Non-numeric response	86	4.0	6.3	.095	19.8	
Comparative age		(.607)	(.048)			.314
Older	14	17.1	17.5	.595	17.3	
Same	19	19.1	45.5	.025	27.5	
Younger	263	22.7	22.7	.525	22.7	
Can't compare	17	23.1	17.0	.332	19.8	
Husband-wife's relative		(.120)	(.410)			.042
ages	294	23.6	25.7	.389	24.8	
0-2	419	23.5	24.6	.442	24.1	
3-4	272	24.8	25.7	.487	25.4	
6-9	262	15.7	17.7	.394	16.8	
10 or more	146	12.5	22.0	.102	17.8	
Undetermined						
Comparative education		(.095)	(.782)			.208
Less	911	22.7	24.7	.266	23.8	
More	242	16.3	20.9	.235	18.9	
Same	56	36.8	21.6	.184	26.8	
Can't compare	183	15.3	22.4	.149	19.1	
Comparative fertility desires		(.698)	(.956)			.954
Husband wants more	307	24.2	23.0	.459	23.5	
Husband wants less	54	29.6	18.5	.263	24.1	
Uncertain	208	21.8	22.3	.538	22.1	
Both want the same number	824	21.1	23.1	.272	22.1	

Table 4.18. Percentage distribution of the women by contraceptive discontinuance by selected reproductive-related factors according to place of residence, 1998 SADHS.

Variable	N	Urban	Rural	U/R sig.	% Total	p
Children		(.306)	(.914)			.656
0-1	311	25.8	22.4	.289	23.8	
2-3	603	19.8	24.6	.097	22.6	
4-5	334	21.4	23.7	.361	22.8	
6 or more	145	14.5	21.7	.190	18.6	
Last birth interval four or more years		(.000)	(.000)			.000
No	226	52.5	58.3	.233	55.8	
Yes	768	13.9	17.4	.112	15.9	
Visited health facility past year						.521
No	787	20.3	24.2	.118	22.5	
Yes	604	21.9	23.0	.414	22.5	
Discussed family planning with husband		(.961)	(.988)			.970
Never	434	20.2	23.4	.250	22.1	
Once or twice	599	21.2	23.5	.286	22.5	
More often	359	21.3	24.0	.315	22.8	
Told of family planning at health facility		(.361)	(.082)			.080
No	459	22.9	25.8	.304	24.6	
Yes	134	20.0	18.8	.481	19.3	
Births past year		(.025)	(.211)			.336
Yes	186	12.0	27.0	.010	21.0	
No	1207	22.2	23.0	.399	22.7	
Fertility desires		(.501)	(.001)			.003
Have another	399	22.8	24.1	.433	23.6	
Undecided	227	17.0	12.8	.240	14.5	
No more	718	21.9	27.6	.046	25.1	
Comparative fertility desires		(.233)	(.205)			.954
Husband wants more	307	15.3	29.5	.002	23.5	
Husband wants less	54	28.6	19.2	.316	24.1	
Uncertain about partner's fertility desires	208	20.4	23.6	.348	22.1	
Both want the same	824	22.7	21.7	.397	22.1	
Approves of family planning		(.330)	(.498)			.433
No/Don't know	137	24.1	22.9	.515	23.4	
Yes	1256	20.6	23.7	.112	22.4	
Husband approval of family planning		(.332)	(.369)			.173
Disapproves	46	31.8	23.8	.404	27.9	
Approves	376	23.8	26.9	.286	25.5	
Don't know	17	44.4	50.0	.601	47.1	
Comparative approval of family planning		(.836)	(.836)			.822
Both (or man only) approve	945	23.4	22.8	.443	23.1	
Woman only	244	15.6	24.6	.033	22.1	
Both disapprove	82	16.1	21.6	.382	19.5	
One or both uncertain	122	14.5	25.4	.105	20.5	
Reason for using fertility control		(.324)	(.007)			.013
Using to space	671	19.9	19.8	.515	19.8	
Using to limit	722	21.8	27.4	.049	24.9	

Due to method of rounding, some percentages might not add to exactly 100.

Table 4.19. Distribution of the women by the reason for contraceptive discontinuance during the year before the interview by selected socio-demographic characteristics, 1998 SADHS

