SEWANEE: UNIVERSITY OF THE SOUTH
POLITICAL SCIENCE HONORS THESIS

REPRODUCTIVE HEALTH POLICIES IN SUB-SAHARAN AFRICA:
A Look at Five Factors and Their Impact on Contraception Access Using the Case Studies of Nigeria and Senegal

ABSTRACT: Over the last two decades, many countries in sub-Saharan Africa have implemented programs to improve the overall wellbeing of their citizens. While individual countries have observed significant strides in improving education and eradicating hunger and disease, access to reproductive health education and services have not been accorded equal priority. My research examines the impact of religious majorities, percent of women in government, donor aid programs, democracy, and female literacy rates on contraceptive prevalence in Africa. This research involved a large-N study of all countries in Sub-Saharan Africa to determine the correlation between the contraceptive prevalence percentage and the five factors. The major finding of a bi-variable and multi-variable analysis indicated that democracy and female literacy rates are large determinants of contraception availability, while religion, donors, and women in government do not have statistically significant effects. Findings were then applied to the case studies of Nigeria and Senegal to helped elucidate the ways that the five factors shape contraception prevalence. This research suggests that to improve reproductive health access, African countries must focus on improving democracy and female literacy rates.

By: Anna Alikhani
Readers: Dr. Amy Patterson and Canon Gideon B Byamugisha

TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION

BACKGROUND

Over the last two decades, many countries in sub-Sahara Africa have and still are implementing programs to improve the overall well being of their citizens. While individual countries have observed significant strides in improving education and eradicating hunger and disease, access to reproductive health services practices and education most often are a low priority for many countries (United Nations 2013). The focus of this paper will be reproductive health practices, which I will define more specifically later in the paper.

The concept and terminology of reproductive health have evolved over the past two decades with the purpose of educating and limiting the spread of sexually transmitted infections as well as unplanned, undesired and unsafe pregnancies. This development can be seen as countries began to discuss implementation of these practices based on a several factors. In recent years, the international community has begun to see that reproductive health practices are beneficial overall for individuals and their states. In 2000, the UN developed eight Millennium Development Goals (MDGs) to improve the status of people with the target year of 2015. Two of these goals, specifically improving maternal health (MDG 5) and combating Human Immunodeficiency Virus infection/Acquired Immunodeficiency Syndrome (HIV/AIDS), malaria and other diseases (MDG 6), encourage the practices of reproductive health through such efforts as public media campaigns, classes, condom distribution and low cost birth control. While MDG 5 and 6 stress reproductive health initiatives to improve lives, progress on other MDGs will benefit from the work being done in reproductive health. These include promoting gender equality and empowering women (MDG 3), reducing child mortality (MDG 4) and working on a

global partnership for development (MDG 8).

Research shows that women and men who have access to reproductive health practices will improve their livelihood by protecting themselves against sexually transmitted diseases and engaging in family planning. Specifically, unplanned children are often associated with lower socioeconomic outcomes at the household and the societal level (Longwe and Smits, 2013). Longwe and Smits reported that the use of contraceptives allows a mother to have better access to education and means to provide for the family (2013). In addition, often the quality of life increases for a mother and child when a woman chooses to become pregnant and prevent unplanned pregnancies.

The World Health Organization (WHO) encourages reproductive health practices such as family planning to delay or stop child bearing; to reduce the need for unsafe abortions and to protect against sexually transmitted infections. In Asia and Latin America, the use of contraceptives has increased, but in sub-Saharan Africa, use remains low with only a one percent increase from 23% to 24% between 2008 and 2012 (WHO 2013b). Furthermore, it is estimated that untreated genital infections such as chlamydia or human papillomavirus will cause up to 85% of the infertility among African women. The availability of contraceptives will allow for a decrease in these infections, infertility and maternal mortality rates, and help create opportunities for higher education for women (World Health Organization 2012). Men who use condoms can also guard against infections and unplanned pregnancies. These advantages will come because men and women with access to reproductive health options will protect themselves from situations such as unplanned pregnancies and girls becoming young mothers (World Health Organization 2012a).

DEPENDENT AND INDEPENDENT VARIABLES

For this honors thesis, I studied the impact of religious majorities, percent of women in government, donor aid programs, democracy and female literacy rates on reproductive health policies, specifically contraceptive distribution, in Africa. I used a large-N study to look for patterns and then provide two case studies to elucidate those patterns. With this stated, I recognize that I cannot prove causality between the five factors and established policies, rather I will focus the scope of my research on observing patterns and correlations across countries.

Dependent Variable

First, the definition of reproductive health must be clarified before understanding the variables that may affect these policies. According to the United Nations (UN), reproductive health can be defined as a "state of complete physical, mental and social well-being, and not merely the absence of reproductive disease or infirmity... [and reproductive health] deals with the reproductive processes, functions and system at all stages of life" (UN Guidelines on Reproductive Health 2013). While this is a vague and general definition, my paper defines reproductive health practices as the education, distribution and availability of contraceptives. Examples of contraceptives governmental programs may include technologies such as intrauterine devises (IUDs), the pill, Depo Provera and condoms. In addition, programs that promote abstinence and the rhythm method were considered because policies have developed around these two practices. For the purposes of this paper, I only looked at how reproductive health policies correlate with specific factors and not the effectiveness or long term effects of the implemented contraceptive programs.

To understand and quantify the dependent variable of reproductive health, I used the World Health Organization's measure for contraceptive prevalence (2013). According to the

report, "contraceptive prevalence is the percentage of women who are currently using, or whose sexual partner is currently using, at least one method of contraception, regardless of the method used. It is usually reported for married or in-union women aged 15 to 49" (World Health Organization 2013). The measure of contraceptive prevalence in sub-Saharan African countries contributed to explaining how government-sponsored programs promoted contraceptive use.

Independent Variables

Religion and reproductive health practices produce a great source of contention in many countries. Even though African states may have or promote family planning practices, their emphasis could vary from formulating abstinence-only policies to passing out free contraceptives and condoms as well as funding informational meetings on safe sex practices. To observe the variable of religion, countries were classified as having a sizeable majority religion (over 70%) or not. This is valuable to distinguish between majority versus no majority because countries with prominent religious institutions may have a strong influence on governmental decisions and practices. To observe if policies are impacted by religious influence, I researched articles from SocINDEX, Academic OneFile, *African Journal of Reproductive Health*, *Journal Global Public Health*, *Social Science & Medicine*, *World Development*, and the JSTOR index, which will provide information about policy and culture's influence in those African states.

Along with a country's religious majority or possible domination by a majority, a country's reproductive health policies may be affected by the number of women in government at both a local and federal level. In a prior research paper, I observed how women influence policy making in Nigeria compared to South Africa. More women were representatives in South Africa and therefore more programs were targeted to aiding women and children. However, in

Nigeria there were fewer women in government and there was only one department focused on women. Lack of representation may have adverse effects on the Nigerians' access to reproductive health information. If women in politics understand the value of reproductive health policies, then the country will set forth more policies focused on access to contraceptives. Research has shown that female representatives will advocate for women's issues and this pattern should be observed in African states with high percentages of female delegates (Inter-Parliamentary Union 2013). I used the 2013 Inter-Parliamentary Union report to indicate the percentage of female representatives in national legislature.

Furthermore, international donors have brought about change within African states, namely the push for democracy and free and fair elections within the countries. The terminology of an international donor includes a multilateral donor such as the World Health Organization and a bilateral donor such as the United States Agency for International Development. For the purposes of this paper, I did not include NGOs because often times they are receiving funding from bilateral and multilateral donors. Donors' contributions to states have established educational and feeding programs. Many reproductive health practices in African nations have been promulgated because of a push from the international community. For example, in Senegal the government in recent years has appropriated funds for general healthcare, but donors provided the funds for reproductive health care programming (Hardee et al. 1999). This pattern has been increasing in many nations over the years, and the World Bank, International Monetary Fund and Organization for Economic Co-operation and Development (OECD) provide data on who donates and how the funds are distributed. To observe this, I based the data set off of the World Health Organization's Official Development Assistant (ODA) statistics. Specifically, the WHO provided general government expenditures on health as the

percentage of the total budget and then indicated the break-down of aid given from international donors. This report provided a basis for measuring donor aid.

