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FERTILITY DESIRES AND BEHAVIOURS AMONG BASOTHO COUPLES: A COMPARATIVE ANALYSIS OF MEN AND WOMEN

A research report submitted in partial fulfilment of the degree of Master of Commerce in applied development economics, in the school of Economics and Finance, University of the Witwatersrand

BY

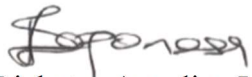
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26/08/2025

DECLARATION

I, Lieketso Leponesa declare that this is my original work and has not been submitted anywhere else partially or in full. It is currently submitted for the Master of Commerce in Applied Development Economics degree at the School of Economics and Finance under the Faculty of Commerce, Law and Management, University of the Witwatersrand, Johannesburg, South Africa.



Lieketso Angelina Leponesa

March 2025

DEDICATION

This paper is dedicated solely to my mother, Mrs. Mamolai Leponesa. She is a woman who, though initially wishing for a small family, was compelled to have a larger one due to immense pressure from her in-laws and the community, all seeking an heir for the Leponesa family name. Her journey involved giving birth to six daughters in the pursuit of a son, driven by societal expectations to satisfy her in-laws and escape the stigma associated with not having a male child.

As the wife of the eldest son, who was both the family breadwinner and heir, my mother faced relentless external demands to bear a boy to carry on the family name and preserve its legacy. This paper has a deeply personal connection to her story, as many of its chapters reflect her challenges. It is with great pride that I dedicate this work to her and declare, “Mama, this is for you.”

ABSTRACT

Although childbearing and reproduction involve both partners in a relationship, it is often perceived as solely the woman's responsibility. Research in Lesotho has largely focused on women's access to contraceptives, neglecting the dynamics of joint decision-making within couples. This study aimed to examine the similarities and differences in fertility desires between Basotho men and women in relationships, and whether their contraceptive behaviour aligns with these desires. Using the 2023-24 Lesotho Demographic and Health survey we conducted both descriptive statistics and employed the Actor-Partner Interdependence Model (APIM) to evaluate dyadic effects. The descriptive statistics identified that there is often inconsistency between fertility desires and contraceptive behaviour. Results from the logistic Generalized Structural Equation Model (logit GSEM) showed that women's fertility desires significantly influence both their own and their partners' contraceptive use within couples. Conversely, men's fertility desires were insignificant in determining contraceptive use for either partner. Additionally, working women were more likely to use contraceptives than their unemployed counterparts. Although most women were found to be more educated than their partners, the majority remained unemployed and financially dependent. The development of initiatives that would enhance women's employment opportunities and address gender disparities in the labour market is recommended. Establishing child social grant programs could further support women and families, particularly given the financial constraints faced by unemployed women in Lesotho.

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I am also profoundly grateful to Mr. Napo Monyane, who has been my rock throughout this entire process. His unwavering support, his willingness to put his plans and goals on hold, and his constant encouragement have been instrumental in helping me stay focused and regain my confidence, even on my hardest days. His belief in me kept me motivated and steadfast until the very end.

A special thanks go to Doctor Mamello Nchake, who has been both my cheerleader and prayer warrior. Her words of encouragement, calls on tough days, and willingness to pray with me or lend a helping hand—financially or emotionally—provided the strength I needed to keep moving forward during trying times.

Finally, I want to express my appreciation for my dear friends, Lintle Potieane, Manthabiseng Thamae, and Moretlo Botipe. Their consistent check-ins, thoughtful calls, and occasional invitations to step away and recharge my mind played a vital role in helping me maintain my productivity and focus.

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CHAPTER 1. INTRODUCTION

Concerns about population growth, its environmental impact, and implications for development date back to classical economic thought in the 16th and 17th centuries. These concerns arise from the effect of rapid population growth on the supply of natural resources, which generally leads to increased demand, especially in less developed countries like Lesotho, where the industrial base remains limited. Over time, there has been a significant global transition in fertility rates, with rates declining rapidly (Bankole & Audam, 2011). While this decline persisted in high-income countries, many sub-Saharan African nations experienced a stall, with most maintaining a rate of 4.5 births per woman, much higher than in other regions, where rates dropped to around 2.5 births per woman (Bankole & Audam, 2011; Sylvest et al., 2018).

In high-income countries, the continued decline in fertility is mainly due to delayed childbearing among both men and women. The delay is often linked to education pursuits till ages where fertility quality and chances have declined, particularly for women, since their fertility cycle is shorter than men's, making it harder to reach their desired family sizes (Lampic et al. 2006). Moreover, Freitas & Testa (2017) discovered that in France, the average fertility rate surpassed the replacement threshold of 2.1 children per woman, making it the highest in Europe., Australia and Bulgaria recorded lower fertility rates of 1.47 and 1.53, respectively. In these countries, there is not only increased access to contraception but also high usage and desires for small family sizes.

On the other hand, sub-Saharan Africa faces a notably high rate of unmet need for contraception, leading to unplanned pregnancies. According to Bankole & Audam (2011), this is largely due to differences in fertility preferences between spouses and attitudes toward contraception, with men reportedly wanting more children than women. The unmet need decreases significantly when men's or husbands' fertility desires are taken into account. In some African cultures, having many children is associated with wealth, as children contribute labour in rural agricultural settings and are expected to support their parents in old age (Preston-Whyte,1988). Moreover, this traditional mindset often discourages the use of contraceptives and even considers them ungodly, as they go against the will of God.

Lesotho has achieved a significant milestone by reducing its total fertility rate from 3.5 children per woman in 2004 to 2.5 in 2024, alongside reaching 70% access to modern contraceptive methods (LDHS, 2024). However, the country continues to face challenges, with 13% of married women and 18% of unmarried yet sexually active women still experiencing an unmet need for contraception (LHDS, 2024). As Bauer & Kneip (2013) observe, access to contraceptives does not guarantee their usage, as decisions often depend on various factors, including mutual agreement between partners (Brehm & Schneider, 2019).

Family planning in Lesotho is spearheaded by the Ministry of Health and Social Welfare, complemented by the efforts of the Lesotho Planned Parenthood Association (LPPA), an affiliate of the International Planned Parenthood Federation (IPPF) (Tuoane et al. 2003). While these organizations ensure a steady supply of contraceptives through public and private healthcare facilities, the demand for their use is influenced by numerous factors, such as mutual desires for additional children and partner approval (Tuoane et al. 2003).

Despite advances, Lesotho struggles with high rates of unsafe abortions and cases of abandoned newborns, issues exacerbated by the illegality and societal condemnation of abortion (Makatjane, 2002). Even with improved access to contraceptives, many Basotho women resort to unsafe pregnancy terminations due to unintended pregnancies or pressure from partners as opposed to having children. These incidents raise questions about power dynamics within relationships, inconsistent behaviour, and possible mismatches in desires for children, suggesting deeper societal and cultural factors at play.

In Lesotho, as in many African countries, women may have the legal right to decide when to have children or determine their family size. However, enforcing this right often requires navigating the expectations and desires of their partners. Meyer et al. (2024) suggest that while contraceptive use may initially be an individual decision aimed at preventing disease and pregnancy, it often evolves into a shared responsibility shaped by the dynamics of the relationship. Preston-Whyte (1988) further asserts that fertility has transcended being merely a biological matter; it now represents the interdependent choices made by partners within a marriage or union.

Despite men’s influence in fertility and childbearing decisions, they have frequently been overlooked in related studies, resulting in public health policies that are often biased or incomplete in addressing real-world dynamics in Lesotho. Existing research has largely centred on young, adolescent boys in school settings, neglecting the experiences of older men and women in marital or committed relationships, where decision-making is inherently interdependent. For instance, Mhloyi's (1986) research on fertility determinants in Lesotho and Kenya focused exclusively on women of reproductive age, leaving a significant gap in understanding men’s contributions to their partners’ reproductive choices.

To fully comprehend the childbearing behaviour of Basotho couples, it is crucial to examine the fertility desires of both men and women alongside the socioeconomic factors shaping their behaviour. This study, therefore, aims to bridge this gap by conducting a comparative analysis of men’s and women’s fertility preferences and their associated behaviours within marital and cohabiting relationships in Lesotho. Leveraging the Actor-Partner Interdependence Modelling Analysis, the study seeks to account for the intricate interdependence in decision-making between partners.

In particular, we seek to answer the following questions.

1) Are there differences in childbearing desires among Basotho men and women in relationships and what are the determinants of these desires?
2) How do these desires align with behaviour towards contraceptive use?
3) Do male or female desires regarding future pregnancies dominate the decision to use contraception among Basotho couples?

The paper is structured as follows: Section 2 provides an overview of the literature on fertility desires and contraception use, and the determinants of these. Section 3 presents the methodology. Section 4 is the data analysis section. We present both descriptive statistics and APIM, dyadic model results. Section 5 provides a discussion of the results. The paper concludes with section 6.

CHAPTER 2. LITERATURE REVIEW

This chapter explores the multifaceted discussions around fertility desires and contraceptive use among men and women. It integrates both empirical evidence and theoretical perspectives, providing a comprehensive analysis.

2.1 Overview of Fertility Desires and Contraception Use in African Society

Fertility desires, deeply rooted in cultural and economic contexts, reflect varying aspirations between men and women. Research suggests men often favour larger families than women (Brehm & Schneider, 2019). This is especially evident in rural areas, where agriculture predominates, living costs are lower, and children are considered valuable labour and a marker of wealth. In such communities, men with numerous children command respect and are deemed prosperous, unlike those with few or no offspring (Biney et al. 2021).

Additionally, Liamputong (2007) notes the societal stigma men face when their partners are unable to bear children, often prompting them to seek another wife. Children symbolize a man's fulfilment of his duties, driving some men to prioritize fertility in relationships. Consequently, some choose partners who have already proven their fertility or even impregnate them before marriage as assurance. Interestingly, Preston-Whyte (1988) highlights the contrasting trend of some unmarried women deliberately becoming pregnant to secure marriage, even if having a child isn't their immediate desire.

Attempting to secure marriage by becoming pregnant can be risky, as men may change their minds, leaving women to raise children as single parents. Nevertheless, in certain cases, this tactic works, as some men prefer to marry women who bear their children, a sentiment echoed among Zulu men according to Preston-Whyte (1988).

In many African societies, a boy child is seen as the family's lineage bearer. Men without sons often feel compelled to continue having children until they sire one (Liamputong, 2007). Women, in contrast, may not prioritize the gender of their children but often face immense pressure from husbands, in-laws, and the community to produce at least one male heir. This societal expectation may push women to bear more children than they desire to satisfy cultural norms and familial demands. Liamputong (2007) further notes that women, even when preferring smaller families, often view having at least a second child as essential to providing siblings and preserving familial bonds, especially after their passing (Brehm and Schneider, 2019).

Contraceptives, the key to controlling family size, enable couples to delay or prevent pregnancies as desired (Tuoane et al. 2003). Modern contraceptives are particularly effective and safe for avoiding unintended pregnancies (Singh et al. 2010). Decisions regarding their use may emerge from open communication between partners, ideally achieving mutual agreement. However, power imbalances within relationships often influence outcomes. Meyer

et al. (2024) assert that in cases where one partner wields greater economic influence, coercion may override the autonomy of the other partner. Equitable financial standing between partners increases the likelihood of fair, consensual decisions about contraception.

Historically, childbearing and parenting duties have predominantly fallen on women (Campbell et al. 2019). These traditional roles have shaped reproductive health policies over centuries, with many initiatives focusing on empowering women with access to contraceptives and education about their reproductive rights (Khaile, 2003). The imbalance in household economic power, a vestige of Smith's stadial theory where men provided resources while women managed households, still resonates in modern dynamics.

Public health systems in developing countries often provide free contraceptives to help couples, particularly women, prevent unintended pregnancies. Yet, contraceptive use remains disproportionately low in Sub-Saharan Africa compared to other regions (Bankole & Audam, 2011). Open communication within partnerships is vital to bridging this gap, as it influences shared behaviours, thoughts, and decisions, contributing to responsible reproductive choices (Brehm & Schneider, 2019).

Interestingly, Dudgeon & Inhorn (2003) highlight the pivotal role of men in reproductive health, whether directly through actions like transmitting STIs or indirectly via resource allocation during and after childbirth. Campbell et al. (2019) further note that men's behaviours towards sexual activities and birth control can often be inconsistent, leading to unintended pregnancies and, potentially, abortions. Understanding men's reproductive desires, how they diverge from their partners, and their role in contraception decisions is key to improving women's reproductive health and easing the government's burden of addressing cases of abandoned children.