Variable	N	Pregnant	Inactive	Menses	Health	Other	p
Place of residence							.048
%Urban	142	38.7	10.6	18.3	12.7	19.7	
%Rural	171	35.1	18.1	12.9	20.5	13.5	
Age (%)							.379
%15-24	30	33.3	13.3	13.3	30.0	10.0	
%25-29	60	38.3	13.3	8.3	26.7	13.3	
%30-34	62	38.7	19.4	12.9	8.1	21.0	
%35-39	74	36.5	14.9	17.6	13.5	17.6	
%40-44	51	35.3	9.8	17.6	15.7	21.6	
%45-49	36	36.1	16.7	25.0	13.9	8.3	
Education)							.874
%None	22	54.5	9.1	9.1	13.6	13.6	
%Primary	105	39.0	15.2	13.3	15.2	17.1	
%Secondary	168	33.9	14.3	17.9	18.5	15.5	
%Higher	18	27.8	22.2	11.1	16.7	22.2	
Head of household							.000
%Head	54	29.6	18.5	24.1	22.2	5.6	
%Husband	68	61.8	1.5	7.4	10.3	19.1	
%Parent	102	33.3	17.6	16.7	16.7	15.7	
%Father or mother in-law	20	35.0	15.0	5.0	20.0	25.0	
%Grandparent	24	16.7	12.5	16.7	25.0	29.2	
%Sister	17	17.6	17.6	23.5	23.5	17.6	
%Other relative	21	38.1	19.0	14.3	14.3	14.3	
%Unrelated	7	14.3	57.1	14.3		14.3	
Gender of household							.981
%Male	215	35.8	14.4	15.8	17.2	16.7	
%Female	98	38.8	15.3	14.3	16.3	15.3	
Cohabiting							.830
%Yes	217	37.8	15.2	14.7	17.5	14.7	
%No	94	35.1	12.8	17.0	16.0	19.1	
Type of union							.386
%Formal	243	34.6	14.0	16.5	17.3	17.7	
%Consensual	70	44.3	17.1	11.4	15.7	11.4	
Type of marriage							.690
%Monogamy	263	37.6	14.8	15.8	16.3	15.6	
%Polygamy	27	29.9	11.1	11.1	29.6	22.2	
%Don't know	19	42.1	10.5	21.1	10.5	15.8	
Years since first union							.381
%Four or less	72	34.7	19.4	16.7	19.4	9.7	
%5-9	62	38.7	8.1	12.9	24.2	16.1	
%10-14	60	35.0	16.7	10.0	15.0	23.3	
%15-19	53	41.5	17.0	17.0	11.3	13.2	
%20-24	42	25.6	14.3	14.3	9.5	21.4	
%25 or more	24	45.8	8.3	8.3	20.8	16.7	
Last birth interval							.000
%Less than four years	126	81.0	1.6	4.0	7.1	6.3	
Four or more years	122	9.8	18.9	24.6	25.4	21.3	
Had birth in past year							.272
%Yes	39	41.0	15.4	7.7	25.6	10.3	
%No	274	36.1	14.6	16.4	15.7	17.2	
Average number of births	313	3.3	3.3	3.0	2.9	3.5	.631
Average number o f children	313	3.0	2.9	2.7	2.7	3.3	.645

Table 4.20. Percentage distribution of use of fertility control among the women by contraceptive needs and first method ever used according to place of residence, 1998 SADHS.

Variable	Not using	Using	Use non-use	Using		Urban /Rural
			p.	Urban	Rural	p.
Reason for use/non use			.000			
Need to space	13.8					
Need to limit	27.0					
Using to space		29.1		59.3	42.2	.000
Using to limit		70.9		57.4	43.3	.000
Want birth in 2 or less years	33.6					
Infecund or menopausal	25.6					
First method ever used			.007			
Pill	29.5	26.4		32.8	28.0	.001
IUD	4.5	3.7		5.5	2.3	.195
Injections	59.7	61.0		56.5	60.3	.000
Diaphragm, foam or jelly		.1				
Condoms	1.5	1.3		1.0	1.6	.060
Female sterilisation		4.1		2.6	3.0	.106
Male sterilisation		.1		.1		
Periodic abstinence	1.0	.8		.5	.9	.473
Withdrawal	2.6	2.1		.6	3.1	.366
Other	.8	.1		.1	.3	.708
Herb or remedies	.4	.3		.3	.5	.643

Due to rounding, some percentages may not add to exactly 100.

Table 4.21. Percentage distribution of the women by their exposure to HIV/AIDS information from the media during the year before the interview by selected socio-economic factors, 1998 SADHS.

Variable	Radio	Television	Newspaper or magazine	Pamphlets or brochures
Wealth quintile	(.200)	(.000)	(.000)	(.000)
Two lowest	82.7	63.8	52.0	50.7
Middle	84.9	72.2	59.0	57.9
Two highest	85.2	72.2	65.5	61.9
Gender of head	(.440)	(.000)	(.000)	(.000)
Male	84.1	72.9	61.4	59.4
Female	83.9	62.7	51.2	49.1
Age group (yrs.)	(.485)	(.360)	(.241)	(.409)
15-24	84.8	66.4	53.7	53.0
25-29	81.7	69.5	55.9	56.5
30-34	83.7	68.0	60.1	56.0
35-39	84.9	72.4	59.8	58.6
40-44	83.6	69.9	59.7	56.7
45-49	86.1	69.8	57.2	53.0
Place of residence	(.155)	(.000)	(.000)	(.000)
Urban	84.4	91.0	78.0	78.3
Rural	83.4	52.2	42.0	38.1
Education	(.485)	(.000)	(.000)	(.000)
None	82.1	63.8	52.2	44.3
Primary	84.6	66.3	54.4	52.7
Secondary or higher	84.1	73.4	62.3	61.5
Employed	(.000)	(.000)	(.000)	(.000)
Yes	87.9	86.0	74.3	72.5
No	82.3	62.3	50.9	48.4
Type of language	(.557)	(.077)	(.106)	(.099)
Nguni	83.4	68.6	57.1	54.8
Sotho	84.9	70.7	58.7	57.2
Other Bantu	85.2	75.2	62.5	62.5
Non-Bantu	81.1	63.2	53.8	51.4
Overall percentage	84.0	69.6	58.1	56.1

Table 4.22. Percentage distribution of the women by their use of fertility control by exposure to HIV/AIDS information through the media during the year before the interview according to place of residence, 1998 SADHS.