In addition, observing how international funds are distributed through the governmental system could provide insight on reproductive health policymaking in Nigeria and Senegal. For example, the WHO suggests in a recent report that:

> "It is imperative that governments are able to articulate their national health priorities and work to form meaningful partnerships with donors so that money is invested efficiently and where it is most needed. Many governments feel that money can be spent more effectively if donor money comes directly to the ministries, rather than being funneled to NGOs. Donors often reply that this would require increased accounting capacity on the part of the ministries" (2010).

The WHO statement explains an important conflict regarding donor aid and reproductive health. Understanding how donor funding is allocated and acknowledged by the African state may indicate a correlation to how policies are made and applied.

The accountability of each of these governments may play a crucial role in reproductive health policies. I examined this accountability by using the Freedom House score, which determines the democratic level of a country based on several factors. The assumption is that a country with a classification of free, or close to it, will have better reproductive health policies because it is more democratic. The level of democracy may also affect how information is distributed through the state.

The last factor observes the relationship between female literacy rates and contraceptive access. Countries with high female literacy rates also see improvements in areas such as infant mortality rates, maternal mortality rates and nutrition (WHO 2013b). According to the World Bank, female literacy is defined as women ages 15 and older who can understand, read and write a simple statement (2013). This section will not look at how literacy rates inform reproductive health policies, rather how this factor relates to accessing of contraceptives and their usage.

METHODOLOGY

Large-N study

I preformed a large-N study of all countries in Sub-Saharan Africa to observe a correlation between the contraceptive prevalence percentage and the five factors. The majority of the states in sub-Saharan Africa have data on the prevalence of contraceptive access, allowing this measure to be a strong indicator of whether reproductive health practices and policies exist within a specific country. An assumption that can be made about a country with a high percentage of contraceptive prevalence is that it is focused on distributing reproductive health materials. This assumption then raises the questions of why countries were denoted with specific percentages and how the five factors may affect the contraceptive prevalence. A correlation analysis was done between each independent variable and the dependent variable.

Case Studies

The large-N study indicated how factors might affect policy. I analyzed Nigeria and Senegal as my case studies to delve more deeply into how these factors may matter in particular contexts. Each of these states has a relatively similar female literacy rate as well as the same percentage of the population under the age of 24; however, the other four factors are different within these two countries. These factors, while crucial, are not going to be considered in the discussion of reproductive health policies because these states are all considered part of the developing world, and as poor countries.

The two countries chosen have differences regarding the five factors, which will be strong indicators to explain the variation in reproductive health policies. Religion is a variable because Senegal is a predominately Muslim country while Nigeria is almost equally divided between Christianity and Islam. Thus, I had one case that has a dominant religion and one that

does not. I was interested in observing if a country with a religious majority has more or less reproductive health policies compared to a country with mixed faiths. Furthermore, the amount of donor aid, the number of women in government, the level of democracy and female literacy rates in each country are different enough to observe the variation in policies (Table 1). Even though the contraceptive prevalence is low for both countries, I am interested in how the factors contribute to the percentages and how they contribute to the type of reproductive health polices established to deal with access and distribution to contraceptives.

Country	Government Type	Religion	Percentage of Women in Federal Government	External Resources for Health as a Percentage of Total Expenditure on Health	Freedom House Score	Female Literacy Rate	Contraceptive Prevalence (Percentage)
Nigeria	Federal Republic	50% Muslim 50% Christian	7%	5.4 %	Partly Free	50.4 %	14%
Senegal	Republic	94% Muslim 5% Christian 1% Other	43%	14.0%	Free	38.7%	13%

Table 1. Comparing Nigeria and Senegal based on a variety of factors. Data from Central Intelligence Agency (2013), Inter-Parliamentary Union (2013), Freedom House (2012), World Health Organization Report (2013) and World Health Organization (2012b).

CHAPTER 2:
LITERATURE REVIEW

This literature review examines each of the five factors and its relationship with reproductive health practices. Religious institutions often aid the government with social welfare programs. The HIV/AIDS epidemic in sub-Saharan Africa evoked the help of churches to promote abstinence and HIV education programs. In addition, this literature review discusses the importance of women in government and their opportunity to change the political agendas. Women representatives tend to focus on social issues impacting women within the country such as improving education and health information. Furthermore, it has been shown that international donors can play a large role in enactment of programs, including ones that deal with reproductive health. Bilateral and multilateral donors often have been observed to work with governments for program implementation. Another factor observed in this literature review includes how democracy and freedom within the country have positively impacted reproductive health policies. Finally, the literature indicates that countries with high female literacy rates often tend to have better reproductive health policies and programs.

Religion

Globally, there were about 5.8 billion religiously affiliated adults and children in 2010 according to the Pew Research Center's Forum on Religion and Public Life. The break down of the major religions is as follows: 2.2 billion Christians, 1.6 billion Muslims, 1 billion Hindus, 500 million Buddhists, 14 million Jews and 400 million people practicing native religions. In a recent study that looked at 19 sub-Saharan African nations, which represented 75 percent of the region's population, it was determined that 90 percent of respondents identified with either Christianity or Islam (Pew Research Religion and Public Life Project 2012). However,

Christianity exists as the major religion, and the number of adherents outnumbers Islam by two-to-one. With a large percentage of the continent's population having a religious affiliation, this could be a large factor when developing welfare policies. Governments are susceptible to religious influence and these views may shape the nature of the policy. Many African politicians identify with a faith and then during campaigns use their religious ideology to inform their political agenda. They recognize that faith is important to many voters and will use this knowledge to their advantage. An important question to consider is when a majority religion is present in the country, do reproductive health policies reflect this by promoting particular reproductive policies, such as abstinence programs instead of contraceptives distribution?

Religion is a prominent cultural aspect in sub-Saharan Africa and it could be suggested that these beliefs factor into daily lives. According to Kevin McQuillan,"More than any other social institution, religions have elaborated moral codes that are meant to guide human behavior, and many of the great religious traditions have been given special attention to issues of sexuality, the roles of men and women, and the place of family in society" (2004, p. 27). This understanding that religious beliefs affect individual lifestyles allows for the assumption that the communal faith will become a part of the governmental structure and policies. Scholars Ellis and Haar note that before African societies had bureaucratic institutions and constitutions, religion acted as a system of checks and balances on governance (2004). Religion used to be the formal face of politics, but now has less apparent underlying impact in developing and maintaining public policy.

The tradition of religion affecting government is not always directly visible, but can be still seen in the action of government officials. Specifically, in Africa, "unlike in Europe or North America, there is reason to believe that political elites do not use religion solely as a means of

increasing their base of popular support, but that in many cases they also believe that access to the spiritual world is a vital resource in the constant struggle to secure advantage over their rivals in political in-fighting" (Ellis and Haar 1998, p. 188). Politicians sometimes use religion as a means to an end to get elected, but in other cases, faith can be an essential part of the politician's character.

Furthermore, these scholars indicated that "in many parts of Africa where bureaucratic memory and formal histories have declined, religion tends to take on an enhanced social function as a means of both remembering and forgetting the past in ways that are conducive to present needs" (Ellis and Haar 2004, p. 184). Here, the concept of needs refers to social welfare programs and public policies that countries need and use to take care of their citizens. For example, religious institutions often take the role of government by providing healthcare services, which often is necessary in a weak state (Bongmba 2004).