2.2 Determinants of Fertility Desires and Contraception Use

The section adopts the framework proposed by Bongaarts et al. (1984), categorizing variables into three key dimensions: socioeconomic, demographic, and proximate determinants.

Socioeconomic variables encompass factors such as education, religion, age, wealth or economic status, and the total number of living children, among others. Demographic variables are rooted in geographical location, highlighting contextual influences. Meanwhile, proximate determinants act as direct moderators, with contraceptive use being a central factor in shaping fertility behaviours and outcomes.

Socioeconomic Variables

2.2.1 Education

Policymakers have invested significant efforts in promoting contraceptive education for preventive purposes, yet such initiatives have drawn criticism from feminists worldwide. They

argue that the emphasis on regulating population growth often overshadows deeper issues tied to reproductive health (Dudgeon & Inhorn, 2003).

A study by Olatoregun et al. (2014) examining perceptions of fertility among women of reproductive age in Nigeria and Ghana provides critical insights. Using a sample of 5,193 Nigerian and 4,916 Ghanaian women from national demographic surveys, the study used the number of children borne by each woman as a proxy for fertility. The findings reveal that Nigerian women with primary education were 3.8 times more likely to have more children compared to those with higher education. Similarly, Ghanaian women with no formal education were 17 times more likely to have larger families compared to their highly educated counterparts, while the likelihood for Nigerian women without formal education was 2.5 times higher. These results underscore the pivotal role of literacy in promoting access to sexual and reproductive health, as it reduces the risks of early pregnancies, early marriages, and susceptibility to STIs and HIV (Khaile, 2023).

Education, however, does more than just lower fertility rates. According to Liamputtong (2007) and Preston-Whyte (1988), it shapes but does not erase cultural ideologies surrounding family size and reproduction, blending traditional norms with modern perspectives. Women, empowered through education, are better equipped to choose their desired family size, as outlined in the Maputo Protocol (Khaile, 2024). Education also influences men's perspectives on fertility and reproduction. This was evident in Holton et al.'s (2016) Australian study, which surveyed 1,104 men aged 18–50. It found that educated men tend to overestimate reproductive longevity, often believing they can delay fatherhood until after age 50.

Findings from Bankole & Audam (2011) highlight literacy disparities across 24 sub-Saharan African countries. They found the lowest literacy rate among husbands in Niger and Burkina Faso (14%) and the highest among husbands in Zimbabwe (86%). Meanwhile, wives' literacy rates lagged significantly behind in almost all surveyed countries, except for three in Southern Africa. Interestingly, Basotho women in Lesotho demonstrated some of the highest literacy levels, with 88% able to read without difficulty, surpassing their husbands and peers from other nations. Similarly, women in Namibia and Swaziland displayed higher literacy rates compared to their husbands, with figures ranging from 78–88% for women versus 59–75% for men.

Despite progress in female literacy, gaps remain in addressing gendered inequalities in education and cultural expectations around childbearing. These dynamics underscore the need for inclusive policies that recognize the interplay between education, reproductive autonomy, and cultural norms.

2.2.2 Employment

Olatoregun et al. (2014) highlight notable differences in how employment status affects fertility preferences between Nigerian and Ghanaian women. In Nigeria, unemployment appears to be linked to a lower desired number of children. Unemployed Nigerian women were

0.4% less likely to desire more children compared to their employed counterparts. Conversely, among Ghanaian women, employment status had no significant influence on decisions regarding childbearing.

2.2.3 Relationship Status

Traditional beliefs often discourage women from having children outside of marriage, as it is seen as bringing shame to their families (Makatjane, 2002). However, Biney et al. (2021) provide a contrasting perspective. Their research revealed that both married and unmarried women in South Africa significantly contribute to the country's fertility levels. Interviews conducted in a black residential area in Durban found that pregnancy often increased the likelihood of marriage. This trend was especially observed among Zulu men, who preferred impregnating women to confirm their fertility before marriage. As a result, some Zulu women refrained from using contraceptives to boost their chances of getting married.

Conversely, the study by Freitas & Testa (2017) found that unmarried couples in Australia, France, and Bulgaria were less likely to transition into parenthood compared to married couples. This reflects the strong social and religious stigmas surrounding out-of-wedlock pregnancies in these countries, similar to many African societies (Liamputong, 2007). These stigmas often disproportionately affect women in such partnerships.

Adding further complexity, Bankole & Audam (2011) challenge the traditional assumption that married men in developing countries desire fewer children than their wives. Their findings suggest the opposite, revealing that married men often hold stronger pronatalist attitudes compared to their female partners, a dynamic that influences fertility patterns and family planning decisions.

2.2.4 Age

Lampic et al. (2006) demonstrated a clear link between higher education and the postponement of parenthood. Their study, conducted among 222 female and 179 male university students in Sweden via a postal survey, explored students' intentions and attitudes toward parenthood and their awareness of female fertility. The findings showed that both male and female students were optimistic about becoming parents but intended to delay parenthood until they were closer to the end of their fertility window. Stability in a relationship and a responsible partner were identified as essential prerequisites for having children. Most women aimed to have their first child between the ages of 25 and 29, while men preferred to begin parenthood between the ages of 30 and 34.

Similarly, Freitas & Testa (2017) revealed that Australian women have been delaying childbirth since the mid-1970s. By 2014, the average age of women at the birth of their first child was 28.9 years. In comparison, French women had their first child at a slightly older

average age, while Bulgarian women tended to have children earlier than women in other Western countries.

In Nigeria, Olatoregun et al. (2014) found that women aged 35–44 were 33% less likely to have more children compared to those older than 44, highlighting how age influences reproductive decisions. Across these diverse contexts, cultural, educational, and societal factors play significant roles in shaping childbearing decisions and timelines.

Proximate determinants

2.2.5 Contraceptive Use

The use of contraceptives is deeply shaped by cultural beliefs and societal norms. Preston-Whyte (1988) emphasizes that merely having knowledge of or access to contraceptives does not guarantee their use; social and environmental factors play a critical role. This was evident in a study by Tabong & Adongo (2013) in Ghana, which found widespread beliefs linking contraceptive use to infertility among women. These misconceptions, shared by both men and women, also associated contraceptive use with women involved in prostitution, further stigmatizing its usage. In some African societies, contraceptives are seen as ungodly, with Christians, in particular, viewing childbearing as a divine duty solely governed by God (Campbell et al. 2019).

Campbell et al. (2019) delved into the attitudes and behaviours surrounding pregnancy among low-income men over 24 years old in Alabama, USA. Through qualitative content analysis of questionnaires administered to 26 sexually active men, the study revealed limited contraceptive knowledge and a perception of low unintended pregnancy risk, irrespective of the birth control method. While most men expressed a desire to avoid having more children, decisions about birth control were often left to their partners. Hesitation around vasectomies stemmed from concerns about potential impacts on sexual performance or the possibility of desiring children in the future.

Liamputtong (2007) adds a cultural perspective from the Hmong community, where men are seen as the ultimate authority. Male sterility is rarely acknowledged, as admitting to it undermines traditional moral values, threatening the social order. These deep-seated attitudes highlight how cultural beliefs shape reproductive ideologies across generations.

Mhloyi's (1986) comparative study of Kenya and Lesotho uncovered a reluctance among women with no or only one child to use contraceptives. Using data from the 1977/78 World Fertility Survey, the study showed contraceptive usage rates of 32% in Kenya and 23% in Lesotho. Married women were the primary users, yet many relied on inefficient methods, increasing the risk of unintended pregnancies. The study, however, lacked a focus on men's contraceptive knowledge, leaving gaps in understanding fertility outcomes.

Meyer et al. (2024) explored the dynamics of contraception decision-making among U.S. couples, finding that men's involvement decreased when they perceived coercion from their partners. Interestingly, men's relationship satisfaction improved when women independently made contraceptive choices. This points to potential power imbalances, where male perceptions of coercion may stem from a partner's autonomy in choosing methods suited to her body.

Meanwhile, Makatjane (2002) highlights that in Lesotho, cultural taboos surrounding reproductive health hinder open discussions about contraception and childbearing. These societal silences exacerbate family planning challenges and contribute to unintended pregnancies, a phenomenon mirrored across many African countries.

2.2.6 Fertility Desire

In sub-Saharan Africa, Bankole & Audam (2011) examined gender differences in fertility goals and how they contribute to persistently high fertility rates. Their findings revealed that husbands often desired more children than their wives. For instance, the proportion of husbands wanting more children than their wives ranged from 25% in Rwanda to 64% in Guinea, exceeding 40% in 20 out of 24 countries studied. Conversely, only in Rwanda did 42% of wives desire more children than their husbands, with most other countries reporting much lower proportions.

Agreement on family size among couples was notably low, with consensus ranging from 15% in Chad to just 37% in Madagascar. In Eastern and Southern sub-regions, the countries where agreement on desired family size among couples reached 30% or higher were Kenya and Malawi. Despite this, married men across all studied countries consistently expressed a preference for larger families on average.

Geographical variables

2.2.7 Location

Location plays a pivotal role in shaping attitudes and perspectives on childbearing and reproduction, as illustrated by Holton et al. (2016). Their study found that Australian men in metropolitan areas without secondary education believed it was better to have children earlier, citing concerns about men's fertility declining at or after age 45, compared to women's decline beginning at or after 35. In contrast, older men in rural areas with partners tended to have more children than their urban counterparts. Despite their desire for larger families, barriers such as quality of life, measured by access to private health insurance limited their ability to achieve these aspirations. Similar findings were observed in China by Kane & Li (2023), where couples, following the amendment of the one-child policy, carefully weighed the opportunity cost of having additional children against their quality of life and income.

Kane & Li's (2023) study also highlighted the enduring influence of traditional Chinese practices on men's fertility desires. Their findings revealed that men identifying with traditional Chinese values exhibited a strong desire for more children, regardless of the financial or policy-related limitations. This cultural emphasis on larger families, despite restrictive policies, mirrors observations by Campbell et al. (2019) in rural Durban. In South Africa, traditional beliefs influenced reproductive behaviours, with limited access to sexual health information and reproductive services, especially in rural areas, contributing to unintended pregnancies and unsafe abortions.

Holton et al. (2016) further emphasize the global inclination among men toward larger family sizes, particularly in Australia. Their findings reveal that 90% of Australian men aspired to have at least two children, underscoring the significant value placed on fatherhood and the societal preference for women who can bear children. This aligns with broader cultural trends that associate masculinity and respect with the ability to father multiple children.

CHAPTER 3. METHODOLOGY

3.1 Conceptual framework

Drawing on the work of Campbell et al. (2019), we will categorize our analysis into two main areas: procreative consciousness and procreative responsibility. **Procreative consciousness**, as defined by Campbell et al. (2019), refers to the beliefs, views, and general awareness of men and women regarding childbearing and reproduction. This includes their views on virility and sexual prowess, feelings and desires about future parenthood, and attitudes towards pregnancy.

Procreative responsibility, on the other hand, relates to individual attitudes, beliefs, and actions regarding their obligations and involvement in contraception and pregnancy. For example, this could involve men's involvement in their partner's contraceptive use to prevent pregnancy or their responsibility for child support.

3.1.1 Procreative Consciousness

In this analysis, we will focus on men's and women's attitudes and desires toward future pregnancies. These desires may have a huge impact on the use of contraception for both men and women in relationships.

The analysis of the desires regarding having more children will be explored solely in the descriptive analysis section. The section will serve to compare and contrast such desires between men and women in partnerships, as well as to look at the correlates of these desires.

The survey question from which the outcome variable will be derived is:

“Would you like to have another child or would you prefer not to have any more children.”,

The analysis will capture the conjoint desires of partners in a couple to see where desires align and differ.

We will have 4 cases 1) Man and woman both want more children; 2) Man and woman both don’t want more children, 3) Man does not want more children but woman does, 4) Woman does not want more children but man does.

3.1.2 Procreative Responsibility

For this purpose, we will check whether contraceptive behaviour is aligned with desires regarding future pregnancies. We will check how men and women in a relationship with each other differ in their responses to the following two questions

“Are you or your partner currently doing something or using any method to delay or avoid getting pregnant.?”,

“Which method is you or your partner using.?”

This approach will integrate the two questions, conceptualizing contraceptive use as a two-stage process, as proposed by Tuoane et al. (2003). The first stage involves the decision to use contraception, and the second focuses on the choice of method among users. This integration will yield a single binary variable for regression analysis, categorizing individuals into non-users or users of traditional methods, and users of modern/safe methods.