	Not Using				Using			
Category/variable	**%**	**Urban**	**Rural**	**p.**	**%**	**Urban**	**Rural**	**p**
Media exposure to HIV/AIDS information								
Radio (.262)				.193				.360
No	16.4	15.3	17.1		15.5	15.2	15.9	
Yes	83.6	84.7	82.9		84.5	84.8	84.1	
Television				.000				.000
No	35.4	9.0	50.7			8.9	43.8	
Yes	64.6	91.0	49.3		74.7	91.1	56.2	
Newspaper (.000)				.000				.000
No	45.3	22.4	58.6		38.4	21.7	57.2	
Yes	54.7	77.6	41.4		61.6	78.3	42.8	
Posters or brochures (.000)				.000				.000
No	47.5	22.4	62.2		40.3	21.2	15.2	
Yes	52.5	77.6	37.8		59.7	78.8	38.4	
Amount of Information on HIV/AIDS from media								
Radio (.000)				.000				.000
None	16.2	10.7	19.1		9.3	6.5	12.3	
A lot	73.0	81.5	68.3		80.6	85.0	75.8	
Some	10.8	7.8	12.5		10.1	8.5	11.9	
Television (.000)				.000				.000
None	41.2	18.4	53.9		24.8	10.9	39.7	
A lot	48.1	70.4	35.8		62.9	77.7	47.0	
Some	10.6	11.2	10.3		12.4	11.4	13.3	
Newspaper (.000)				.000				.000
None	53.9	35.2	64.2		38.8	25.9	52.7	
A lot	30.8	47.6	21.5		41.0	53.5	27.5	
Some	15.3	17.3	14.3		20.2	26.0	19.8	
Pamphlet (.000)				.000				.000
None	54.2	34.4	65.1		27.4	22.9	53.0	
A lot	29.8	46.3	20.7		43.4	55.9	30.0	
Some	16.0	19.3	14.2		19.2	21.3	17.0	

Table 4.23. Percentage distribution of the women by type of person discussing family planning during the few months before the interview by selected socio-economic and household characteristics, 1998 SADHS.

Variable	Husband	Mother	Sister	Daughter	Friends or neighbours
Place of residence	(.000)	(.013)	(.006)	(.000)	(.000)
Urban	10.4	2.0	5.9	4.2	26.3
Rural	5.4	1.0	4.0	1.4	20.5
Education	(.000)	(.130)	(.000)	(.557)	(.000)
None	3.8	.9	1.8	2.0	11.0
Primary	5.7	1.1	2.9	2.5	19.6
Secondary or higher	10.0	1.9	7.1	2.9	28.6
Employed	(.255)	(.214)	(.335)	(.075)	(.031
Yes	8.1	1.8	5.1	3.2	25.2
No	7.4	1.3	4.7	2.3	22.1
Wealth quintile	(.038)	(.702)	(.542)	(.972))	(.817)
Two lowest	6.3	1.4	4.8	2.6	23.0
Middle	8.8	1.3	4.9	2.7	23.2
Two highest	8.5	1.7	5.3	2.5	22.4
Gender of head	(.168)	(.034)	(.124)	(.412)	(.272)
Male	7.2	1.8	5.3	2.5	22.6
Female	8.1	1.0	4.4	2.7	23.5
Type of language	(.163)	(.306)	(.856)	(.570)	(.027)
Nguni	7.9	1.4	4.8	2.6	22.9
Sotho	7.7	1.7	4.8	2.7	24.3
Other Bantu	6.9	1.4	4.2	3.2	20.8
Non-Bantu	2.8		6.4	.9	12.8
Age group (yrs.)	(.117)	(.002)	(.000)	(.000)	(.000)
15-24	6.9	2.2	4.9		28.2
25-29	9.8	2.5	8.8	.2	29.9
30-34	8.0	1.8	4.2	.9	25.5
35-39	7.6	1.0	3.5	3.3	25.5
40-44	7.2	1.1	5.2	5.2	17.2
45-49	5.0		1.9	6.7	14.6

Table 4.24. Percentage distribution of the women by use of fertility control by type of person from whom they heard about family planning during the past few months according to place of residence, 1998 SADHS.

	Not Using				Using			
Variable	**%**	**Urban**	**Rural**	**P.**	**%**	**Urban**	**Rural**	**p**
Family planning information								
Health facility past year (.000)				.133				.468
No	87.4	86.1	88.1		78.8	78.9	78.6	
Yes	12.6	13.9	11.9		21.2	21.1	21.4	
Discussion past few months								
Husband (.000)				.000				.023
No	95.0	91.5	96.9		89.7	88.2	91.3	
Yes	5.0	8.5	3.1		10.3	11.8	8.7	
Mother (.002)				.045				.207
No	99.1	98.5	99.5		97.9	97.6	98.3	
Yes	.9	1.5	.5		2.1	2.4	1.7	
Father (.646)				.268				.526
No	99.8	100.0	99.7		99.8	99.9	99.8	
Yes	.2		.3		.2	.1	.2	
Sister (.001)				.000				.397
No	96.4	94.0	97.7		94.0	94.2	93.7	
Yes	3.6	6.0	2.3		6.0	5.8	6.3	
Daughter (.228)				.000				.001
No	97.6	95.8	98.7		97.2	95.9	98.5	
Yes	2.4	4.2	1.3		2.8	4.1	1.5	
Friends or neighbours (.001)				.008				.050
No	82.0	79.0	83.8		71.9	70.1	73.8	
Yes	18.0	21.0	16.2		28.1	29.9	26.2	

Due to method of rounding, some percentages might not add to exactly 100.

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Table 4.25. Percentage distribution of the women by frequency of spousal discussions about family planning during the year before the interview by selected household and socio-economic factors, 1998 SADHS.