Scholar Elias Bongmba suggests that principles such as good governance that strengthen the private economic sector and the promotion of social development come from the religious bases (2004). For Bongmba and others such as Pierre Englebert, African states are often considered weak and cannot properly deliver social and economic justice (Bongmba 2004, Englebert 2009). This means that religious institutions have an opportunity to deliver social services. Furthermore, when the state cannot provide for its citizens, this role often comes from multilateral or bilateral aid agencies, NGOs, and religiously-based missions and charities (Rice et al. 2010). For example, it is reported that faith-based organizations (FBOs) provide 40 percent of the health infrastructure across the continent (UNFPA 2013).

Paul Gifford's book *African Christianity: Its Public Role* reviews the way churches have impacted their environments. He comments, "Churches have become a major, if not the greatest

single, source of development assistance, money, employment and opportunity in Africa" (Gifford 1998, p. 308). This situation creates an environment for churches to use power, structure and resources to their own advantage. While Gifford's statement refers just to Christian churches, this pattern can also be applied to other religious institutions such as Islamic mosques and centers of higher learning or African traditional religious leaders. He makes the claim that it is highly unlikely for religious institutions to have any direct influence on legal matters of the state; however, this does not take into account the underlying cultural implications of religious beliefs in a society.

Religious influence in sub-Saharan African public policies, specifically healthcare policies, may not be directly visible. However, the specifics of the policy when there is a strong religious majority or dominant faith may reflect strong ties to the dominant faith doctrines. For example, in regards to AIDS policy formation in many African nations, churches that were involved early on were able to be a moving force on the initiative and join the conversation on policy formation (Patterson 2011). Religious institutions in Africa promoted the ABC program, which encourages abstinence, faithfulness and contraceptive and condom use within marriage. Furthermore, many faith-based organizations took on the responsibility of providing HIV/AIDS education, testing centers and counseling. For the purposes of this paper, I observed if religious institutions within my two case studies of Nigeria and Senegal impact how contraception policies are developed and items are distributed, if at all. My hypothesis is that countries with a religious majority will negatively impact the promotion of contraception access within the country. I assert a negative influence because within some Christian institutions and the Islamic faith, the use and promotion of contraceptives is not encouraged. For example, Salafi Muslims who practice a strict form of Islam do not believe in any form of contraceptives but more moderate Sunni

Muslims support this reproductive health practice within marriage. Rather, these ideologies preach abstinence and faithfulness, before contraceptive use. Religious institutions have the ability to provide a united message about certain policies and practices and I am interested in whether a negative correlation is observed between the dependent variable and this independent variable.

Women in Government

Women in government descriptively represent a population within their state that would otherwise not have a voice. Descriptive representation is often assumed to produce substantive representation for women's issues in policy making. The average percentage of women in African parliaments is only 21 percent; however, the percentage of female representatives varies across the continent. For example, 7 percent of the representatives in the Democratic Republic of the Congo are females, but Rwanda has a 52 percentage (Inter-Parliamentary Union 2013). While Western regions are not too far ahead of Africa, this percentage is still low, if the assumption is that women better represent women.

To understand the systems of many African governmental systems and the difficultly of women to obtain office, the past must be examined. According to April Gordon, "It is important to realize that women's present status in African patriarchy is a product of pre-capitalist gender relations that were modified and distorted as African societies were incorporated into the world economy" (1996, p. 81). In addition, women are often fearful of advocating for their rights because they may become oppressed in the process of speaking out. To stand up for the rights of all means that a woman becomes the target of attacks either from other women, the government or other organizations. However, "due to the historical and cultural separation between women's and men's mobilization, women have often used their position as mothers as a basis of moral

authority from which to argue their inclusion in politics" (Tripp 2006, p. 26). Women play a matriarchal role to indicate that they can best serve the men and women they want to represent because they have earned respect as mothers. However, women may face challenges in public participation due to such factors as low education levels, lack of opportunities and beginning families too early (Tripp 2006). Women who face these challenges have limited opportunities because they are hampered by responsibilities of raising a family and an inability to better their lifestyle.

The difficulty women have had in joining politics stems from a deeper issue of the bureaucratic institutions developed to aid women. Bureaucratic institutions, while trying to serve the basic needs of women, often do not have any women or have few women personnel running the programs (Staudt 1997). Women are often the ones who are not being focused on by the government and are thus behind in education. They then have poorer health status compared to their male counterparts (WHO 2013b).

Women working in their governmental system provide descriptive representation, but perhaps more importantly, substantive representation. For example, women's organizations in Mozambique, Angola and other countries were able to achieve their goals of reproductive rights, good working environments and equal division of labor (Thurshen 2010). This was possible because of the high levels of female representation in office and women as social activists (Tripp 2006). Furthermore, when women are in political office, change to promote women's issues occurs. This can be seen in the example of Botswana's women's movement known as Emang Basadi, which increased the number of women in politics as well as fostered changes in discriminating policies. This movement became a party that won votes and has focused its energies on reform and developing policies around issues such as education, equal rights and

health (Leslie 2006). These examples show that descriptive representation matters in policy making because women were able to make policy centered on issues important to other females.

Organizations such as the African Training and Research Center for Women were developed to promote women's involvement in politics. Women participating economically and politically can "provide the social benefits that come from women's enhanced status and independence including the reduction of mortality and fertility rates" (Sen 1999, p. 201). The African Training and Research Center for Women guides women to be effective candidates and leaders within their communities. In many countries, women have developed coalitions and made movements to encourage more participation among female citizens. My hypothesis for women in government is as follows: there will be a high correlation between the percentage of women in office and contraceptive prevalence. This is based on the premise that women representatives will focus on the needs that most pertain to them, which include healthcare and reproductive rights.

International Donor Aid

It is often assumed that the more donor aid a country receives, the more likely it is that poor conditions will improve within that country. In broad terms, aid can be described in three ways: humanitarian or emergency aid, charity-based aid and systematic aid. For the purpose of this paper, the discussion on aid will be focused on systematic aid, which are donations "made directly to governments either through government-to-government transfers… or transferred via institutions such as the World Bank" (Moyo 2009, p. 7). These two forms of systematic aid can be classified as bilateral (government to government donations) or multilateral aid (multilateral organization to government).

After World War II, the major world powers established the World Bank as a development bank, which quickly became one of the largest aid donors (Glennie 2008). In addition, the Organization for Economic Cooperation and Development (OECD) was established to run the Marshall Plan for reconstruction after World War II. This organization, which encapsulates the Development Assistance Committee (DAC), focuses on numerous sectors including health. This development assistance concept peaked in the 1990s, when receiving aid was partnered with structural adjustment policies (SAPs) within poor countries. These programs included revising economic policies and structural reform that encouraged an environment for good democracy. Specifically, the SAPs were implemented to promote rapid economic growth by working towards deflation and privatizing state-owned industries. SAPs have been criticized for their promotion of decreased spending on health services. According to the WHO,

> "Studies have shown that SAPs policies have slowed down improvements in, or worsened, the health status of people in countries implementing them. The results reported include worse nutritional status of children, increased incidence of infection diseases, and higher infant and maternal mortality rates" (2013c).

Today, there has been more of an effort by international donors to reverse this negative attribute of SAPs. Furthermore over the past twenty years, DAC aid for healthcare programs have increased exponentially and between 2008 and 2009, about 50 percent of PAC health aid was funneled into Sub-Saharan Africa (OECD 2011). Many donors partner with governments, with FBOs, or even develop a private sector to implement and fund healthcare programs.