In this area of analysis, both descriptive analysis and the actor-partner interdependence model of analysis (Econometric model) will be conducted.

The outcome variable for our regression model (APIM) will be whether safe contraception is being used or not by each partner (man or woman). The most important explanatory variables in each effect model here will be both the woman's and man’s responses to the question regarding the desire for future pregnancies. In addition, other explanatory variables such as education (of both a man and woman), employment status (of both a man and woman), age (of both a man and woman), marital status, location, and religion (of both a man and woman).

3.2 Data

This study leverages data from the Lesotho Demographic and Health Survey (LDHS), conducted by the Ministry of Health Lesotho in collaboration with the World Bank from November 27, 2023, to February 29, 2024. The data is nationally representative of men and women of reproductive age, encompassing all districts and ecological zones of Lesotho. It includes women aged 15–49 and men aged 15–59, drawn from an updated sampling frame based on the 2006 Lesotho Population and Housing Census (LPHC) (LHDS, 2024).

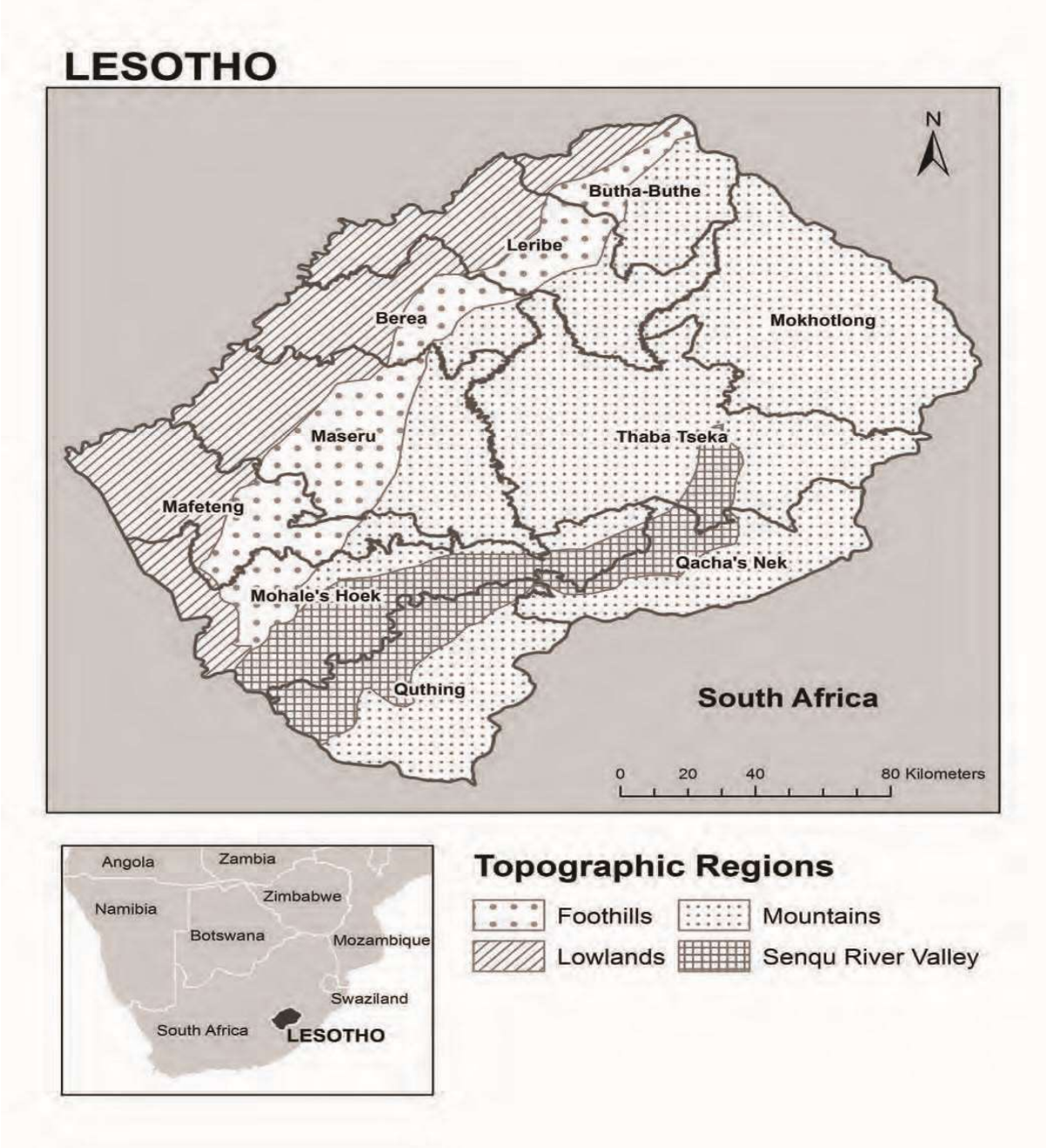
The survey’s primary objective is to gather comprehensive data on the health and demographic characteristics of Basotho men and women of reproductive age. Key areas of focus include fertility, contraceptive use, marriage, and various socioeconomic factors. Of the four questionnaires administered during the LDHS, this study exclusively utilizes the male and female questionnaires, as well as the standardized couples recode microdata. The data is accessible upon request and approval through the DHS Program website. Notably, the male and female questionnaires share a similar structure, although the male version is shorter.

3.3 Study Site

Lesotho, a small mountainous country surrounded by South Africa, spans 30,355 square kilometres and is home to approximately 2 million people (Tuoane et al. 2003; LDHS, 2009). Its population, known as the Basotho people, is culturally homogeneous, with Sesotho as their sole native language. Primarily rural, Lesotho comprises four ecological zones and ten districts (Linono et al. 2007). Agriculture dominates as the main source of livelihood due to the country's limited infrastructure in rural regions (FAO, 2023; LDHS, 2009).

The Basotho people maintain deeply rooted cultural and religious traditions, such as the association of manhood status with school initiation rites and the view of abortion as a crime. Despite government efforts to enhance access to contraception, contraceptive prevalence remains significantly lower than in neighbouring South Africa (Tuoane et al. 2003). Interestingly, Basotho women are noted to be more educated than their male counterparts and women from many other African nations (Tuoane et al. 2003; Bankole & Audam, 2011). A map illustrating Lesotho's ten districts and four ecological zones is depicted in **Figure 1** below. It shows the country's four ecological zones the Lowlands, Senqu River Valley, Highlands and the Foothills where the urban areas are only a small portion of the lowlands (LDHS, 2009). This map is intended to portray that indeed Lesotho is a small country, mostly rural where subsistence farming is the main source of food supply.

Figure 1. The Map of Lesotho with all districts and ecological zones.



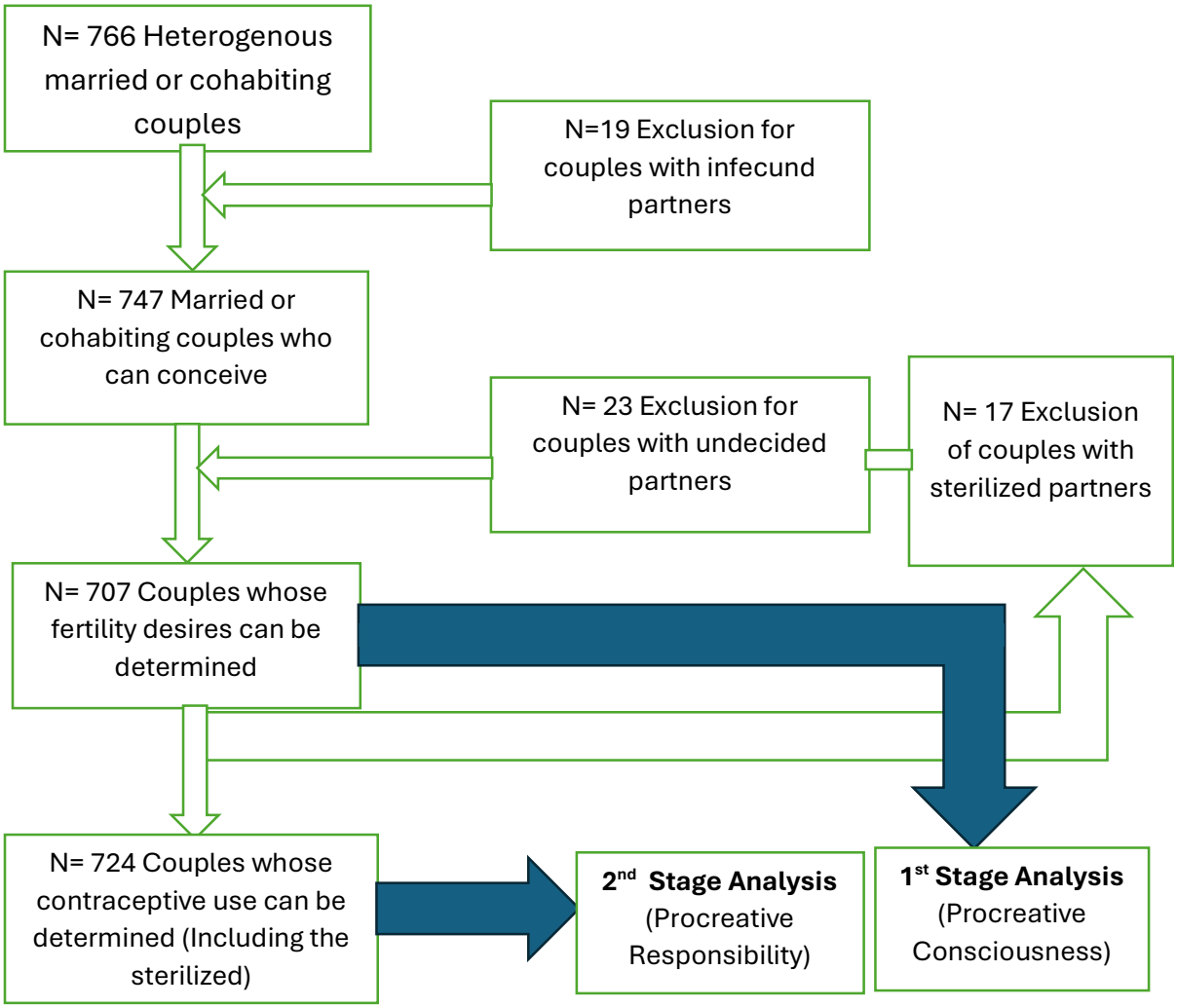
Source: LDHS (2009).

3.4 Participants and Sample Size

Our study adheres to the DHS definition of couples as outlined by Bauer & Kneip (2013), which includes only heterosexual men and women who are legally married or cohabiting in a consensual union. Notably, the Lesotho Demographic and Health Survey (LDHS) 2023-24

couples recode excludes individuals in polygamous marriages or relationships. As such, each male participant is matched with one female partner, and vice versa. Couples not residing in the same household or those where one partner was not present during the survey will be excluded from the analysis. Including such couples would give us biased results, as only one-sided outcomes would be presented, thus leaving the gap in information regarding the other partner's desires. Our study initially included a diverse sample of 766 married or cohabiting Basotho couples. We focused on respondents who could provide clear insights into their reproductive aspirations, excluding 23 individuals who were uncertain about their desires and 19 who identified as infecund. This careful selection resulted in a robust sample of 724 couples, ready for analysis. Our two-stage sampling procedure is depicted in **Figure 2** below.

Figure 2. Flow chart portraying the sampling procedure for the study participants.



Source: Author's work

3.5 Study Design

We will employ both descriptive statistics analysis and the Actor-Partner-Interdependence Model of analysis to understand the impact of cultural and socioeconomic variables as well as the impact of integrated decision-making among partners.

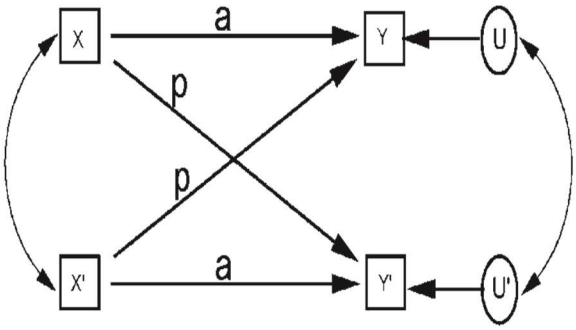
This study intends to find alignment and differences in fertility desires and behaviours among Basotho couples, thus making couples our unit of analysis. Bauer & Kneip (2013) state that any analysis that aims to assess behaviour and decision-making between two individuals in a relationship where both partners' characteristics influence each other needs to use models that incorporate that dyadic effect. He goes further to state that partners could either agree in decision-making or disagree and, in a case, where they disagree, bargaining occurs. In this bargaining, the more powerful partner is the one who dominates the decision-making. In the case of fertility desires and behaviour either the man or woman could be more influential in deciding on the family size through the use of contraceptives. Men have been found by most studies to have more bargaining power in decision-making regarding the number of children to have due to their advantageous access to ownership of resources (Bauer & Kneip, 2013).