Variable	Never	Once or twice	More often	p.	x^2
Language preference				.972	1.292
Nguni	31.9	43.2	24.8		
Sotho	32.0	43.2	24.7		
Other Bantu	34.7	40.7	24.5		
Non-Bantu	35.5	40.9	23.6		
Place of residence				010	9.211
Urban	29.5	44.8	25.7		
Rural	34.4	41.7	24.0		
Gender of head of household				.027	7.253
Male	31.3	42.6	26.0		
Female	34.2	43.8	22.0		
Wealth quintile				.029	10.775
Lowest two	34.4	41.4	24.2		
Middle	30.9	46.4	22.6		
Highest two	30.3	42.7	27.0		
Age group				.000	109.21
15-24	24.5	46.1	29.4		
25-29	24.5	47.3	28.3		
30-34	27.7	43.6	28.7		
35-39	31.9	42.8	25.3		
40-44	40.5	40.6	18.9		
45-49	48.2	36.5	15.3		
Education				.000	177.232
None	52.2	34.8	12.9		
Primary	36.4	44.1	19.5		
Secondary or higher	24.0	44.3	31.6		
Employment status				.022	7.606
Employed	28.9	45.3	25.8		
Unemployed	33.7	42.0	24.3		
Ever abused				1.424	.491
No	32.2	43.3	24.5		
Yes	32.3	40.8	26.9		

Due to rounding, some percentages might not add to exactly 100.

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Table 4.26. Percentage distribution of the women by frequency of spousal discussions about family planning by marriage and partner-related factors, 1998 SADHS

Variable	Never	Once or twice	More often	p.	x^2
Type of union				.625	.914
Formal	32.1	43.4	24.5		
Consensual	32.8	41.5	25.7		
Number of unions				.812	.416
One	32.3	43.1	24.6		
Two or more	32.0	43.6	26.4		
Type of marriage				.975	.484
Monogamous	32.3	43.1	24.5		
Polygamous	32.2	41.4	26.4		
Uncertain	32.0	42.7	25.3		
Comparative age				.153	6.691
Older	38.9	36.8	24.3		
Same	34.7	43.5	21.8		
Younger	31.0	43.6	25.4		
Relative age				.067	11.772
2 or less	29.8	42.3	27.9		
3 to 5	29.9	43.3	26.7		
6 to 9	33.2	42.2	24.6		
10 or more	34.3	44.5	21.2		
Husband's education				.000	137.586
None	47.3	37.0	15.7		
Primary	35.6	44.7	19.7		
Secondary or higher	24.5	43.4	32.0		
Comparative education				.000	54.043
Less	25.8	44.8	29.5		
More	38.8	42.7	18.4		
Same	34.5	43.5	22.0		

Due to rounding, some percentages might not add to exactly 100.

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Table 4.27. Percentage distribution of frequency of spousal discussions about family planning by selected reproductive-related factors, 1998 SADHS.

Variable	Never	Once or more	More often	p.	x^2
Comparative approval for family planning				.000	702.521
Both or man only approve	19.0	50.0	31.0		
Woman only	42.3	39.7	18.0		
Both disapprove	67.6	24.3	8.1		
One or both uncertain	82.5	13.0	4.4		
Approval for family planning				.000	234.267
Approves	28.1	45.2	26.6		
No or don't know	70.5	22.3	7.2		
Husband 's approval for family planning				.000	661.672
Approves	19.2	49.9	30.9		
Don't know	84.9	10.4	4.7		
Disapproves	48.8	36.0	15.2		
Comparative fertility desires				.000	137.667
Partner wants more	33.9	43.2	22.9		
Partner wants less	24.4	47.4	28.1		
Uncertain	51.1	36.3	12.6		
Both want same	26.7	44.6	28.7		
Fertility desires				.746	1.943
Have another	33.0	43.3	23.6		
Undecided	33.3	40.4	26.3		
Wants no more	31.3	43.7	25.0		
Births past five years				.000	54.876
Yes	26.4	45.4	28.2		
No	37.8	40.8	21.4		
Births past three years				.000	42.899
Yes	25.3	45.6	29.1		
No	35.8	41.7	22.5		
Births past year				.000	19.985
Yes	23.6	49.3	27.2		
No	33.6	42.0	24.3		
Last birth interval four or more years				.401	1.826
No	34.9	41.1	24.0		
Yes	31.6	43.5	24.9		
Wantedness of last child or current pregnancy				.203	5.944
Waned then	30.8	42.5	26.7		
Wanted later	31.1	45.1	23.8		
Wanted no more	37.9	38.2	23.9		
Attitude toward prospects of a pregnancy				.087	8.137
Happy	29.8	44.0	26.2		
Unhappy	32.5	42.7	24.8		
Would not matter	32.8	35.3	32.0		

Due to rounding, some percentages might not add to exactly 100.

Table 4.28. Percentage distribution of the women by frequency of spousal communication about family planning by selected reproductive-related factors, 1998 SADHS.

Variable	Never	Once or twice	More often	p.	x^2
Ever used condoms				.160	117.423
Ever	28.6	45.2	26.2		
Never	32.9	42.6	24.5		
Condom used at last intercourse				.000	43.097
Yes	16.3	42.9	40.8		
No or don't know	32.6	43.5	23.9		
Ever used fertility control				.060	5.634
Yes	31.2	43.5	25.3		
No	35.4	41.8	22.8		
Using fertility control				.000	171.788
No	42.1	39.2	18.7		
Yes	22.2	46.9	30.9		
Ever terminated a pregnancy				.338	2.169
No	31.8	43.5	24.8		
Yes	34.7	40.7	24.6		

Due to method of rounding, some percentages might not add to exactly 100.