From 1999 to 2008, donors increased the amount given to the continent: "excluding debt relief, and taking inflation into account, aid to Africa has increased by 81 per cent" (Glennie 2008, p.12). Glennie suggests that the solution is "lots of money from donors as part of a package to lead to the sustainable growth of African economies" (Glennie 2008, p. 17). However, this is not often the case because development is a slow, tedious process and many

donor countries now are endorsing giving more aid in larger amounts in hopes of expediting the transformation process. Donor aid can be considered a way to bridge the gap between investment necessities and domestic savings (Yontcheva and Masud 2005).

Scholars Peiffer and Engelbert suggest that the more donor aid a country receives, the more power the donor has on that country's government system. The concepts of personal rule and patrimonialism, which include the practice of state officials using resources for private benefits, can be applied here. Many African nations look to use "the patronage of rich countries, offering diplomatic allegiance and strategic benefits in exchange for resources, political support and non-interference in domestic affairs" (Peiffer and Engelbert 2012, p.361). Poor countries that cannot necessarily provide resources such as oil in exchange for the aid are highly susceptible to donors' pressure for democracy. The donors continue giving because they can pressure the government because of the aid leverage they have over the country. African nations that do not have the stability of their resources need these donors' funding and will be more willing to follow suggestions given by donors. For example, Mozambique and Eritrea receive more than 65% of their healthcare budgets from international donors and therefore the governments are swayed by the donors' initiatives.

Jeremy Youde observed the relationship between HIV prevalence rates, aid from donor states and the recipient governments' healthcare spending. He mentions that donor aid may not be given out solely based on need, but his primarily research could not identify strong correlation between specific factors (Youde 2010). Allotment of aid may appear arbitrary, but Peiffer and Engelbert's findings on donors impacting the political system may be a strong indicator that donors can influence local policies.

Looking at the financial contribution provided to countries is important; however, it is also crucial to acknowledge some of the many donor programs focused on healthcare and reproductive health issues. The United Nations Population Fund (UNFPA) has a Global Contraceptive Commodity Programme (GCCP) that supplies reproductive health kits. They have developed different kits for emergency situations and disaster preparedness. However, their main package provides condoms, IUDs and oral birth control (UNFPA 2013b). Furthermore, the bilateral donor of the United States Agency for International Development (USAID) provides contraception to low-income countries. Between 2009 and 2011, Ethiopia, Kenya, Madagascar, Malawi, Tanzania, Uganda and Rwanda all experienced increased use of contraceptives because of the USAID program (USAID 2013). The Canadian International Development Agency (CIDA) partnered with UNFPA and Ministries of Education to develop age-appropriate sexuality education programs which include the education and distribution of contraceptives (CIDA2012). These are just some examples of what is being done on a multilateral and bilateral basis in regards to reproductive health practices.

Donor aid programs vary among nations and programs approach reproductive health differently. My hypothesis for donor aid to a country suggests international donor aid positively correlates with contraception prevalence because the more a donor allocates to the reproductive initiative, the higher contraceptive prevalence rates will be. If a country is receiving donor aid for a specific purpose, the program will be more likely to be carried out because the government will want to continue the financial partnership. Specifically, I will focus on the different partnerships international donors engage in and how they fund programs run by FBOs and different ministries within the governments of Nigeria and Senegal.

Democracy

Democracy can be defined as giving citizens of a state freedom to choose their politicians and allowing equal rights. To properly assess democracy within sub-Saharan African states, this paper will focus on using the Freedom House Scores. Freedom House classifies countries as free, partly free or not free which is based on whether elections were free and fair, the protection of civil liberties and if countries allow citizens to participate in government (Freedom House 2012).

Determining a country as free implies that the government chosen by the citizens fairly includes them in the political process. While this paper does not observe government spending directly, the literature indicates that more democratic countries will focus spending on education and health (WHO 2013c). For example, no substantial famine has existed within a democratic country regardless of the wealth of the nation. According to Sen, "This is because famines are extremely easy to prevent if the government tries to prevent them, and government in a multiparty democracy with elections and free media has strong political incentives to undertake famine prevention" (1999). In addition, a positive correlation exists between democracy and life expectancy, suggesting that democracies focus more on health than non-democracies (Przeworski et. al 2000). To explain this statement it is important to recognize that democracies are able to set up a system of checks and balances so that power is not centralized as seen in authoritarian governments (Siegle et al 2004). In addition, citizens in a free country have the ability to be more vocal about their needs and wants without fear of repression from the government.

Furthermore, scholar Fantu Cheru denotes four characteristics that are essential to development which include pluralism, accountability and transparency, sanctity of the rule of law and decentralization of authority and responsibility (2002). Good governance includes actors

such as the government, the media, and its citizens who are participating and holding each other accountable. This lack of accountability leads to corruption and exploitation of resources, creating or continuing a weaker state and hampering socioeconomic development.

Therefore, I hypothesize that the classification of free by Freedom House will positively correlate with increased availability of contraceptives. A plausible assumption is that the better a country is in regards to democracy, the more access citizens will have to healthcare benefits. Democracies have a strong advantage in advocating and providing for their citizens.

Female Literacy

Female literacy can be defined as women ages 15 and older who can understand, read and write a simple statement (World Bank 2013). Lack of education among women is often found in relationship with high rates of infant mortality, low life expectancy and poor nutrition. In addition, poorly educated women are more likely to marry and have children younger compared to those with higher education levels (Norton 2013). High literacy rates and family size are related to each other because mothers who are educated often tend to have fewer children. One study done in South Africa determined that women who have more education, through media or classroom setting, are more likely to demand and implement better health practices (Population Reference Bureau 2010). In the context of literacy, it shows how women with an education can take advantage of free institutions. Free countries often tend to provide better for education of both genders and then in turn people can better advocate for their needs.

When discussing the relationship between literacy and contraceptives, it is important to discuss health literacy. Much of the information provided about contraceptives comes from a health literacy framework. In regards to health literacy, the World Health Organization recognizes that there are three distinct levels: functional, conceptual and as a form of

empowerment (Kanj and Mitic 2009). Functional literacy is the ability to read and understand medical directions such as medical labels. Conceptual literacy is more focused on a broad area of skills that allows citizens to make informed health decisions and reduce risks. Finally, empowerment in health literacy is the ability for citizens to mobilize and inform each other about health disparities in their communities (Kanj and Mitic 2009). As women become better educated, they will be able to achieve these different levels of comprehension. Supposedly, a country with a high female literacy rate will have citizens who can engage in health literacy empowerment, thus improving the contraceptive prevalence percentages.

One challenge to literacy promotion is that education rates differ in many sub-Saharan African countries based on geographical location. Oftentimes, the poor rural regions of a country have lower literacy rates than urban areas because of lack of access to education, teachers and other necessities (Sahn 2003). Keeping this challenge in mind, I will observe how literacy rates within each case study impact access to contraceptives. My hypothesis assumes that countries with higher contraceptive prevalence will also be countries where female literacy rates are high as well.

Next Steps

This literature review described the factors observed in this paper and presented hypotheses about how they might affect the dependent variable, which is access to contraception. My question for this thesis is focused on understanding how the factors discussed above impact contraceptive access. The next step is to conduct a bi-variable and multi-variable analysis of all sub-Saharan African countries. The results from those analyses will permit further exploration of my question in the case studies of Nigeria and Senegal.

CHAPTER 3:
LARGE-N STUDY

This large-N study observes the five factors in relationship to contraceptive prevalence. A bi-variable analysis was done for each factor and then a multi-variable analysis confirmed the results suggests in the first analysis. Each section hypothesizes why items may or may not correlate with contraceptive prevalence. The purpose of this large-N study is to observe factors from a statistical analysis viewpoint and their impact on contraceptive prevalence access on the continent. The data suggested in this section will be applied to the case studies to see if the strong correlations are present in Nigeria and Senegal.