Due to the nature of interdependence in decision-making within our analysis unit, the Actor Partner Interdependence Model (APIM) will be utilized as the basis for our statistical analysis, where the actor or partner could either be a female or male partner. Rayens & Svavarsdottir (2003) assert that the APIM is greatly appropriate in a study of family dynamics or close relationships where individual decision-making is influenced by either their partner or family member. Physically and biologically, childbearing involves two individuals who are romantically involved in either a formal (marriage) or informal(cohabiting) relationship. However, one partner may have more power over the other in deciding and influencing the other to have more or fewer children in that relationship as well as the spacing between their children. Cook & Snyder (2005) add further by stating that interdependence is present in a relationship where one person's emotion, cognition, or behaviour affects the emotion, cognition, or behaviour of their partner and APIM is designed to measure and cater to such interdependence in analysis, which is something that the normal regression models fail to do.

Cook & Snyder (2005) further elaborate on how APIM is more appropriate for a study like this in comparison to normal regression analysis, by stating that in normal regression analysis, the scores of two linked individuals would be treated as if they were completely independent observations when in fact the correlation would indicate that they are not independent observations. This then leads to the mismeasurement of effects, thus making it necessary to treat the dyad rather than individuals as the unit of analysis. This then justifies our unit of analysis as couples rather than individuals and choice of model of analysis.

Figure 3 below illustrates the integration of decision-making and interdependence within partners in a relationship or marriage based on APIM.

Figure 3. The Actor Partner Interdependence Model.



Source: Reproduced from Cook & Kenny (2005)

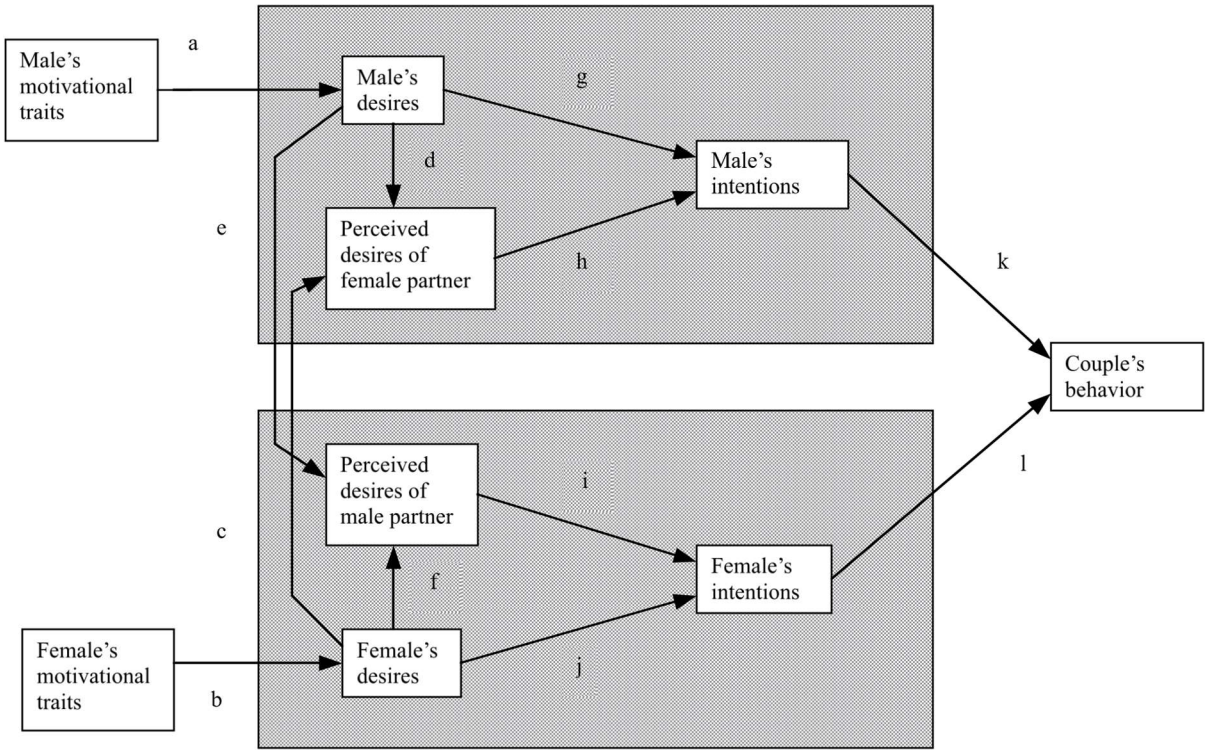
Figure 3 illustrates the analysis of desires and behaviours among partners in a couple using APIM. The diagram shows the model with four variables. The two outcome variables are labelled Y and Y'. The X and X' variables are the measures of Person A (either man or woman) and Person B (either man or woman), respectively, expected to predict Y and Y'. These include all the explanatory variables expected to determine each partner's fertility desires, perspectives, and behaviours such as education, age, geographic location, etc. Single-headed arrows indicate causal or predictive paths, labelled by the letters a and p, and could indicate the actor's characteristics (a) or those of their partners (p) that could influence their fertility desires and behaviours in the case of our study. Paths labelled as "a" indicate actor effects and paths labelled as "p" indicate partner effects.

Double-headed arrows indicate correlated variables that could jointly affect both partners' fertility desires, perspectives, and behaviour such as culture and the community norms in which they both exist or live. U represents the residual or unexplained portion of person A's (Female/Male) fertility desires that are not captured by variables contained in X, this could include the environment she/he was raised in as well as his/her aspirations, etc., and U' represents residual or unexplained portion of person B's (Male/Female) fertility desires and behaviours that are not captured by variables contained in X'.

While many approaches capture the effect of the dyad in decision-making, the most appropriate in our study is the framework portrayed in the Traits-Desire-Intentions-Behaviour (TDIB). Brehm & Schneider (2019) state that the dyad of partners, which is at the centre of fertility behaviour, is modelled explicitly only in the TDIB framework, and regarded only very marginally in other APIM approaches.

This conceptual framework is diagrammatically depicted in **Figure 4** below

Figure 4. Traits-Desire-Intentions-Behaviour Model.



Source: Reproduced from Miller et al. (2004), Traits-Desire-Intentions-Behaviour sequence for each partner's perceived fertility desires, thus leading to the conjoint couple's fertility behaviour.

In this context, female/male motivational traits represent the background characteristics that could influence their fertility desires as well as their individual or combined use of contraceptives in the relationship. These background characteristics are a set of all variables that fall under the socioeconomic and demographic factors. Arrows labelled "a" and "b" represent the path of influence from these characteristics to each partner's perceived desires. The arrows represented by the letters **d** and **f** illustrate actor-partner effects- how one partner in a couple considers their partner's perceived fertility desires while considering their own. The arrows **g** through **j** show each partner's final intentions as influenced by their characteristics and the perceived desires of their own and those of their partner in the relationship. Arrows **l** and **k** represent the final actions/behaviours of each partner. The behaviour is whether partners make use of contraceptives (procreative responsibility) based on their fertility desire (actor effect) or those of their partners (partner effect)

According to Cook & Kenny (2005), the partner effect for each partner must be statistically significant when running the APIM model to support the hypothesis that there is a bidirectional influence in decision-making and behaviour between partners in a couple and this nonindependence is measured using the Pearson product-moment correlation.

3.5.1 Statistical Technique in APIM

While the APIM encompasses various statistical techniques, this study will employ the logit Generalized Structural Equation Modelling technique (GSEM) to analyse Basotho couples' contraceptive behaviours. Unlike other APIM techniques, GSEM has outstanding features that are more appropriate and suitable for our study. These include its capability to cater for both categorical, binary, and continuous outcome variables. It is also able to estimate more than one equation simultaneously and to specify the relations between parameters in different equations. This feature directly translates the model illustrated in **Figure 3** into a single model that can be estimated and tested simultaneously in Stata or any statistical program (Cook & Kenny, 2005). This model is estimated from the covariance matrix of all explanatory and explained variables within our dyads (Unit of analysis, which is Basotho couples within this study).

The command "gsem" is used in Stata to estimate the model depicted below to estimate both the direct and indirect paths in both partners' contraceptive use. In particular, we estimate as follows:

gsem (woman contraceptive use <- B_1 female fertility + B_2 male fertility desire + $B_i X^I$, logit)

(man contraceptive use <- B_3 male fertility desire + B_4 female fertility desire + $B_i X^I$, logit)

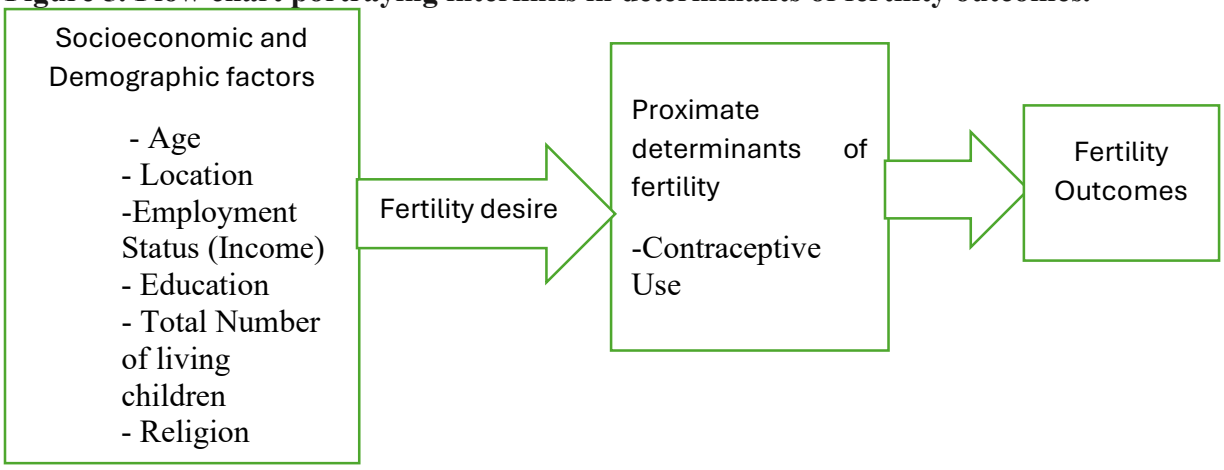
Where BX^I is a covariance matrix of all the background variables (socioeconomic and demographic factors of both the male partner and the female partner)

3.6 Variables Justification

Fertility desires, perspectives, and behaviours are influenced by various factors as proven by numerous studies. These factors may be socioeconomic and demographic factors such as education, person's age, income, culture, and contraceptive access. According to Bongaarts & Potter (1983), these socioeconomic and demographic determinants of fertility desires and behaviours influence fertility through proximate variables. Proximate variables are described as the biological and behavioural factors through which the socioeconomic and environmental variables impact fertility (Bongaarts & Potter, 1983). These may include but are not limited to contraceptive use and marital status.

For this study, proximate variables are going to be used as proxies for fertility outcomes among couples. Desire to have more children and the use of contraceptives directly influence fertility and are themselves influenced by various socioeconomic and demographic factors, thus making them suitable dependent variables for couples' fertility desires and behaviours. These interlinks are demonstrated in **Figure 5** below

Figure 5. Flow chart portraying interlinks in determinants of fertility outcomes.



Source: Reproduced from Bongaart et al. (1984), Variables modified by the author for the context of the study.

Proximate Determinants Variables

3.6.1 Contraceptive Use (Outcome Variable)

This variable is extracted from both male and female questionnaires where a woman/man is asked whether she/he or her/his partner is using any form of contraception to delay or prevent pregnancy. The responses were categorized into eight codes where 0 is for those who claimed to not be using any contraceptive method and 1-7 lists all the methods of contraceptives that respondents claim to be using, from traditional to modern methods. For the regression analysis, two dummy variables were created with 0 for no contraceptive or usage of unsafe methods and 1 for usage of safe or modern methods. These dummy variables were named "male contraceptive use" for male partners and "female contraceptive use" for female partners. Traditional methods like withdrawal and periodic abstinence were considered unsafe and categorized under no contraceptive use for both males and females. The only safe and modern contraception for males (other than being sterilized) was considered a male condom, otherwise, no contraceptive use.