Table 4.29. Percentage distribution of the women by frequency of spousal communication about family planning during the previous year by exposure to information on family planning and HIV/AIDS, 1998 SADHS.

Category/Variable	Never	Once or twice	More often	x^2	p.
Family planning information from:					
Radio				46.828	.000
No	41.2	37.6	21.3		
Yes	28.8	45.1	26.1		
Television				57.940	.000
No	37.2	41.6	21.2		
Yes	25.9	44.8	29.3		
Newspaper or magazine				72.107	.000
No	35.8	42.9	21.3		
Yes	23.5	43.2	33.2		
Posters or brochures				84.784	.000
No	36.6	41.8	21.6		
Yes	22.1	45.6	32.3		
Amount of HIV/AIDS information from:					
Radio				59.808	.000
None	46.3	37.9	15.8		
A lot	29.3	44.0	26.7		
Some	37.0	42.1	20.9		
Television				93.307	.000
None	41.0	41.7	17.2		
A lot	26.6	43.8	29.6		
Some	34.6	43.0	22.4		
Newspaper				122.881	.000
None	39.3	43.2	17.5		
A lot	23.8	43.2	33.0		
Some	31.0	42.2	26.7		
Pamphlets				112.811	.000
None	40.2	41.5	18.3		
A lot	23.9	44.7	31.4		
Some	29.1	43.8	27.1		
Husband				235.978	.000
None	46.1	37.4	16.5		
A lot	23.9	41.0	35.0		
Some	27.3	53.9	18.8		
Clinic or healthcare workers				129.068	.000
None	46.3	40.5	13.3		
A lot	26.7	44.3	29.0		
Some	37.3	40.6	22.1		
Friends					.000
None	46.5	36.7	16.8	155.863	
A lot	25.4	43.1	31.6		
Some	29.8	49.6	20.6		
Relatives				137.422	.000
None	42.6	39.2	18.2		
A lot	26.2	41.0	32.8		
Some	26.2	50.9	22.9		

Due to rounding, some percentages might not add to exactly 100.

Table 4.30. Percentage distribution of the women by the prevalence of method in use by numbers of children, sons and daughters, 1998 SADHS.

Variable	N	0-1	2-3	4-5	6 or more
Living children					
Pill	264	18.8	52.7	23.1	5.7
Injections	970	20.3	49.2	23.2	7.3
Other methods	102	20.6	55.9	17.6	5.9
Sterilisation	358	2.8	32.7	44.1	20.4
Overall	1694	16.4	46.6	27.3	9.7
Living sons					
	N	**0**	**1**	**2**	**3**	**4 or more**
Pill	264	22.0	29.2	28.4	15.9	4.5
Injections	970	20.0	36.5	27.0	11.1	5.4
Other methods	102	28.4	36.3	23.5	4.9	6.9
Sterilisation	358	8.1	28.2	30.7	19.3	13.7
Overall	1694	18.3	33.6	27.8	13.2	7.1
Living daughters						
Pill	264	22.7	37.5	21.2	11.7	1.9
Injections	970	22.9	37.3	24.2	10.0	5.6
Other methods	102	24.5	31.4	24.5	12.7	6.9
Sterilisation	358	11.2	23.2	29.1	20.4	16.2
Overall	1694	21.3	34.0	24.8	12.6	7.3

Table 4.31. Percentage distribution of the women by their reproductive-related attitudes according to place of residence, 1998 SADHS.

Variable	All	Urban	Rural	p
Ideal number of children				.000
One or none	3.8	5.0	2.9	
Two to three	44.1	55.9	334.9	
Four	31.7	27.0	35.4	
Five or more	20.3	12.1	26.7	
Wantedness of last child or current pregnancy	56.3	54.4	57.7	.422
Wanted then	25.8	26.8	25.1	
Wanted later	17.9	18.8	17.2	
Wanted no more				
Fertility preferences				.884
Have another	37.1	37.5	36.8	
Undecided	6.7	6.5	6.8	
No more	56.2	56.0	56.4	
Desired timing to next birth				.624
Two or fewer years	67.5	68.3	66.9	
Three or more years	32.5	31.7	33.1	
Attitude toward pregnancy				.469
Happy	28.4	28.5	28.3	
Unhappy	59.1	58.1	59.8	
Would not matter	12.5	13.4	11.9	
Approves of family planning				.004
Disapproves/Don't know	9.7	8.1	11.0	
Approves	90.3	91.9	89.0	
Radio for promoting family planning				.000
Not Acceptable/Don't know	6.4	4.2	8.1	
Acceptable	93.6	95.8	91.9	
Television for promoting family planning				.000
Not Acceptable/Don't know	8.9	5.8	11.3	
Acceptable	91.1	94.2	88.7	
Intention to use fertility control				.195
In next 12 months	38.8	39.9	37.9	
Use later	19.0	17.4	20.2	
Unsure about timing	.8	.4	1.2	
Unsure about use	8.5	8.2	8.7	
Does not intend	32.9	34.0	31.9	

Due to rounding, some percentages might not add to exactly 100.