Hypotheses

To analytically observe the relationship between each factor and contraceptive prevalence, a large-N study was performed for all Sub-Saharan African countries. In this study, 49 countries were considered; however, the World Health Organization only indicated 39 countries' contraceptive prevalence (CP) percentages. The countries not considered in this study included: Angola, Chad, Comoros, Equatorial Guinea, Eritrea, Gabon, Gambia, Mauritius, Seychelles, and South Africa. Prevalence of contraceptives is a strong indicator of whether reproductive health practices and policies do exist within a specific country.

For each variable with respect to contraceptive prevalence percentage, my hypotheses are as follows:

> ***Hypothesis 1****: A majority population of one religion will negatively correlate with contraceptive prevalence percentages.*
>
> ***Hypothesis 2:*** *High percentages of women in government will positively correlate with contraceptive prevalence percentages.*
>
> ***Hypothesis 3:*** *High percentages of international donor aid as put on government health budgets will positively correlate with contraceptive prevalence percentages.*

Hypothesis 4: *Freedom House Score of free will positively correlate with contraceptive prevalence percentages.*

Hypothesis 5: *High female literacy rates will positively correlate with contraceptive prevalence percentages.*

The factors of contraceptive prevalence, international donor aid, women in the government and female literacy rates follow categorical trends of low (0-20%), low-middle (20-40%), middle (40-60%) and high (60-100%). These classifications are a reflection of values within the data set. The majority of countries exist in the low, low-middle and middle ranges with very few having values above 60%. Values above 60% are minimal so it was appropriate to have a very high category to incorporate values from 60-100%. Correlation and regression analyses have been calculated between each factor and the dependent variable of contraceptive prevalence to determine the validity of these hypotheses. This chapter is divided into a bi-variable analysis and a multi-variable analysis. The bi-variable analysis is used as a preliminary finding while the multi-variable analysis confirms findings from the bi-variable analysis; therefore, together these are used to test the hypotheses.

Bi-variable Analysis of Independent Variables and Contraceptive Prevalence

Contraceptive Prevalence Percentage

The World Health Organization's measure for contraceptive prevalence in its 2013 report calculates the percentage of women who have access to contraceptives, which include traditional and modern methods. According to the report, "Contraceptive prevalence is the percentage of women who are currently using, or whose sexual partner is currently using, at least one method of contraception, regardless of the method used. It is usually reported for married or in-union women aged 15 to 49" (World Health Organization 2013). This is calculated by dividing women of reproductive age who are married or in a union and who are currently using any method of contraceptives by the total number of women of reproductive age who are married or in a union.

The most recent numbers gathered by WHO are from 2010, but most likely countries have not made significant changes in these values (Table 2). Items were put in the standard categories of low (0-20%), low-middle (20-40%), middle (40-60%) and high (60-100%).

	Low (0-20%)	**Low-Middle (20-40%)**	**Middle (40-60%)**	**High (60-100%)**	**Not included in WHO study**
Number of countries in group	20	7	10	2	10
Averages of CP	12.65	28.57	48.4	63	0

Table 2. Average contraceptive prevalence (CP) percentages. This table indicates the average CP within each range and indicates how many countries exist within each category.

Religion

Religion and reproductive health practices produce a great source of contention in many countries. Even though African states may have or promote family planning practices, their emphasis could vary from formulating abstinence-only policies to passing out free contraceptives and condoms as well as funding informational meetings on safe sex practices. The percentages of religious affiliation within the country were collected from the Central Intelligence Agency's World Factbook (2013). To observe the variable of religion, countries were classified as having a sizeable majority religion (over 70%) or not. For the correlation and regression analyses, religious majority was recoded as 0 indicating no majority present and 1 indicating that there was over a 70% religious majority. Most common religious groups included indigenous beliefs, Islam and a collective grouping of Christian denominations including Catholicism. This variable distinguishes between majority versus not because countries in with prominent religious institutions, as seen in the literature review. Those religions institutions had an impact on governmental decisions and practices.

	1- Majority	**0-Not Majority**
Number of countries in category	19	20
Average percentage of Contraceptive Prevalence (CP)	27.2	27.3
Correlation	0.393	-0.344

Table 3. Religion and its relationship to contraceptive prevalence percentages. Having a majority religion with in a country has a positive correlation to contraceptive prevalence. The opposite is observed for those with multiple religious sects.

A correlation of 0.393 is suggestive that religious prominence within a country and contraceptive prevalence are positively related (Table 3). That is, as religious homogeneity increases, contraceptive prevalence increases. However, the reverse seems to appear when there is greater religious diversity within the country. The presence of a strong majority religion in a country may be able to more directly encourage a specific type of contraception versus a country with many different religious backgrounds. In addition, the impact of a majority faith will most often be incorporated within government policies and societal values and therefore, a country may support a specific contraceptive methodology. However, it is important to keep in mind that if a country with multiple religions (Islam and Christianity) that have similar views on a topic, such as contraceptives, then they would also support similar methodologies.

Often religious leaders within some Christian faiths and the Islamic faith preach abstinence instead of encouraging contraceptive usage. Especially when there is not one religious majority within the country, conflicting viewpoints may negatively impact the spread of contraceptives as a whole. For example, this may be a result of one religion supporting contraceptives while another supports abstinence. On the other hand, having a majority religious institution within a country may positively impact contraceptive prevalence because the faith may encourage condoms within marriage.

Women Representation in Office

A country's reproductive health policies may be affected by the number of women in government at both a local and federal level. The thinking is that more women in office means the country will set forth more policies focused on women's issues such as access to contraceptives. Data was retrieved from the 2013 Inter-Parliamentary Union report to indicate the percentage of women representatives in national legislatures. The categories regarding the percentage of women in office were denoted as low (0-20%), low-middle (20-40%), middle (40-60%) and high (60-100%). Two countries did not provide data for this indicator according to the Inter-Parliamentary Union; thus, total number of observations on this variable is 37 and not 39. The correlation analysis (0.062) determined that the number of women in political office has little or no relationship to contraceptive prevalence in a country (Table 4). While the correlation value for the middle range is higher, the sample size is too small to determine the validity of the number. The negative correlation between low female representation and contraceptive prevalence may be accounted by the fact that there is a lack of power for women to advocate for their needs as citizens and in the legislature. Women are highly underrepresented in political office and therefore this may impact their ability to push substantive policies (UNDP 2013).

	Low (0-20%)	**Low-Middle (20-40%)**	**Middle (40-60%)**	**High (60-100%)**	**Not included**
Number of countries in group	22	13	2	0	2
Averages of CP	20.68	39.61	32.5	0	
Correlation	-0.12	-0.09	1		

Table 4: Women in Government and Contraceptive Prevalence (CP). Countries that have about 20 to 40 % of women representatives have a higher average CP as compared to the low and high levels of female representatives.

International Donor Aid

International donors have brought about change within African states, namely the push for democracy and free and fair elections within the countries. The terminology of an international donor includes multilateral donors such as World Health Organization and bilateral donors such as United States Agency for International Development. Many reproductive health practices in African nations have been promulgated because of a push from the international community. To observe this, I based the data set off of the World Health Organization's Official Development Assistant (ODA) statistics (2013c). I looked at the external resources for health as a percentage of total expenditure on health factors for the values of how much international aid was being donated.

Correlation for this variable only considered external resources and the values were grouped into the following categories: low (0-20%), low-middle (20-40%), middle (40-60%) and high (60-100%). For the low-middle and middle ranges no significant correlations were observed, but there is a suggested positive correlation between the low range and contraceptive prevalence (Table 5). This suggests that the less a donor gives to a country's health budget the higher the contraceptive prevalence; however, it could be assumed that grassroots efforts exist within the country or that the government's ministry of maternal health within countries receiving less aid can actually provide for themselves. If a country is better off financially and has a stable GDP, then it may be assumed that international donors are less likely to invest into programs within the country because the state is already self sufficient. While this disproves the hypothesis suggested, the multi-variable analysis may provide more insight into the validity of the correlation values observed.