For the descriptive analysis, since the question was more on the couples' contraceptive use, another variable called "couple contraceptive use" was created with three categories: no contraceptive use, traditional/unsafe methods, and modern/safe methods. This variable, unlike the first two dummy variables, did not distinguish the use of contraceptives per partner in a couple but captured the conjoint use within the couple. Two similar variables, one for male contraceptive use and the other for female contraceptive use, were also created with two categories for descriptive analysis purposes, first category was non-use of use of unsafe methods of contraception while the second was for the use of modern contraception by a partner. The sterilized were also included but as a distinguished category on its own.

3.6.2 Fertility Desires (Intermediate Variable)

This variable is extracted from both the male and female questionnaires. The question asks each partner whether they want to have more children in the future or not. The response has options on the timing for those who claimed to want more children. The first option is within 2 years, after 2 years, and want but not sure of the timing. Those who did not desire any more pregnancies are placed under the "want no more" category. There is also an option for undecided, infecund, and sterilized which were all excluded when considering individual partners/couple fertility desires. For this study, new variables were created for each partner's fertility desires and the conjoint couple's fertility desires. These new variables are named "female fertility desire" for a female partner in a couple and "male fertility desire" for a male partner.

Within these variables, every partner (male/female) who claimed to want another child/children no matter the time frame was treated the same and placed under one variable. The binary variable was then created, 0 for those who want more children", and 1 for those who do not want more children, with 0 being the base category in our regression analysis.

Socioeconomic and demographic variables

3.6.3 Education (Explanatory Variable)

Various studies have found a significant relationship between education and family size, particularly the desire to have more children and the use of contraceptives. Lampic et al. (2006) noted that education leads to delays in marriage, thus inducing people to delay childbearing with contraceptives.

The variable is extracted from the question that appears in both male and female questionnaires, where an individual is asked about their highest level of educational attainment. Responses are categorized into four levels of education: 1.no education, 2. primary education, 3. secondary education, and 4. higher education. The no-education category serves as a reference group in our regression analysis.

3.6.4 Age (Explanatory Variable)

According to Bongaarts et al. (1984), age is one significant determinant of fertility desires and individual behaviours toward those desires. The higher the age, the less the desire to have another child/children, while the lower the age the higher the desire to have another child/children for every individual. From the Lesotho Demographic and Health Survey data, this variable is extracted from both male and female questionnaires, where individual partners are asked about their age at the time of the survey. It is treated as a continuous variable in the standardized couples recode.

3.6.5 Location/ Residence (Explanatory Variable)

Campbell et al. (2019) state that contraceptive use and family desires may be influenced by place of residence, where people in urban areas may prefer fewer children due to the lifestyle and means of living that are normally expensive compared to rural areas, where people mainly depend on farming. From both male and female questionnaires, this variable is categorized into urban and rural and is extracted from the question where each partner is asked about the type of place of residence they live in. Location is the same for both partners in a relationship. The urban couples serve as the reference group in the regression analysis.

3.6.6 Number of children living (Explanatory Variable)

For any couple, actual fertility has an impact on future fertility desires and the use of contraceptives for both partners in a couple. This variable is extracted from both the male and the female questionnaires. The question asks both the male and female about the total number of living children living with them or elsewhere, that they have. It is treated as a continuous variable in the standardized LDHS couples recode.

3.6.7 Religion (Explanatory Variable)

Religion serves as a significant cultural factor that can impact fertility by shaping views on contraception and determining desired family size. For instance, some religious teachings consider the use of contraception a violation of divine will, and preventing childbirth goes against the plan of God. According to a study by Preston-Whyte (1988), among Zulu Christians, there is a belief that children are a gift from God, and the use of contraception does not inevitably stop one from receiving that gift. Their use was considered a sin in the eyes of God. These religious beliefs are deeply embedded in African culture through religious influences.

Despite the availability of knowledge about contraceptives, their usage is not automatically ensured. Therefore, an in-depth assessment of the influence of religion on childbearing and fertility among the Basotho people should involve an examination of contraceptive use across all religious groups in Lesotho. The variable is recorded as a categorical variable in the standardized couples recode with options: Roman Catholic church, Lesotho Evangelical church, Methodist church, Anglican church, Seventh-day Adventist, Pentecostal, Other Christians, Islam, No Religion, and others. The Roman Catholic church serves as our reference group in the regression analysis.

3.7 Limitations of this Study

The design of the male and female questionnaires made it impossible to ascertain the fertility desires of couples in which one or both partners were sterilized. The LDHS 2024 report assumed that such couples no longer wished to have more children, but they were excluded from answering questions about their desire for more children in the short or long term. Even

though Akintade et al. (2011) refer to it as permanent and irreversible, this assumption was found to be biased, as people's preferences can change and an unsterilised partner might have his/her desires. Additional interviews with these couples would have provided more clarity.

CHAPTER 4. RESULTS

4.1 Descriptive Analysis

4.1.1 Participants Characteristics

TABLE 1. SOCIO-ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS OF BASOTHO COUPLES.

Characteristics	N (%)	N (%)		N (%)	N (%)
	Women	**Men**		**Women**	**Men**
Highest Education Level			**Religion**		
No Education	9 (1.24)	98 (13.54)	Roman Catholic Church	243 (33.56)	272 (37.57)
Primary	255 (35.22)	314 (44.37)	Lesotho Evangelical	87 (12.02)	106 (14.64)
Secondary	376 (51.93)	221 (30.52)	Methodist Church	15 (2.07)	8 (1.1)
Higher	84 (11.60)	91 (12.57)	Anglican Church	35 (4.83)	49 (6.77)
Employment Status			Seventh-day Adventist	10 (1.38)	7 (0.97)
Employed	275 (37.98)	500 (69.06)			
Not Employed	449 (62.02)	224 (30.94)	Pentecostal	156 (21.55)	116 (16.02)
Age and Living Children					
Mean age	32.35	37.75	Other Christian	162	93
Standard Deviation	8.3511	8.7408		(22.38)	(12.85)
Minimum age	16	18			
Maximum age	49	59	Islam	1	2
Mean total living children	2.14	2.25		(0.14)	(0.28)
Standard deviation	1.55	1.82			
Minimum	0	0	No Religion	13	55
Maximum	8	13		(1.8)	(7.6)
Place of Residence					
Urban	256 (35.36)	256 (35.36)	Other Religious Groups	2 (0.28)	16 (2.21)
Rural	468 (64.64)	468 (64.64)			
Marital Status					
Married	707 (97.65)	699 (96.55)			
Cohabiting	17 (2.35)	25 (3.45)	Observations	766	766

Source: *Author's work using LDHS 2023-24 in Stata*

Table 1 summarises the socioeconomic and demographic characteristics of men and women in marriages or committed relationships with each other in Lesotho. The table reveals that 1.24% of women and 13.54% of men in our selected couples did not have formal education. This indicates that more men than women lack formal education, which is not surprising given that most of Lesotho is rural. Men are often raised to work in South African mines, become shepherds, or attend initiation school and marry. Additionally, 35.22% of women and over half of the men (44.37%) in partnerships had only completed elementary school. Men with only primary education were 3.25% more than women with the same level of education in Basotho couples who are either married or cohabiting.

Furthermore, 51.93% of women had completed secondary school, 21.41 percentage points higher than men. However, it seems that whilst most of the women complete secondary school, a smaller percentage of them (11.60%) compared to men (12.57%) proceed to tertiary education. In terms of Employment, 30.94% of men reported being unemployed or having only worked in the previous year, compared to 62.02% of women. Thus, women are likely dependent on their male partners for daily existence, giving men economic power over women. Interestingly, although women in our sample are generally more educated than their male partners, they are less likely to be employed. This reflects gender role expectations in Lesotho, where women, despite having the education to enter the workforce, are expected to be homemakers, while men are expected to be breadwinners.

A major share of couples in our study (64.64%) reside in rural areas, while 35.36% live in cities. The average age of men in our sampled couples was 38, while the average age of women was 32. The youngest man was 18, and the oldest was 59. The youngest woman was 16, and the oldest was 49. Additionally, 97.65% of women and 96.55% of men were married. The mean number of living children that women partners had, either with their current partners or from past relationships, was 2.14 with a standard deviation of 1.55. Men claimed to have an average of 2.25 children with a standard deviation of 1.82. Both male and female partners had a minimum of zero living children, with a maximum of eight for women and thirteen for men.

The majority of both men and women were Roman Catholic (33.56% of women and 37.57% of men). Islam was the religious group with the lowest number of believers, with 0.14% of women and 0.28% of men. This is likely because Islam is not a dominant religion in Lesotho. Pentecostal believers made up the second-largest group among women (16.02%), while other Christians were the largest group among men (22.38%).

1st STAGE ANALYSIS

4.1.2 Procreative Consciousness

To examine procreative consciousness, we concentrated on whether each partner wished to have more children in the future. Women who had undergone sterilization and men with sterilized partners were not asked about their fertility desires. Whilst one may be tempted to classify sterilized partners' fertility desires as not wanting more children in the near or distant future, several scenarios could contradict this assumption. For example, one partner may have undergone the procedure before getting married or entering a committed relationship with their current partner; another may have been pressured into it against their will while still wanting more children; and yet another may have had it done due to health issues while still desiring more children.

Consequently, couples with either partner sterilized were excluded from this aspect of our analysis but were included as a distinct category under procreative responsibility, our second analysis.

Ultimately, our focused examination included 707 couples, excluding 17 pairs where one or both partners were sterilized. This refined data set allows us to explore the true landscape of fertility desires among Basotho couples, shedding light on the aspirations that shape family planning in committed relationships. Fertility desires within couples are summed up in **Table 2** below.

TABLE 2. SUMMARY OF COUPLES' FERTILITY DESIRES.

	Freq.	Percent	Cum.
Both want more children	256	36.21	36.21
Both do not want more children	287	40.59	76.80
Woman want more, man does not want more	38	5.37	82.18
Man want more, woman does not want more	126	17.82	100.00
Total	**707**	**100.00**	

Source: *Author's work using LDHS 2023-24 in Stata*

As shown in **Table 2**, a larger percentage of men and women in marriage or cohabiting relationships in Lesotho do not want to have more children. Couples where men want more children while women do not are more common than those where women want more children while men do not. In our study, 36.21% of couples had both partners wanting more children, 40.59% had both partners desiring no more children, 5.37% had a woman wanting more children while a man did not, and 17.82% had a man wanting more while the woman did not.

Table 3 below gives the summary statistics for age and number of living children for each partner for each category indicated above of couples' fertility desires.

TABLE 3. SUMMARY STATISTICS OF PARTNERS' AGE AND NUMBER OF LIVING CHILDREN ACROSS COUPLES FERTILITY DESIRES.

Couple Fertility Desires	Mean	Median	SD	Min	Max
Both do not want more children.					
Female age	37.57	38	7.10	18	49
Male age	42.90	43	7.71	20	59
Living children(female)	3.17	3	1.55	0	8
Living children(male)	3.34	3	1.92	0	13
Both want more children					
Female age	26.99	26	6.34	16	49
Male age	32.27	32	6.87	18	58
Living children(female)	0.97	1	0.77	0	3
Living children(male)	1.02	1	0.91	0	5
Man want more, woman does not want more					
Female age	30.56	30	7.09	16	49
Male age	36.11	36	7.46	20	57
Living children(female)	2.09	2	0.98	0	5
Living children(male)	2.16	2	1.48	0	11
Woman want more, man does not want more					
Female age	31.53	32	8.22	18	46
Male age	38.08	39	7.57	24	51
Living children(female)	2.03	2	1.60	0	8
Living children(male)	2.21	2	1.45	0	5

Source: *Author's work using LDHS 2023-24 in Stata*

Table 3 reveals that age and number of living children are very important factors when it comes to couples agreeing to either have more children or not have more children. Couples who agree about not having more children are those with both older men and women than other couples (The median age of women and men in such couples is 38 and 43, respectively). On average, each partner also has more living children than men and women in other couples, with a median number of children of 3 for each partner. On the other hand, couples who agree that they want more children are those where both partners are younger than men and women in other couples (The median age for women is 26 and for men is 32). Each partner also has the least amount of living children compared to men and women in other couples.

Table 4 below explores the distribution of partners' educational attainments and their desire for children.