Appendix 5. Model fitting information

5.1. Individual models: Variable submitted, variables removed and reason for removal

5.1.1. Background and socio-economic characteristics of the woman

Variable	Reason removed from: In Individual model
Childhood place of residence	ok
Mother's children	ok
Respondent's Order of Birth	ok
Age	ok
Province	ok
Urban/Rural	ok
Literacy	ok
Educational level	ok
Respondent still in school	ok
Respondent currently working	ok
Respondent's occupation	ok
Work for family, others, self	Reduced sample size plus estimation difficulties
Earns cash for work	Reduced sample size plus estimation difficulties
Employment all year/seasonal	Reduced sample size plus estimation difficulties
Days in a week normally work	Reduced sample size plus estimation difficulties
Earns cash for work	Reduced sample size plus estimation difficulties
Work for family, others, self	Reduced sample size plus estimation difficulties
Any type of abuse	ok
Age at First Marriage	ok
Type of union	ok
Marital duration (grouped)	ok
Number of unions	ok

5.1.2. Characteristics of the husband

Husband's age(groups)	ok
Husband's educational level	ok
Husband's occupation	ok
Husband's regular provision of money	ok
Husband's approval for family planning	ok

5.1.3. Husband-wife's comparative characteristics

Comparative age	ok
Relative ages	ok
Comparative education	ok
Comparative approval for FP	ok
FP Homogamy	Estimation Difficulties
Comparative fertility desires	ok

5.1.4 Characteristics of the household

Head of household	ok
Sex of household head	ok
Age of Head of Household	ok
Works at home or away	Reduced sample size plus estimation difficulties
Who decides how to spend money	Reduced sample size plus estimation difficulties
Preferred Language	ok
Husband lives in house	ok
Quintiles of wealth index	ok
Size of Household	ok
Children 5 years and less at home	ok
Sons at home	ok
Daughters at home	ok
Own children at Home (GP)	ok
Childminder or caretaker	Reduced sample size plus estimation difficulties

5.1.5. Reproductive-related

Age at first period	Estimation Difficulties
Age at first intercourse	ok
Age of respondent at 1st birth	ok
Live Births	ok
Living children	ok
Living Sons	ok
Living Daughters	ok
Births in last 5 years	ok
Births last 3 years	ok
Last birth interval >= 4 years	Reduced sample size plus estimation difficulties
Birth in Past Year	ok
Ever had a terminated pregnancy	ok
Ever use of any method	ok
Children at first use	ok
Contraceptive use & intention	Reduced sample size plus estimation difficulties
Current contraceptive method	ok
Contraceptive need	ok
Main reason not using a method	Reduced sample size plus estimation difficulties
Break contraceptive use last 12 months	Reduced sample size plus estimation difficulties
Reason breaking contraceptive	Reduced sample size plus estimation difficulties
Ever used condoms	ok
Partners past year	ok
Relationship to last sex partner	ok
Last intercourse used condom	ok
Main reason condom was not used	ok

5.1.6 Information and communication

Has radio	ok
Has television	ok
Reads newspaper once a week	ok
Watches TV every week	ok
Listens to radio every day	ok
Visited health facility last 12 months	ok
At health facility, told of Family Planning	ok
Heard about Family Planning on radio last months	ok
Heard about Family Planning on TV last months	ok
Heard about Family Planning on newspaper last months	ok
Heard about Family Planning on poster last months	ok
Heard about Family Planning on brochures last months	ok
Frequency of FP discussions/yr.	ok
Discussed family planning with husband	Estimation Difficulties
Discussed Family Planning with mother	Estimation Difficulties
Discussed Family Planning with sister(s)	ok
Discussed Family Planning with daughter(s)	ok
Discussed Family Planning with friends/neighbors	ok
AIDS: friends	ok
AIDS information obtained from friends	ok
AIDS: partner	ok
AIDS information obtained from partner(s)	ok
AIDS: relatives	ok
AIDS information obtained from relatives	ok
AIDS: radio	ok
AIDS information obtained for radio	ok
AIDS: television	ok
AIDS information obtained from TV	ok
AIDS: newspapers/magazines	ok
AIDS information obtained from Newspaper	ok
AIDS: pamphlets/posters	ok
AIDS information obtained from pamphlets	ok
AIDS: clinic/health workers	ok
AIDS information obtained from health workers	ok

5.1.7. HIV/AIDS knowledge and attitudes

Ever heard of AIDS	ok
Knows some with HIV/AIDS	ok
Practice safer sex	ok
Use condoms	ok
Using clean needles	ok
Sharing razor blade	ok
Avoid touching	ok
Avoid mosquito bites	ok
Avoid by having a good diet	ok
Avoid public toilets	ok
Avoid by sharing food	ok
Can a healthy person have AIDS	ok
People with AIDS be told status	ok
People with HIV be told status	ok
HIV/AIDS patients tell partners	ok
AIDS be reported health authorities	ok
HIV be reported health authorities	ok

5.18. Reproductive-related knowledge and attitudes

Ideal Number of Children	ok
Wanted last child	Reduced sample size plus estimation difficulties
Fertility preference	ok
Preferred waiting time	Reduced sample size plus estimation difficulties
Attitude toward becoming pregnant	ok
Approves of FP	ok
Acceptability of radio Promotion	ok
Acceptability of TV Promotion	ok
Law on abortion	ok
Knowledge of Ovulatory Cycle	ok
Knowledge of condom	ok
Source for BC	ok
Source for Condom	ok
Contraceptive use & intention	Reduced sample size plus estimation difficulties