	Low (0-20%)	Low-Middle (20-40%)	Middle (40-60%)	High (60-100%)	Not included
Number of countries in group	14	9	8	1	5
Averages of CP	28	26	28	12	
Correlation	0.302	0.04	-0.064	n/a	

Table 5: Donor Aid and Contraceptive Prevalence (CP). There appears to be a suggested positive correlation between less donor aid and an increase in CP within a country. A multi-variable analysis is needed to confirm the findings of the table.

Democracy and Freedom House Scores

The freedom that exists with each country may play a crucial role in reproductive health policies. Freedom House scores are another evaluation of government that looks at democracy levels within a country (2012). This organization uses the classification system of free, partly free and not free. It can be hypothesized that free countries will have better reproductive health policies because governments are more accountable to their citizens. The level of democracy may also affect how information is distributed through the state. When comparing all of the Freedom House scores to CP, the correlation value was 0.162, which does not suggest that there is a strong relationship between democracy and contraceptive prevalence within a country (Table 6). However it is important to note that the nine countries that are considered free have a higher contraceptive prevalence. These countries include Benin, Botswana, Cape Verde, Ghana, Lesotho, Namibia, Sao Tome and Principe, Senegal and Sierra Leone. All of these countries are classified as democratic which means that citizens within the country have equal rights, and are able to participate in politics.

	Free	Partly Free	Not Free
Number of countries in group	9	16	14
Averages of CP	35	23.68	26.28

Table 6: Freedom House Score and the contraceptive prevalence (PC) averages. Countries classified as not free had a higher CP than the partly free and free countries. No correlation values were calculated on this analysis.

Female Literacy

Research has indicated that as women become better-educated, issues such as health, nutrition, infant mortality rates and other matters improve. So therefore it is expected that as literacy rates for females improve so will the contraceptive prevalence. It is important to note that GDP was not used as a factor because it can be assumed that countries with higher GDP also have higher female literacy rates. The female literacy variable was classified as low (0-20%), low-middle (20-40%), middle (40-60%) middle-high (60-80%) and high (80%-100%). Except for the lowest category, each grouping had a similar number of countries, thus making for a strong presentation of the relationship between contraceptive prevalence and female literacy (Table 7). As literacy rates improve, so do the average contraceptive prevalence rates and the correlations, except for the high category. The high group presents a negative correlation number; however, this could be due to the high numerical values in each category negating each other thus resulting in a negative number. For this group the average of contraceptive prevalence percentage was 55.14, which shows that high literacy rates do result in higher contraceptive usage.

	Low (0-20%)	**Low-Middle (20-40%)**	**Middle (40-60%)**	**Middle-High (60-80%)**	**High (80-100%)**
Number of countries in group	2	8	11	11	7
Averages of CP	7.5	14.38	16.72	33	55.14
Correlation	-1	-0.101	0.126	0.425	-0.46

Table 7: Female Literacy Rates and Contraceptive Prevalence (CP). As female literacy increases, so doe the contraceptive prevalence averages. The same relationship can apply to correlation values except for the last category that shows a negative correlation between literacy and contraceptive prevalence.

Multi-Variable Analysis

While a bi-variable analysis is useful for an initial first glance at a data set, a regression analysis allows for factors to be considered while holding all other things constant. Simply, this

means that each factor is observed and compared to a dependent variable without the interference of other factors. Dummy variables were created for governmental type and religious majority as already indicated in the prior section. All other factors follow the recoding scheme of low (0-20%), low-middle (20-40%), middle (40-60%) and high (60-100%), except for female literacy that uses middle-high (60-80%) and high (80-100%). Coefficients suggest similar patterns as correlation values.

Compared to Contraceptive Prevalence	**Coefficient**	**Standard Deviation**	**P value**
Religion	-0.049	0.09	0.59
Percentage of women in government	0.158	0.19	0.418
External resources given health care budget	0.0612	0.16	0.387
Freedom House scores	**3.79**	**4.20**	**0.376**
Female literacy rates	**0.647**	**0.11**	**0.00**
Constant	**-11.19**	**8.84**	**0.218**

Table 8: Contraceptive Prevalence (CP) and its factors in a regression analysis. A linear regression analysis indicated a constant of -11.19, which indicates a negative correlation between the factors and CP. The R-Squared value was 0.6658 and the Root Mean Squared Error was 11. The p-value for this model indicates reliability of comparison for independent to dependent. This value was 0.218, which shows the relationship was not as plausible.

This multi-variable analysis observed five factors, holding each one constant, and compared it against the contraceptive prevalence percentages. The female literacy rates showed a strong relationship with the contraceptive prevalence percentages as well as a statistically significant p-value of 0.00 (Table 8). This was the strongest correlation observed and is consistent with the observation made within the bi-variable analysis. Furthermore, democracy appeared to have a positive relationship with contraceptive prevalence percentages which indicated that freedom within a society supports reproductive health practices. The other factors such as religion, women in government and external resources for healthcare budgets appear not significant in this regression analysis. In addition, no multicollinearity exists between the

independent and dependent variable which means no one factor is impacting the results of the other factors (see appendix).

The analysis only considered an observation of the 39 countries based on numerical data. It did not include other factors within a country such as rebel conflict or civil unrest. Theoretical expectations of the contraceptive prevalence, by determining the constant, can be calculated for each country. To observe these theoretical expectations, I observed Sierra Leone with the lowest contraceptive prevalence percentage, Swaziland with the highest percentage as well as the case study countries of Nigeria and Senegal (Table 9). The theoretical expectations from the formula do not exactly match the actual measured values, which may indicate other factors are impacting a country. A further look into the case studies of Nigeria and Senegal will aid in the understanding of conceptive prevalence and how the independent variables differ numerically and practically.

Country	Theoretical Expectation	Reported value by WHO
Sierra Leone	12.71%	8%
Swaziland	48.72%	65%
Nigeria	20.35%	14%
Senegal	20.59%	13%

Table 9. Comparison between theoretical expectations and actual values reported by WHO regarding contraceptive prevalence percentages. The equation used was conceptive prevalence (CP) is equal to the constant plus the coefficient of variable(s) multiplied by actual values for each factor (CP = constant + (coef. * actual values) +…). As seen in the table, the theoretical expectations do not exactly match the actual measured values, which indicates other factors are impacting a country.

Summary

This twofold large-N study observed the factors through bi-variable and multi-variable analyses. Freedom House score of free and female literacy positively correlate with contraceptive prevalence, which reflects what is already known in the literature about these topics. However, for the other factors there was no strong statistical significance with contraceptive prevalence. A further look into the case studies of Nigeria and Senegal will consider all these factors mentioned and see how each factor relates on an individual basis.

CHAPTER 4:
CASE STUDY OF NIGERIA

Nigeria is one of the wealthiest and most populated countries in Sub-Saharan Africa, but it has an extremely high maternal mortality rate. The use of contraceptives in Nigeria could be beneficial to population control, spreading out births and it could contribute to a reduction in maternal mortality rates. This case study looks at the relationship between contraception prevalence and the factors of religious institutions, women in government, democratic freedom, donor aid for reproductive health programs and the female literacy rate. Each section examines the role of the specific factor within the country and its function in developing reproductive health policies around contraception access and usage. This chapter concludes with a discussion of contraceptive policies and practices and the challenges with implementation in Nigeria.