TABLE 4. DISTRIBUTION OF COUPLES FERTILITY DESIRES ACROSS PARTNERS' EDUCATION LEVELS.

	highest educational level				
Couple fertility desire	no education	Primary	secondary	Higher	**Total**
Female Education					
Both want more children	3	63	155	35	**256**
	(1.17)	(24.61)	(60.55)	(13.67)	**(100.00)**
Both do not want more children	3	142	113	29	**287**
	(1.05)	(49.48)	(39.37)	(10.10)	**(100.00)**
Woman want more, man does not	0	11	20	7	**38**
	(0.00)	(28.95)	(52.63)	(18.42)	**(100.00)**
Man want more, woman does not	3	35	77	11	**126**
	(2.38)	(27.78)	(61.11)	(8.73)	**(100.00)**
Man Education					
Both want more children	26	108	84	38	**256**
	(10.16)	(42.19)	(32.81)	(14.84)	**(100.00)**
Both do not want more children	47	132	77	31	**287**
	(16.38)	(45.99)	(26.83)	(10.80)	**(100.00)**
Woman want more, man doesn't	3	22	9	4	**38**
	(7.89)	(57.89)	(23.68)	(10.53)	**(100.00)**
Man want more, woman doesn't	20	50	44	12	**126**
	(15.87)	(39.68)	(34.92)	(9.52)	**(100.00)**

Source: *Author's work using LDHS 2023-24 in Stata*

The above table shows that couples where both partners want more children are more likely than most other groups to have a partner with a higher education. Of such couples, 13.67% have a woman with a higher education degree, and 14.84% have a man with a higher education degree. This probably has something to do with the fact that having the ability to support one's family (obviously an ability correlated with having a higher degree) is an important factor in determining the desire to have children. However, couples most likely to have a partner with higher education are those where the woman wants more but the man does not. In this case, it is the woman with the higher education (18.42% of couples fall into this category). This may be because the man may feel he will have greater responsibility in caring for the children, as the woman is likely to be a professional.

2nd STAGE OF ANALYSIS

4.1.3 Procreative Responsibility

Our couple's contraceptive use variable was designed so that if one partner uses unsafe/traditional methods while the other uses modern methods, the couple is considered to

be using safe/modern contraceptives. While sterilized couples were excluded from the procreative consciousness analysis, this section includes them as a distinct category, as sterilization is a permanent form of contraception. Thus, except for the part of this analysis (**Table 6**) that looks at the relationship between fertility desires and contraceptive use, we include sterilized couples. It is important to include sterilized couples where possible because sterilization is a form of contraception, and including them in this analysis will help shed light on how Basotho men and women in relationships perceive this permanent form of contraception.

TABLE 5. DISTRIBUTION OF CONTRACEPTIVE USAGE AMONG COUPLES AND PARTNERS SEPARATELY.

	Freq.	Percent	Cum.
Couples Contraceptive Use			
No contraceptive use	131	18.09	18.09
Traditional methods	15	2.07	20.16
Modern methods	561	77.49	97.65
One or both partners sterilized	17	2.35	100.00
Partner's Contraceptive use			
Man Contraceptive use			
None/unsafe methods	484	68.46	68.46
Modern/safe Methods	223	31.54	100.00
Woman Contraceptive use			
None/unsafe methods	265	37.48	37.48
Modern/safe Methods	442	62.52	100.00
Total Observations	**724**	**100.00**	

Source: *Author's work using LDHS 2023-24 in Stata*

From **Table 5**, 18.09% of couples do not use contraceptives, with 2.07% relying on traditional methods such as withdrawal and periodic abstinence, which are considered risky and unsafe. The majority (77.49%) of Basotho couples in our study use modern contraceptive methods, with 2.35% having one or both partners sterilized.

Results from the table further show that for all couples, 68. 46 % of men were either not using contraceptives or safe methods, while 31.54 % were using safe methods and, in our case, a male condom was regarded as the only modern/safe method for males. On the other hand, only 37.48 % of female partners were using no contraceptives or unsafe methods of contraception while the remaining majority (62.52 %) relied on modern/safe methods of contraception. Thus, it is women who are the ones mostly using safe contraception in Basotho couples.

To determine the consistency and alignment between the desire for more children and

contraceptive use, as shown in Table 5, we focused on 707 couples where neither partner was sterilized because, as mentioned previously, the design of the Lesotho male and female DHS questionnaire did not capture the fertility desires of sterilized couples.

TABLE 6. COUPLES CONTRACEPTIVE USE ACROSS THEIR FERTILITY DESIRES.

Couples fertility desire	Couples contraceptive use		
	No Contraceptive Use	Traditional Methods	Modern/safe Methods
Both want more children	82	9	165
	(62.60)	(60.00)	(29.41)
Both do not want more children	42	1	244
	(32.06)	(6.67)	(43.49)
Woman want more, man does not want more	3	2	33
	(2.29)	(13.33)	(5.88)
Man want more, woman does not want more	4	3	119
	(3.05)	(20.00)	(21.21)
Total	**131**	**15**	**561**
	100.00	**100.00**	**100**

Source: *Author's work using LDHS 2023-24 in Stata*

We see from **Table 6** that very few couples (only 15 out of 707) use traditional (non-safe) methods of contraception. It is encouraging to note that couples who desire contraception have knowledge and access to safer methods.

Not surprisingly, 62.60% of couples not using contraceptives were those where both partners wanted more children. However, it is also interesting to note that 32% of couples who are not using contraception are couples where both partners agree that they do not want children. That is 32% of those not using contraception have a misalignment of desires and contraceptive behaviour. We also note that of those using modern contraceptive methods, 43.49 % are couples where both partners agree they do not want more children. This group shows a consistency of Desires with contraceptive behaviour.

The 29.41% using safe contraceptive methods where both partners want more children probably account for couples who want more children but not immediately, hence the need for contraception. When there is disagreement about desires regarding having future children, 21.21% of those using safe contraception are couples where the man wants more children, but the woman does not. This may reflect the fact that female contraceptive methods can be used without the knowledge of the male partner.

It's important to note that our results in this part of the analysis might be slightly biased due to the inability to determine the fertility desires of couples where one or both partners are sterilized, owing to the design of the male and female questionnaires used. If one was able to

elicit the desires of such couples, we might have found a greater level of consistency between desires and permanent contraception. However, since sterilized couples account for such a small percentage of the sample, we do not believe the bias would be that significant.

Furthermore, contraceptive use by couples in a relationship or marriage may be influenced by factors such as age and the total number of children each partner or both have together. The distribution of couples' contraceptive use by age and the total number of live children for each partner or as a pair is displayed in **Table 7** below.

TABLE 7. SUMMARY STATISTICS OF COUPLES' CONTRACEPTIVE USE ACROSS PARTNERS' AGE AND LIVING CHILDREN.

	Mean	Median	SD	Min	Max
No Contraceptives					
Female age	32.07	31	9.11	16	49
Male age	37.72	37	9.67	18	59
Total Living children (female)	1.46	1	1.81	0	8
Total Living children(male)	1.60	1	2.04	0	9
Traditional Methods					
Female age	29.4	28	6.38	20	47
Male age	32.87	31	4.32	27	40
Total living children(female)	1.6	1	1.40	0	5
Total living children(male)	1.27	1	1.10	0	4
Modern Methods					
Female age	32.26	32	8.19	16	49
Male age	37.68	37	8.55	19	59
Total Living children(female)	2.29	2	1.45	0	8
Total Living children(male)	2.40	2	1.75	0	13
Sterilized					
Female age	40.12	40	4.79	28	48
Male age	44.94	45	6.20	32	55
Total Living children(female)	2.94	3	1.03	1	5
Total Living children(male)	3.29	3	1.05	1	5

Source: *Author's work using LDHS 2023-24 in Stata*

The most important observation from **Table 7** is that the sterilized population is not random. The mean female age in such couples is 40.12, and the mean male age is 44.94. This is much higher than for the rest of the couples. In addition, the mean number of children in sterilized couples is 2.94 and 3.29 for the female and male partners, respectively. Again, this is higher than for other couples. Interestingly, couples using traditional (non-safe) contraception, are younger than other couples. Either they are less informed about safety measures, or they are

less invested in preventing pregnancies.

Additionally, education has been shown to influence couples' decision-making, with some studies indicating that education delays childbearing for women and leads to increased contraceptive use. **Table 8** below illustrates the relationship between the educational qualifications of partners in Basotho couples and their use of contraceptives.

Table 8 shows that Basotho couples with women who have no education are much more likely (44.44%) than any other educational attainment group to not be using contraception. Whilst couples with lower educated men (no education or primary school only) are more likely to not use contraception than couples with higher educated men, the effect for women is much stronger. This shows that women having any education is more important for contraception use than men going to school, probably because women are generally the ones who use safe contraception as indicated earlier.
At the other end of the spectrum, when it comes to having a higher education, the effect on safe contraceptive use is higher for men than for women (72.53% of couples where the man has a higher education are using safe contraceptive methods as against 67.86% of couples where the woman has a higher education) This may have something to do with the fact that women with a tertiary education were shown earlier to be most likely to want more children. In addition, the most likely couples to have a partner sterilized are those with highly educated men (6.59%).

TABLE 8. DISTRIBUTION OF COUPLES' CONTRACEPTIVE USE ACROSS PARTNERS' EDUCATION LEVELS.

Highest Educational Level	COUPLES CONTRACEPTIVE				
	No Contraceptive Use	Traditional Methods	Modern/Safe Methods	Sterilised Method	**Total**
Men Education					
No Education	23 (23.47)	3 (3.06)	70 (71.43)	2 (2.04)	**98 (100)**
Primary	57 (18.15)	1 (0.32)	254 (80.89)	2 (0.64)	**314 (100)**
Secondary	36 (16.74)	6 (2.71)	171 (77.38)	7 (3.17)	**221 (100)**
Higher	14 (15.38)	5 (5.49)	66 (72.53)	6 (6.59)	**91 (100)**
Women Education					
No Education	4 (44.44)	0 (0.00)	5 (55.56)	0 (0.00)	**9 (100)**
Primary	49 (19.22)	3 (1.18)	199 (78.09)	4 (1.57)	**255 (100)**
Secondary	60 (15.96)	5 (1.33)	300 (79.79)	11 (2.93)	**376 (100)**
Higher	18 (21.43)	7 (8.33)	57 (67.86)	2 (2.38)	**84 (100)**

Source: *Author's work using LDHS 2023-24 in Stata*

TABLE 9. THE DISTRIBUTION OF COUPLES' CONTRACEPTIVE USE ACROSS THEIR LOCATIONS.

Type of place of residence	COUPLES CONTRACEPTIVE				
	No Contraceptive Use	Traditional Methods	Modern/safe Methods	Sterilized Method	**Total**
Urban	40 (15.63)	8 (3.13)	199 (77.73)	9 (3.52)	**256 (100.00)**
Rural	91 (19.44)	7 (1.50)	362 (77.35)	8 (1.71)	**468 (100.00)**

Source: *Author's work using LDHS 2023-24 in Stata*

Table 9 reveals that a slighter higher percentage of couples residing in rural areas (19.44%) are not using contraception compared to couples residing in urban areas (15.63%). This may indicate a lower degree of knowledge about or access to contraception in rural areas compared to urban areas.

Table 10 below explores the distribution of couples' contraceptive use across partners' employment status.

TABLE 10. DISTRIBUTION OF COUPLES' CONTRACEPTIVE USE ACROSS THEIR EMPLOYMENT STATUS

Man employment status	COUPLES CONTRACEPTIVE				
	No Contraceptive Use	Traditional Methods	Modern/ safe Methods	Sterilized Method	**Total**
Employed	91	10	386	13	**500**
	(18.20)	(2.00)	(77.20)	(2.60)	**(100)**
Not employed	40	5	175	4	**224**
	(17.86)	(2.23)	(78.13)	(1.79)	**(100)**
Women employment status					
Employed	43	8	212	12	**275**
	(15.64)	(2.91)	(77.09)	(4.36)	**(100)**
Not employed	88	7	349	5	**449**
	(19.60)	(1.56)	(77.73)	(1.11)	**(100)**

Source: *Author's work using LDHS 2023-24 in Stata*

Table 10 reveals that a woman's employment status affects whether a couple uses contraception or not. 19.60% of couples with non-working women are not using contraception, compared to 15.64% of couples with an employed woman. Such an effect on the male employment status is not seen. This raises the question of whether these women choose not to use contraceptives of their own volition or if they simply cannot afford it by themselves, and are influenced by their employed partners, who may hold more bargaining power as the main providers. Additionally, the data indicate that the highest percentage of couples with a sterilized partner is those with employed women (4.36%).