5.2. Variables submitted for final modelling, variables removed and reason for removal

Childhood place of residence	ok
Mother's children	ok
Respondent's Order of Birth	ok
Age	ok
Province	ok
Urban/Rural	ok
Literacy	ok
Educational level	ok
Respondent still in school	ok
Respondent currently working	ok
Respondent's occupation	ok
Work for family, others, self	Reduced sample size plus estimation difficulties
Earns cash for work	Reduced sample size plus estimation difficulties
Employment all year/seasonal	Reduced sample size plus estimation difficulties
Days in a week normally work	Reduced sample size plus estimation difficulties
Earns cash for work	Reduced sample size plus estimation difficulties
Work for family, others, self	Reduced sample size plus estimation difficulties
Any type of abuse	ok
Age at First Marriage	ok
Type of union	ok
Marital duration (grouped)	ok
Number of unions	ok

5.2.2. Husband's characteristics

Husband's age(groups)	ok
Husband's educational level	ok
Husband's occupation	ok
Husband's regular provision of money	ok
Husband's approval for family planning	Estimation Difficulties

5.2.3. Husband-wife's comparative characteristics

Comparative age	
Relative ages	
Comparative education	
Comparative approval for FP	Estimation Difficulties
FP Homogamy	Estimation Difficulties
Comparative fertility desires	

5.2.4. Characteristics of the household

Head of household	ok
Sex of household head	ok
Age of Head of Household	ok
Works at home or away	Reduced sample size plus estimation difficulties
Who decides how to spend money	Reduced sample size plus estimation difficulties
Preferred Language	ok
Husband lives in house	ok
Quintiles of wealth index	ok
Size of Household	ok
Children 5 years and less at home	ok
Sons at home	ok
Daughters at home	ok
Own children at home	ok
Childminder or caretaker	Reduced sample size plus estimation difficulties

5.2.5. Reproductive-related

Age at first period	Estimation Difficulties
Age at first intercourse	Estimation Difficulties
Age of respondent at 1st birth	Estimation Difficulties
Live Births	ok
Living Children	ok
Living Sons	ok
Living Daughters	ok
Births in last 5 years	ok
Births last 3 years	ok
Last birth interval >= 4 years	ok
Birth in Past Year	ok
Ever had a terminated pregnancy	ok
Ever use of any method	ok
Children at first use	Estimation Difficulties
Contraceptive use & intention	ok
Current contraceptive method	ok
Contraceptive need	Estimation Difficulties
Main reason not using a method	Reduced sample size plus estimation difficulties
Break contraceptive use last 12 months	Reduced sample size plus estimation difficulties
Reason breaking contraceptive	Reduced sample size plus estimation difficulties
Ever used condoms	ok
Partners past year	ok
Relationship to last sex partner	ok
Last intercourse used condom	ok
Main reason condom was not used	ok

5.2.6 Information and communication

Has radio	ok
Has television	ok
Reads newspaper once a week	ok
Watches TV every week	ok
Listens to radio every day	ok
Visited health facility last 12 months	ok
At health facility, told of Family Planning	ok
Heard about Family Planning on radio last months	ok
Heard about Family Planning on TV last months	ok
Heard about Family Planning on newspaper last months	ok
Heard about Family Planning on poster last months	ok
Heard about Family Planning on brochures last months	ok
Frequency of FP discussions/yr.	ok
Discussed family planning with husband	ok
Discussed Family Planning with mother	ok
Discussed Family Planning with sister(s)	ok
Discussed Family Planning with daughter(s)	ok
Discussed Family Planning with friends/neighbors	ok
AIDS: friends	ok
AIDS information obtained from friends	ok
AIDS: partner	ok
AIDS information obtained from partner(s)	ok
AIDS: relatives	ok
AIDS information obtained from relatives	ok
AIDS: radio	ok
AIDS information obtained for radio	ok
AIDS: television	ok
AIDS information obtained from TV	ok
AIDS: newspapers/magazines	ok
AIDS information obtained from Newspaper	ok
AIDS: pamphlets/posters	ok
AIDS information obtained from pamphlets	ok
AIDS: clinic/health workers	ok
AIDS information obtained from health workers	ok

5.2.7 HIV/AIDS knowledge and attitudes

Ever heard of AIDS	ok
Knows some with HIV/AIDS	ok
Practice safer sex	ok
Use condoms	ok
Using clean needles	ok
Sharing razor blade	ok
Avoid touching	ok
Avoid mosquito bites	ok
Avoid by having a good diet	ok
Avoid public toilets	ok
Avoid by sharing food	ok
Can a healthy person have AIDS	ok
People with AIDS be told status	Estimation Difficulties
People with HIV be told status	Estimation Difficulties
HIV/AIDS patients tell partners	Estimation Difficulties
AIDS be reported health authorities	ok
HIV be reported health authorities	ok

5.2.8 Reproductive knowledge and attitudes

Ideal Number of Children	ok
Wanted last child	Reduced sample size plus estimation difficulties
Fertility preference	ok
Preferred waiting time	Reduced sample size plus estimation difficulties
Attitude toward becoming pregnant	ok
Approves of FP	ok
Acceptability of radio Promotion	ok
Acceptability of TV Promotion	ok
Law on abortion	ok
Knowledge of Ovulatory Cycle	ok
Knowledge of condom	ok
Source for BC	ok
Source for Condom	ok
Contraceptive use & intention	Reduced sample size plus estimation difficulties