Contraceptive Prevalence

During the larger N-study, a formula suggested that the theoretical contraceptive prevalence for Nigeria should have been about 20.35%; however, as seen in this chapter, developing reproductive health policies and distribution of materials creates a challenge to matching the theoretical contraceptive prevalence rate. Religious institutions promote abstinence while the small proportion of women in government may limit the expansion of reproductive health policies. In addition, the government has committees dedicated to health, but reproductive health conversations are almost non-existent. However, international donor aid and high female literacy rates appear to be most effective when encouraging reproductive health issues within the country. This closely matches what was found in the multi-variable analysis; however, in the large-N study international donor aid had less of an effect and democratic freedom mattered more. Many of the programs in Nigeria are funded by the international donors, but are made

available through the government; so this could be a reason why international donor aid was not strongly correlated with the contraceptive prevalence rate. For Nigeria to increase its contraceptive prevalence rate, religious institutions, the government and its female representatives need to work more diligently with the international community to develop self-sufficient programs.

Religion

Nigeria is a religiously and ethnically divided country with the majority of Muslims in the north and Christians in the south. According to the World Factbook, the religious division is half Muslims and the other half being a multitude of Christian sects. Nigeria is a secular nation; however, these two dominant faiths are a large part of the culture. This section will look at Muslim and Christian organizations and their role in reproductive health; however, many of these groups promote abstinence before marriage and encourage faithfulness within marriage because of their institution's theological teachings.

With a religiously divided Nigeria, it is important to understand the viewpoints and history of both the faiths. Christianity in Nigeria came with colonization and as the British settled within the territories, so did their beliefs. Many missionary groups, such as the Christian Missionary Society (CMS), provided Christian evangelical teaching to the native Nigerians. These missionary groups such as "CMS, Roman Catholic Mission (RCM), Methodists, Presbyterians, Seventh Day Adventists, and other Protestant sects… used the rivers, roads, and railways to propagate Christian evangelism during colonialism" (Oriji 2011, p. 173). Even though colonialism ended, Christianity had been engrained into the lives of the southern Nigerians.

Islam first came to Nigeria through the medieval trade roots, specifically from the Kanem-Borno. The rulers of this group moved to Nigeria during the late 14th century. During the early 1900s, the British colonizers had gained authority of the northernmost part of Nigeria and implemented indirect rule within these territories. While the British did not recognize the Sharia law that was in place, they allowed the natives to practice their own traditions. During the 1950s to recent times, Sharia law has been challenged and expanded throughout the northern regions of Nigeria (Kenny 1996). In 1977, the *Izala Movement* was established by Sheikh Abubakar Mahmud Gumi to restore Islam to its founding principles and eliminate modern innovations to the faith (Manus and Bateye 2012). This group's motto became *Islam Kawal,* which means Islam must rule, but as secular state, Nigeria began to limit the power of the northern Islamic religious groups. Today, most of northern Nigeria follows Sharia law, which is a code of conduct from Islamic theology. Sharia law has very strict rules about women's roles, such as a dress code, and it does not encourage the use of modern contraceptive methods. For example, in those states where Sharia law has been implemented, sex education has been removed from the school curriculum and there have been attempts at removing non-governmental organizations' efforts to promote contraceptives (Imam 2013).

One Islamic organization that works for females in northern Nigeria is the Federation of Muslim Women's Association in Nigeria (FOMWAN). According to the organization's website, the focus is to promote Islamic teachings and practices as well as improve social progress for women. In addition, FOMWAN focuses on making provisions of reproductive health services; however, the website fails to mention the group's plan to execute this goal (FOMWAN 2013). Based on the teachings of Islam, it may be assumed that its strategy is to promote the practice of abstinence. Furthermore, during the Network of African Islamic Faith-based Organizations

meeting in November 2006, there was discussion of a strategy for HIV/AIDS. The Nigerian Muslim clerics decided that they would encourage abstinence to their congregations and also promote correct and consistent condom use between married couples (IRIN 2006).

In Nigeria about 40 percent of all health services are provided by Christian organizations. In southern Nigeria, Christian Health Association of Nigeria (CHAN) plays a large role in mobilizing members of the Catholic churches, Protestant congregations and other Christian faith communities to promote church-based health services. Founded in 1973, one of CHAN's projects is working with Muslim groups to promote HIV/AIDS prevention and reproductive health among faith communities (CHAN 2013). This organization works closely with its pharmaceutical adjunct, CHANPHARM, for many of its programs; however, these two groups neither stock nor supply contraceptives (Druce and Oduwole 2005). CHAN indicates that its main form of teaching for married couples is with behavioral-based methods such as the abstinence and being faithful (ABC). Another example of policies being influenced by religious interest is within Nigeria's southern state of Anambra where it became illegal to promote the use of condoms in 2008. Furthermore, the state government banned advocacy and distribution of contraceptives. Many have speculated that Christian evangelical groups urged legislators to make this decision (IRIN 2008).

While most of the religious institutions in Nigeria promote abstinence as the only form of safe-sex, it is essential to evaluate if religious institutional teachings actually affect the action of religious followers or the government. One study looked at the relationship between religious commitment and adolescent sexual behavior among college students in Nigeria. Students responded to statements related to pre-martial sexual relations and commitments to marriage. Many of the respondents were from Christian denominations and 88% of them indicated that

religion was very important to them. About 50% of males and 35% of females had engaged in sexual activity; however, only 36% of them used contraceptives, specifically condoms (Odimegwu 2005). The overall conclusions of the study were that participants that followed a religious practice were less likely to be sexually active. This study did not aim to look at contraceptive use among those who were active. The author of the study strongly suggests that silence by religious institutions will not be beneficial for HIV/AIDS awareness and that religious leaders have a larger role in shaping sexual activity than usually perceived (Odimegwu 2005). This study suggests that religious institutions and their leaders have power in shaping opinions on contraceptives, which contradicts data observed in the large-N study.

Women in Government

Women descriptively represent female citizens and therefore are potentially able to develop substantive policies, especially ones that focus on issues that matter to their constituents. Women tend to push issues that are more pertinent to their needs such as policies on education and maternal health. The UN Development Programme (UNDP) has implemented a US $80 million program to train Nigerian women how to run for local and federal office. The international community recognizes the value of the female voice in politics and understands how women will bring substantive change to social issues such as education and health (UNDP 2013). Currently, female representatives comprise only 7 percent of the Nigerian federal government (Inter-Parliamentary Union 2013). It may be assumed that the small voice of women in Nigerian politics will not have a large impact on policy in general.

The 1980s was declared the UN Decade for Women and established a movement focused on improving the lives of women across the world. The Nigerian government in 1982 participated in this international goal by developing the National Committee on Women and Development. This

committee focused on increasing participation of women at different levels of society and the government wanted to produce programs that positively affected women (Aina 1993). Another program promoted in the early 1980s and 1990s was the Better Life Programme (BLP) developed by President Babangida's wife to encourage female mobilization. One of the goals of the BLP was to educate women on the importance of Maternal Child Health and Family Planning. A unique aspect of this program was the focus on empowering rural women to become active in development and economic activities (Aina 1993). While a female representative did not start the program, the president's wife was an influential person in the political eye.

In both the Senate and the House, female representation is limited and very few committees are dedicated to women's issues. In the Senate, there is only one committee focused on health issues. In the Nigerian House of Representatives, the majority of women representatives are on the House Committee on Women Affairs, developed in 1999, which focuses on gender equality issues. Another committee that has a high percentage of female members is the Women in Parliament, which was developed for the purpose of promoting the general welfare of women including reproductive health. While each of these groups appears useful to promoting reproductive health measures, no committee has indicated substantive bills on reproductive health (Nigerian National Assembly 2013). Furthermore, the Nigerian governmental website profiles each representative, and the majority of the female members join one of the committees to indicate their passion for education and health issues; however, of the 24 female representatives only 9 mention any interest in improving health or the status of women (Nigerian National Assembly 2013).