Religious beliefs and doctrines can significantly influence people's actions and behaviours, regardless of their personal preferences. Some religious beliefs prohibit the use of contraceptives altogether, while others restrict specific contraceptive methods.

According to **Table 11**, the number of Basotho couples in the sample belonging to Islam and Seventh-day Adventists is negligible, and thus we do not attempt to draw any conclusions about them. Looking at other groups, we see that couples where the woman partner identifies either with no religion or with the methodist or Anglican domination, as well as couples where men identify as Anglican, are the most likely to be using modern, safe methods of contraception. Couples that are least likely to not be using any contraception are those in which the woman partner identifies as belonging to the Methodist church.

TABLE 11. THE DISTRIBUTION OF COUPLES' CONTRACEPTIVE USE ACROSS THEIR RELIGIOUS GROUPS.

Religion	COUPLE CONTRACEPTIVE									
	Men Religion Vs Couple Contraceptive use					Women Religion Vs Couple Contraceptive Use				
	No Contraceptive Use	Traditional Methods	Modern/ safe Methods	Sterilised Method	**Total**	No Contraceptive Use	Traditional Methods	Modern/ safe Methods	Sterilized Methods	**Total**
Roman Catholic Church	50 (18.38)	4 (1.47)	212 (77.94)	6 (2.21)	**272 (100.00**	42 (17.28)	1 (0.42)	195 (80.25)	5 (2.06)	**243 (100.00)**
Lesotho evangelical	18 (16.98)	1 (0.94)	83 (78.30)	4 (3.77)	**106 (100.00**	19 (21.84)	4 (4.60)	60 (68.97)	4 (4.60)	**87 (100.00)**
Methodist Church	1 (12.50)	0 0.00	6 (75.00)	1 (12.50)	**8 (100.00**	1 (6.67)	0 0.00	13 (86.67)	1 6.67	**15 (100.00)**
Anglican Church	4 (8.16)	2 (4.08)	42 (85.71)	1 (2.04)	**49 (100.00**	5 (14.29)	1 (2.86)	29 (82.86)	0 0.00	**35 (100.00)**
Seventh-day Adventist	1 (14.29)	1 (14.29)	4 (57.14)	1 (14.29)	**7 (100.00**	1 (10.00)	1 (10.00)	7 (70.00)	1 (10.00)	**10 (100.00)**
Pentecostal	16 (13.79)	3 (2.59)	95 (81.90)	2 (1.72)	**116 (100.00**	28 (17.95)	4 (2.56)	120 (76.92)	4 (2.56)	**156 (100.00)**
Other Christian	22 (23.66)	2 (2.15)	68 (73.12)	1 (1.08)	**93 (100.00**	32 (19.75)	4 (2.47)	124 (76.54)	2 (1.23)	**162 (100.00)**
Islam	1 (50.00)	0 0.00	1 (50.00)	0 0.00	**1 (100.00**	0 0.00	0 0.00	1 (100.0)	0 0.00	**1 (100.00)**
No religion	14 (25.45)	0 0.00	40 (72.73)	1 (1.82)	**55 (100.00**	2 (15.38)	0 0.00	11 (84.62)	0 0.00	**13 (100.00)**
Other Religious groups	4 (25.00)	2 (12.50)	10 (62.50)	0 0.00	**16 (100.00**	1 (50.00)	0 0.00	1 (50.00)	0 0.00	**2 (100.00)**

Source: *Author's work using LDHS 2023-24 in Stata*

The type of relationship partners are involved in can significantly influence their contraceptive use. In Lesotho, for example, having children out of wedlock remains a taboo and carries a stigma, even for those in committed, cohabiting relationships. This societal pressure often compels couples to avoid having children before marriage, especially if neither partner has been previously married. However, for couples who are currently cohabiting but were once married to other partners, societal judgment on their childbearing decisions is less severe.

For couples, contraceptive use may be influenced by interpersonal desires or other socioeconomic factors. Despite the similar frequency of sexual activities between married and cohabiting couples, which exposes them to equal chances of pregnancy, societal pressures regarding childbearing differ for each type of relationship. These societal forces can impact their contraceptive use in various ways.

Table 12 below summarizes the contraceptive use among couples based on their marital status.

TABLE 12. THE DISTRIBUTION OF COUPLES' CONTRACEPTIVE USE ACROSS THEIR MARITAL STATUS.

Marital Status	COUPLE CONTRACEPTIVE				**Total**
	No Contraceptive Use	Traditional Methods	Modern/ safe Methods	Sterilized Method	
Married	128	14	541	16	**699**
	(18.31)	(2.00)	(77.40)	(2.29)	**(100.00)**
Cohabiting	3	1	20	1	**25**
	(12.00)	(4.00)	(80.00)	(4.00)	**(100.00)**

Source: *Author's work using LDHS 2023-24 in Stata*

From **Table 12**, it's evident that whilst the majority of the couples in the sample identify themselves as married, those who are cohabiting are less likely to not be using any form of contraception (12% in cohabiting couples as opposed to 18.31% in married couples).

4.2 Regression Analysis

Table 13 presents the findings of our generalized structural equation model, which analysed the interdependence between male and female decision-making regarding contraceptive use within relationships. Both male and female contraceptive use were considered as dependent variables, while the fertility desires of each partner served as the primary explanatory variable of interest. The log-likelihood values for the null and full models were computed using Stata, and the McFadden R^2 was manually calculated to evaluate the model's fit.

TABLE 13. DETERMINANTS OF A WOMAN AND MAN'S CONTRACEPTIVE USE IN A RELATIONSHIP.

Variables	dy/dx	std. err	P>z		dy/dx	std. err	P>z
Woman Contraceptive Use (Outcome Variable)				**Man Contraceptive Use (Outcome Variable)**			
Female Desire (Ref=want more)	0.214***	0.0413	0.000		0.101***	0.048	0.035
Male Desire (Ref=want more)	-0.030	0.046	0.517		0.068	0.049	0.164
Woman Education (Ref Group=No Education)							
Primary	0.243	0.172	0.159		0.283*	0.166	0.088
Secondary	0.295*	0.173	0.089		0.263	0.168	0.117
Higher	0.189	0.185	0.305		0.179	0.179	0.320
Man Education (Ref Group=No Education)							
Primary	0.070	0.056	0.217		0.126***	0.060	0.037
Secondary	0.066	0.066	0.316		0.122*	0.070	0.083
Higher	0.088	0.081	0.276		0.070	0.090	0.434
Woman Religion (Ref Group=Roman Catholic)							
Lesotho Evangelical Church	-0.134**	0.062	0.030		-0.040	0.068	0.558
Methodist Church	0.180**	0.074	0.016		0.049	0.127	0.700
Anglican Church	-0.080	0.091	0.380		-0.104	0.096	0.279
Seventh-day Adventist	-0.217	0.162	0.181		-0.041	0.172	0.813
Pentecostal	-0.142***	0.051	0.005		-0.055	0.056	0.325
Other Christian	-0.078*	0.047	0.094		-0.094*	0.053	0.079
Islam	0.257***	0.028	0.000		0.391***	0.034	0.000
None	0.072	0.112	0.518		0.273***	0.093	0.003
Other	-0.491**	0.244	0.044		-0.292	0.298	0.328
Man Religion (Ref Group=Roman Catholic)							
Lesotho Evangelical Church	0.084	0.054	0.123		0.120**	0.060	0.046
Methodist Church	-0.106	0.176	0.545		0.034	0.183	0.852
Anglican Church	0.151**	0.068	0.027		0.095	0.082	0.245
Seventh-day Adventist	-0.023	0.190	0.906		0.031	0.211	0.883
Pentecostal	0.095*	0.054	0.077		0.077	0.060	0.201
Other Christian	0.030	0.058	0.612		-0.016	0.064	0.801
Islam	-0.636***	0.031	0.000		-0.536**	0.033	0.000
None	0.017	0.070	0.806		-0.014	0.078	0.860
Other	-0.059	0.117	0.618		0.048	0.125	0.699
Woman Age	-0.016***	0.004	0.000		-0.002	0.004	0.600
Man Age	0.003	0.004	0.444		-0.037*	0.019	0.053
Total Living Children (Female)	0.075***	0.020	0.000		-0.000	0.022	0.999
Total Living Children (Male)	-0.005	0.015	0.727		0.026	0.017	0.119
Woman Employment Status	0.100***	0.039	0.009		0.010	0.042	0.810
Man Employment Status	-0.036	0.038	0.346		-0.026	0.041	0.525
Rural	-0.028	0.041	0.489		-0.594***	0.207	0.004
Observations (N)			707				707

Source: *Author's work using LDHS 2023-24 in Stata,* *** p<0.01, ** p<0.05, * p<0.1

Our Generalized Structural Equation Model (GSEM) highlights that women's fertility desires within Basotho couples strongly influence contraceptive use for both partners. Male fertility desires show no significant impact on predicting contraceptive use for either men or women

Table 13 reveals that Basotho women in relationships who do not desire more children are 21.4% more likely to use safe contraceptives than those who wish to have additional children, reflecting consistent alignment between fertility desires and behaviour. Contrarily, Basotho men with partners who do not wish to have more children are 10.1% more likely to use safe contraceptives than those with partners who desire additional children. This further shows that more women than men are likely to use safe contraceptives when an additional pregnancy is not needed anymore.

Education plays a role here too: women with secondary education are 29.5% more likely to use safe contraceptives than those without any education. Additionally, men whose partners have primary education are 28.3 % more likely to use safe contraceptives compared to those whose partners lack formal education. Men with primary and secondary education are 12.6% and 12.2% more likely, respectively, to use safe contraceptives than those without formal education. This trend aligns with the understanding that education enhances knowledge about reproductive health and contraception.

Religious beliefs significantly affect both men and women's contraceptive use. Compared to Roman Catholic women, those affiliated with the Lesotho Evangelical church are 13.4% less likely to use contraceptives, while Methodist women are 18% more likely to do so. Pentecostal women are 14.2% less likely, other Christians 7.8% less likely, and women with unspecified beliefs are 49.1% less likely to use contraceptives. Women whose partners belong to the Angelical Church of Lesotho (ACL), and Pentecostal churches are influenced by their partners when it comes to using or avoiding safe contraceptives. Compared to Roman Catholic partners, women with partners in the ACL are 15.1% more likely to use contraceptives and those with Pentecostal partners are 9.5% more likely.

Contrarily, men whose partners follow unspecified religious beliefs are 27.3% more likely to use safe contraceptives compared to those whose partners are Roman Catholic, as the Roman Catholic Church often opposes modern contraceptive methods. Similarly, men belonging to the Lesotho Evangelical Church (LEC) are 12% more likely to use safe contraceptives than Roman Catholics. Conversely, men with partners identifying as other Christians are 9.4% less likely to use contraceptives compared to their Roman Catholic counterparts. Moreover, every additional year in a man's age decreases the likelihood of using safe contraceptives by 3.7%.

However, it is likely that in many cases, the religion of the male and female in a couple, are the same, and thus there is likely to be very high levels of correlation between these two sets of variables. Thus, the regression results when it comes to religion are less reliable than the

descriptive analysis results. Moreover, as mentioned earlier, results based on the Islamic religion are inconclusive due to the limited number of observations in our data.

Additionally, as a woman ages, her likelihood of using safe contraception decreases by 1.6% per year, likely due to the reduction in menstrual cycles as she approaches perimenopause. However, this stage can still pose risks of pregnancy, making contraceptive use crucial. Conversely, an increase in the number of children a woman has raises her likelihood of using contraceptives by 7% for every child, while being employed boosts this likelihood by 10% compared to women who are not employed. While location does not affect woman's use of safe contraception, men living in rural areas are 59.4% less likely to use safe contraceptives than their urban counterparts.

CHAPTER 5. DISCUSSION OF RESULTS

5.1 Participants Characteristics

Basotho women in relationships tend to have higher educational attainment than their partners. However, despite this, most women are not employed and remain financially dependent on their partners. This aligns with findings from Tuoane et al. (2003) and Bauer & Kneip (2013), which highlight lower employment rates for women compared to men across African countries, including Lesotho. This economic disparity between Basotho men and women fosters an environment where abuse and coercion can influence decision-making within couples. Men, having greater access to resources, wield more bargaining power, as noted by Meyer et al. (2024), who argue that power imbalances reinforce societal norms that oppress women in decision-making dynamics. While statistics have shown that there are high rates of women's unemployment globally, we cannot wholly infer that this is the case in Lesotho; multiple reasons and scenarios could explain our observations, other than unemployment on its own. Indeed, one of them could be that the labour market in Lesotho remains skewed and imbalanced, leaving women unemployed despite high educational qualifications, while the other, most controversial but common, could be that most Basotho women choose to stay at home, be housewives, and are not economically active or participating in the labour market.