5.3. **Step summary**

Model		Action	Effect(s)	Model Fitting Criteria	Effect Selection Tests		
		-2 Log Likelihood	Chi-Square (a, b)	df	Sig.	-2 Log Likelihood	Chi-Square (a, b)
Step 0	**0**	Entered	<all>(c)	1565.275			
Step 1	**1**	Removed	Heard about HIV/AIDS	1565.275	.000	0	.
	2	Removed	Condoms last sex	1565.275	.000	0	.
	3	Removed	Ever used birth control	1565.275	.000	0	.
	4	Removed	Had birth past 5 years	1565.321	.045	2	.978
	5	Removed	Husband's age	1566.743	1.422	6	.964
	6	Removed	Pregnancy attitude	1567.319	.576	4	.966
	7	Removed	Health visit past year	1567.463	.144	2	.931
	8	Removed	Age of head	1570.932	3.470	8	.902
	9	Removed	Had birth past 3 years	1571.258	.325	2	.850
	10	Removed	Type of marriage	1571.629	.371	2	.831
	11	Removed	Level of education	1572.182	.554	2	.758
	12	Removed	Self-husband's age	1575.737	3.555	6	.737
	13	Removed	Mosquito bite	1577.940	2.202	4	.699
	14	Removed	Children 5 or younger	1579.979	2.040	4	.728
	15	Removed	Partners past year	1580.617	.638	2	.727
	16	Removed	Husband's education	1582.821	2.204	4	.698
	17	Removed	Amt. Information from pamphlets or brochures	1585.197	2.376	4	.667
	18	Removed	Condom prevents	1586.216	1.019	2	.601
	19	Removed	Approval for FP	1587.244	1.028	2	.598
	20	Removed	TV for promoting FP	1588.445	1.201	2	.548
	21	Removed	Has TV	1589.595	1.150	2	.563
	22	Removed	Literacy	1590.924	1.329	2	.515
	23	Removed	Weekly viewing of TV	1592.181	1.257	2	.533
	24	Removed	Children at first use	1601.725	9.544	10	.481
	25	Removed	Discussed FP -mother	1603.069	1.344	2	.511
	26	Removed	Pregnancy termination	1604.733	1.664	2	.435
	27	Removed	Gender of head	1606.349	1.616	2	.446
	28	Removed	Knows HIV positive	1608.093	1.744	2	.418
	29	Removed	Employment status	1609.907	1.814	2	.404
	30	Removed	Sharing food	1613.974	4.067	4	.397
	31	Removed	Health visit past year	1615.751	1.777	2	.411
	32	Removed	Had birth past year	1617.630	1.878	2	.391
	33	Removed	Knows source for birth control	1621.773	4.144	4	.387
	34	Removed	AIDS-Friend	1623.999	2.226	2	.329
	35	Removed	AIDS- Paper	1625.953	1.954	2	.376
	36	Removed	Age at first marriage	1630.035	4.082	4	.395
	37	Removed	Age	1640.787	10.752	10	.377
	38	Removed	Sons	1648.247	7.460	8	.488
	39	Removed	AIDS - relative	1649.995	1.748	2	.417
	40	Removed	Discussed FP -Husband	1652.276	2.281	2	.320
	41	Removed	Mother's children	1657.245	4.970	4	.290
	42	Removed	Knowledge of ovulatory cycle	1662.163	4.918	4	.296
	43	Removed	Husband co-resident	1664.370	2.207	2	.332

Continued on next page

Step summary, continued

Model		Action	Effect(s)	Model Fitting Criteria	Effect Selection Tests		
		-2 Log Likelihood	Chi-Square(a ,b)	df	Sig.	-2 Log Likelihood	Chi-Square(a, b)
	44	Removed	Province	1683.287	18.917	16	.273
	45	Removed	Size of household	1688.312	5.025	4	.285
	46	Removed	Condoms prevent	1691.029	2.718	2	.257
	47	Removed	Clean needle prevent	1696.108	5.078	4	.279
	48	Removed	Amount of information from paper	1701.412	5.304	4	.258
	49	Removed	Experienced abuse	1704.287	2.875	2	.237
	50	Removed	Amount of information from TV	1709.482	5.195	4	.268
	51	Removed	Has radio	1712.798	3.316	2	.191
	52	Removed	Touching infected	1718.688	5.889	4	.208
	53	Removed	Amount of information from health worker	1724.904	6.216	4	.184
	54	Removed	Discussed FP – Fiend o neighbour	1728.511	3.607	2	.165
	55	Removed	Amount of information from friends	1734.147	5.635	4	.228
	56	Removed	Discussed FP -Daughter	1737.287	3.140	2	.208
	57	Removed	Own children at home	1751.863	14.576	10	.148
	58	Removed	Daughters at home	1757.227	5.364	4	.252
	59	Removed	Sons at home	1762.887	5.660	4	.226
	60	Removed	Discussed FP - Sister	1766.094	3.207	2	.201
	61	Removed	Fertility desires	1772.513	6.420	4	.170
	62	Removed	Avoid public toilet	1778.855	6.342	4	.175
	63	Removed	Safer sex prevents	1785.369	6.513	4	.164
	64	Removed	Weekly paper	1789.080	3.711	2	.156
	65	Removed	Heard about FP - Radio	1792.724	3.644	2	.162
	66	Removed	Amount of information from radio	1798.315	5.591	4	.232
	67	Removed	Age differences	1809.728	11.413	8	.179
	68	Removed	Herd about FP -Radio	1813.341	3.613	2	.164
	69	Removed	Daughters	1826.359	13.018	8	.111
	70	Removed	Sharing razor blade	1834.026	7.667	4	.105

Stepwise Method: Backward Stepwise

a The chi-square for entry is based on the likelihood ratio test.

b The chi-square for removal is based on the likelihood ratio test.

c This model contains all effects specified or implied in the MODEL subcommand.

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