Lesotho, known for its mountainous terrain and fertile agricultural land, has the majority of its population residing in rural areas (LDHS, 2024). As our findings indicate, most Basotho couples also live in these rural settings. These regions are traditional strongholds where cultural norms and African ideologies, such as the rejection of premarital sex as immoral, are preserved (Makatjane, 2002). This explains why marriage is more common than cohabitation among Basotho couples (**Table 1**).

Additionally, a significant number of Basotho men and women in relationships belong to the Roman Catholic Church, which is highly dominant in Lesotho and a wealthy institution both locally and globally. Conversely, the Islamic religion has a limited presence in Lesotho, likely because the population is largely homogeneous, composed mainly of Basotho people with traditional religious beliefs and minimal representation of other races that might practice Islam.

Furthermore, findings show that Basotho men and women in marriages or committed relationships are generally in their thirties, with men in their late thirties and women in their early thirties. This trend suggests delayed marriage or committed relationships, possibly because Basotho women prioritize their education in their twenties. This supports Mturi & Moerane's (2003) assertion that education postpones marriage and childbirth, especially for women. On average, Basotho men have more living children than their current partners. This could be attributed to the societal stigma surrounding children born out of wedlock in Lesotho. While women bear the brunt of this stigma, men typically continue their lives unimpeded and may marry or form committed relationships with partners who have no children (Makatjane, 2002; Khaile, 2003).

5.2 Fertility Desires

Our findings indicate that the most common type of couples in Lesotho are those where both partners do not wish to have more children. Women in such couples are typically in their late thirties, while men are in their early forties (average age 42.90). According to **Tables 2** and **3**, these couples tend to be the oldest among all couples and have the highest number of living children. This supports the observation by Freitas & Testa (2017) that as people age, their desire for additional children decreases. For women, this decline is often associated with reaching menopause, whereas for men it may stem from nearing retirement and reduced capacity to support a family. Remarkably, most Basotho women aged over 35 in marriages or committed relationships do not wish to conceive further, having already achieved their desired family size, while men generally desire more children until their early forties.

Interestingly, within this group of couples, there are some who have no living children at all, despite this category having the highest average number of living children. In African culture, parenthood is deeply valued and tied to societal respect (Liamputtong, 2007), making it surprising that such couples choose to remain childless despite being capable of conceiving. Factors such as disabilities that limit daily activities may contribute to this choice, especially since Lesotho lacks a disability grant like neighbouring South Africa.

Furthermore, where there is disagreement over fertility desires, there is more of couples where a man wants more children while his partner does not than couples where a woman wants more children while her partner does not. This shows that Basotho men are more likely to want additional children compared to their partners. This aligns with previous findings (LDHS 2024, 2014; Bankole & Audam, 2011) that men generally prefer larger family sizes. Though men do not physically bear pregnancies, they are the primary providers during and after pregnancy, as Dudgeon & Inhorn (2003) suggest. Our results also show that most Basotho women in relationships are housewives (**Table 1**), and men, being the sole providers in rural households, appear comfortable supporting larger families. Rural living, which is common in Lesotho, reduces costs due to reliance on agriculture, where additional children are valued as labourers.

Moreover, our data reveal that more educated women (those with tertiary education) are most often part of couples where the woman wants more children and the man does not. However, women with a secondary education are most likely to be in couples where the man wants more children, but the woman does not (**Table 4**). This demonstrates that education may have a non-linear effect in that whilst the education of a woman delays childbearing for Basotho women to an extent, once women have completed a tertiary education, they may desire to become pregnant.

5.3 Contraceptive Use

The results reveal that most couples in Lesotho use safe contraceptive methods, with women being the primary users, while many men resort to either unsafe methods or no contraception

at all (**Table 5**). This could be attributed to most contraceptive methods being designed for women, as noted by Meyer et al. (2024). It may also indicate that Basotho men in relationships lack adequate knowledge about contraceptives and shift the responsibility entirely to their partners, as similarly observed by Preston-Whyte (1988) among Zulu men. Encouragingly, most couples who do not wish to have additional children actively use safe measures to prevent unintended pregnancies.

However, 32% of couples who claim that they do not want more children are not using contraception, highlighting a mismatch between desires and actions. Only 43.99% of couples align their desire to avoid further pregnancies with the use of safe contraceptive methods. This supports Bankole & Audam's (2011) observation that, despite efforts to improve contraceptive access in developing countries, unmet needs remain, emphasizing that access does not necessarily translate into usage. While unintended pregnancies may sometimes result from method failure, as noted by Hubacher et al. (2008), not using safe contraceptive methods, when necessary, poses significant risks.

According to Tuoane et al. (2003), the supply of contraceptives depends on macroeconomic factors, while their usage is influenced by microeconomic factors such as household dynamics. These findings suggest that Lesotho's contraceptive policies may overlook critical couple-level decision-making dynamics, leading to a disconnect between supply and demand. Despite reproductive health education being a government priority, these results indicate its current insufficiency.

Women, as the physical carriers of pregnancy and primary caregivers, face unique challenges. The data, along with the LDHS (2024), show that most women in Lesotho are without jobs and are likely dependent on their partners. While these could be a choice to some who are not active in the labour market and are fully committed to being homemakers, dependency could explain why some Basotho women who do not wish to conceive still do not use contraceptives. Firstly, affordability might be an issue, as **Table 13** shows that non-working women are less likely to use safe contraception compared to employed women. This could include challenges such as transportation to healthcare facilities, particularly in rural areas where most couples reside, as reported by Tuoane et al. (2004) and LDHS (2024). Secondly, lack of knowledge about reproduction or community influences may discourage women from using modern contraceptives, possibly due to fears of adverse side effects, as highlighted by Castle (2003). The notable observation is that being without a formal job for Basotho women in committed relationships, whether voluntarily or involuntarily, is associated with non-use of safe contraception or no contraception at all.

Given that many men prefer unsafe methods and place the responsibility on women, the risk of unintended pregnancies remains high. Even relying on condoms, which Grossman et al. (2010) note have a high failure rate, is not entirely safe. As a result, women may face unwanted

pregnancies and, in desperation, resort to unsafe abortion procedures to avoid disappointing their employed partners who may not want more children.

The findings further reveal that couples using unsafe contraceptive methods are predominantly the youngest among all groups. This is unsurprising, as they may not have reached their desired family size and still wish to conceive in the future, aligning with Bertrand et al. (1985), who observed that younger women often rely on traditional methods. Additionally, education has been positively associated with modern contraceptive use for both genders (Meyer et al., 2024). More educated couples were more likely to use safe contraceptives, with men's education showing a stronger influence than women's. As highlighted in **Tables 8 and 13**, men with secondary or higher education significantly impacted both their own and their partners' use of safe contraception, compared to those without formal education. This was also evident in couples where one or both partners were sterilized, as they were typically educated, lived in urban areas, employed, and had at least one living child, with an average of three children between them. These findings affirm Brehm & Schneider's (2019) claim that balanced economic power within households fosters mutual communication in decision-making.

The APIM GSEM regression results very strongly indicates that women's fertility desires are the main determinant of contraceptive use for both partners, while men's desires are insignificant. This aligns with Bankole & Audam's (2011) findings in sub-Saharan Africa that couples are less likely to use safe contraception when the woman desires more children but more likely to do so when she does not. This result is encouraging in that it suggests that Basotho women have agency and power in determining their fertility decisions. This may in part be due to the fact that even if a man wants more children, but the woman does not, she can independently decide to use contraceptives, even without her partner's knowledge. However, one would be hopeful that this is also because women have bargaining power in the context of the couple relationship. The fact that women's fertility desires are significant, also, in determining male contraceptive use in the relationship (albeit to a much lesser degree of magnitude than in determining female contraceptive use), is indicative of the fact that indeed women have bargaining power, at least in the domain of fertility, in the couple relationship.

A limitation of the study, as mentioned in the methodology section, is that the fertility desires of sterilized individuals and their partners are not interrogated. Perhaps this is due to the assumption that sterilized individuals do not want any more children. This, however, may not be the case as they may have been forced into sterilization by a current or previous partner. The problem is that since we do not have fertility desires of sterilized individuals, we cannot include them in the regression analysis of the effect of fertility desires on contraception use. Thus, our results in this respect may be slightly biased, with the absence of an effect of male fertility desires on contraception use, being slightly overstated. However, since very few couples in our sample have a sterilized partner, we do not anticipate that this bias is significant.

Religion also plays a role in contraceptive use among Basotho couples. Couples where the woman partner identifies either with no religion or with the Methodist or Anglican denomination, as well as couples where men identify as Anglican, are the most likely to be using modern, safe methods of contraception. The Roman Catholic Church stands out as a major influence opposing the use of safe contraceptive methods, consistent with Makatjane (2002), and thus it is not surprising that there are low levels of safe contraceptive use among Roman Catholic couples. These religious influences were found to be inter-effective, with the beliefs of one partner impacting the other, demonstrating how external environments and personal convictions shape mutual decisions.

Other important factors in female contraceptive use was the female being employed, having at least a secondary education, being older, and having already more living children. For male contraceptive use, other important factors were living in an urban area, male education, and the man being older.

CHAPTER 6. CONCLUSION AND RECOMMENDATIONS

This study aimed to explore the differences and similarities in fertility desires between Basotho men and women in relationships, as these are believed to influence contraceptive use within couples. The findings confirmed notable differences in fertility preferences between partners and variations in how they approach contraceptive use. Education emerged as a significant factor in men's involvement in contraceptive use, although women's fertility desires remain the primary determinant of contraceptive use within couples. While the Lesotho Demographic and Health Survey report aligns with this study in highlighting high modern contraceptive use in Lesotho, there remains a substantial unmet need for contraception. This gap contributes to unintended pregnancies, leading women to resort to unsafe abortion methods.

The study underscores critical fertility dynamics often overlooked in family planning policies in Lesotho. Solely focusing on women's reproductive education and access to contraception is insufficient to enhance their reproductive health or reduce fertility rates. Whilst we have the encouraging result of a woman's fertility desire being the main determinant of both female and male contraceptive use, the results also show that women who are not employed (Voluntarily and involuntarily) are far less likely to be using contraception than their working counterparts. We do not see such an effect of employment on male contraceptive use. This, among other reasons, may suggest the possibility that women who are not employed have far less bargaining power and lack autonomy regarding fertility decisions in relationships than their employed counterparts. However, it is also likely that Basotho women are not employed in order to look after the children that they have and continue to have. The fact is that many Basotho women are not employed either because they cannot find a job, or because they are staying home to look after children. Lesotho's patriarchal culture positions men as household heads, leaving women with limited decision-making power. However, employed women, who are less dependent on their partners, are likely to be less affected by these cultural norms. One might have a virtuous cycle where a woman stays home to look after her first child, and then further decision-making regarding contraception becomes limited. To address this, policies should prioritize women's employment, making it possible for a mother to work flexible hours or provide childcare facilities at the workplace.

Additionally, Basotho men in marriages and committed relationships often view pregnancy prevention as solely a woman's responsibility, placing the blame for unplanned pregnancies on women, particularly non-employed ones. More concerning is the result that men's fertility desires have very little effect on the use of contraception in the couple. Whilst it is encouraging that women's desires do affect contraceptive use significantly, having cases of couples where the male partner does not want more children, getting pregnant because of a lack of contraception, is concerning. This dynamic contributes to cases of unsafe abortions and abandoned infants, especially in urban areas where life is costly, and black-market abortion services are accessible. Thus, whilst women may be able to exert power in the couple in terms

of contraceptive use, they may not have much bargaining power in keeping a child that the male partner does not want.

It was observed that Basotho men tend to favour unsafe contraceptive methods, suggesting a lack of knowledge regarding reproduction and the variety of available options. Educated men, however, are more actively involved in the use of safe contraceptives within couples. This highlights the need to include men in reproductive education programs and discussions about contraceptive options as a couple, rather than focusing solely on women. It is important that both partners in a relationship understand the need for contraception, and that both partners' desires regarding wanting or not wanting more children are considered when deciding to use contraception.

In addition, countries such as South Africa, with high female unemployment rates, have implemented child social grant policies for low-income families. Lesotho could consider similar measures to protect children's rights, as abortion remains illegal, and there is no support for unplanned children. Such interventions will hopefully reduce the prevalence of high rates of unsafe abortions and abandoned infants in Lesotho.

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