The challenge when observing the role of women in government is the small proportion of women to men. In Nigeria, men have the majority in the legislature so women's small percentage

is overshadowed by the male dominated agendas. One scholar relates the low level of women in office back to the colonial periods where men were given more power and education (Okoronkwo-Chukwu 2013). It has been suggested that societally women are considered weak and that the role of women is to take care of their husband and children. Many more women run for office than get elected, thus keeping representation values low among females.

International Donor Aid

Bilateral and multilateral donor aid develops programs to encourage changes of policy or relieve a burden from the governmental regime. The more an actor financially provides to a country for a specific issue, the more control it theoretically has on overseeing and implementing the program. This means that international donors can participate in creating strong development programs that work to improve a situation such as reproductive health. Donors often look for how they can impact a society's needs and in Nigeria, the economic divide between rural and urban causes the funders to provide money where it is most needed. According to a report done by Olaniyan and Lawanson from the Department of Economics at the University of Ibadan, health expenditures between the north and south regions of Nigeria differ (2010). Healthcare financing is dependent on private sources and the North is plagued with high rates of poverty and unemployment, making private donations less feasible. Donor funding's role is vital in closing this gap within the country. In 2010, Nigeria received $US 720 million from international state actors and 8.7% of this went to health programming (World Health Organization 2013). In addition, Nigeria adheres to the Paris Declaration of Aid Effectiveness, which indicated that donors must work with the local needs of the country, which can be conducive to developing self-sufficient programs (2005). If funders and aid workers exhibit a need within the country,

they can approach the solution using grassroots initiatives. The Federal Ministry of Health partners with donors to implement the programs for which the funds were allocated.

USAID spends US $95 million in Nigeria and in 2011 the Federal Ministry of Health collected funds from UNFPA and USAID Deliver Project to develop a project focused on distributing contraceptives within the country. The report indicated that urban facilities had a higher percentage of contraceptives available than those in rural areas. This could be a result of transportation and budgetary obstacles. The most popularly used contraceptive, according to the report, was Depo-Provera, which is a birth control shot (Federal Ministry of Health Nigeria 2011). A high number of facilities that were out-of-stock of the most popular items indicates that Nigerians are using contraceptives and the programs cannot respond to fulfill this need within the country.

Furthermore, the United Kingdom's Department for International Development (DFID) which spends US $252 million each year for various programs, is committed to aiding Nigeria to complete its MDGs. The UK spends 1,756 million euros on health issues in Africa and Nigeria receives 256 million euros of DFID's budget. Yet only 2.4% of that amount goes to reproductive, maternal and newborn health. Specifically, DFID's Strategic Vision for Girls and Women works towards improving the quality of life for this population. In July 2012, DFID and the Bill & Melinda Gates Foundation secured "political and financial commitments to enable an additional 120 million girls and women in the poorest countries to access and use contraceptive information, services and supplies" (Department of International Development 2013, p 16). Each year the Bill & Melinda Gates Foundation provides US $400 million to Nigeria for various programs including this specific program mentioned. The program worked to promote access to the materials as well as to provide public health education on proper usage of the contraceptives.

USAID and DFID are two examples of large aid donors in Nigeria that are focused on reproductive health and contraceptive distribution. These bilateral aid programs work with the Nigerian Ministry of Health to see that goals are being met and the donations are being used as indicated. The Nigerian government recognizes that it cannot help its people in the matters of healthcare and providing contraceptive access, thus it relies on external sources such as USAID and DFID for financial and program contributions. While it cannot be determined if these programs mentioned actually have an effect on contraceptive prevalence, it is important to understand these programs work towards providing information and resources to citizens.

Democracy

According to Freedom House, Nigeria is considered a partly free country (2012). This classification is based off of political and civil freedoms within the country. A score of partly free means that the government protects some rights and liberties, but not all. It has been shown that democratic freedom has a strong relationship with better health and education for citizens. A government invested in its citizens will spend more on social welfare programs instead of the military. To full understand how there is limited freedom within Nigeria, this section will observe the government's spending on healthcare because of the relationship previously measured.

Government appropriates funds to departments or issues that are most pressing within the country. According to the World Health Organization, Nigeria's expenditure on health as a percentage of the total budget is 7.5% (2012). The average appropriation among Sub-Saharan African countries is about 14 percent putting Nigeria below the median. Governments focused on health issues will most likely discuss issues related to contraceptives and reproductive health. A government which does not allocate more funding towards health could be relying on

international donors to provide the funding. This dependency on foreign aid could prevent a development in GDP, whereas a government who allocates funds to health with limited support for international donors are able to gain more legitimacy. For example, the Federal Ministry of Women Affairs and Social Development (FMWASD) advocates for the rights of women including reproductive health measures and encourages more government spending on the issue (FMWASD 2013). However, as discussed in the previous section, a female-focused ministry exhibits its own challenge with representation and receiving an equal voice.

In 1988, the Nigerian government developed the National Health Policy and Strategy to Achieve Health for All Nigerians. The program's goal was to establish primary healthcare for all citizens, but often this target cannot be reached because many cannot gain access to the resources. In 1995, health experts, leaders and policy makers organized the National Health Summit to adjust the Nigerian health policies. Two important policy targets include reducing maternal mortality rate by 75% between 1990-2015 and preventing the spread of HIV and AIDS.

In the 2004 Revised National Health Policy, the goal of the policy was "to create an enabling environment for appropriate action and provide the necessary impetus and guidance to national local initiatives in all areas of reproductive health" (2004, p. 36). The other objectives of the revised policy include reducing unwanted pregnancies and encouraging responsible behavior of adolescents. The weakness of this policy is that it just provides suggestions and no direct action. Its main strategic plan encouraged words such as advocacy, promotion, and mobilization, but had no concrete solutions or initiatives. However in 2001, Nigeria was one of the first countries to adopt the Reproductive Health Commodity Security (RHCS), which aided in the deliverance of contraceptives from international donors (Federal Ministry of Health Nigeria 2011). The Ministry of Health encouraged NGOs and voluntary-, religious- and community-based

organizations to aid in the healthcare needs of the country. While contraceptive prevalence is not high in Nigeria, government programs encourage the promotion of contraceptives, but it is not evident that there is adequate funding for these initiatives. As a partly free country, the government appears to care about reproductive health, but it is not the most pressing issue for the federal system. In 2013, most of expected capital budget Nigeria will be allocated to capital supplementation, public works and power with health expenditures only receiving 4% of the proposed financial plan (Nigerian National Assembly 2013).

Female Literacy

Studies have shown that high literacy rates positively correlate to better access to resources such as reproductive and maternal health information. In Nigeria, only 50.4% of the female population is literate, while the male literacy rate is 72.1% (CIA World Factbook 2013). While access to reproductive health information is important to the contraceptive prevalence movement, it is also necessary that knowledge about the proper usage of the materials is acquired. Two studies done in Nigeria show the strong relationship between literacy rate and access to information on reproductive health; however, the challenge often occurs with male resistance to contraceptives. Males often refuse to wear condoms and/or prevent their spouse permission to use contraceptives.

The first study that observed spousal communication and contraceptive use among the Yoruba society found that it is no longer a husband's decision, but rather the conversation is becoming more egalitarian. The author attributes this change to an increase in women attaining higher levels of education. This growth in female education has also been strongly correlated with more women using contraceptives and family planning resources (Feyisetan 2000). Educated women tend to be better informed about the resources available to them. This study

presented a recent shift from patriarchal conversations about contraceptives to more of an equal decision between husband and wife; however, it is important to note that this study was focused on the Yoruba population in Nigeria and may not be reflective of the rest of the country.

Furthermore, other research has studied female's knowledge, attitudes and practices of family planning. Their observation found that a high percentage of women understood the concept and had a positive outlook on the subject. However, the practice of contraceptive usage, specifically condoms, injectables, and safe period/billings, was relatively low because husbands did not want to use the methods. The literacy rate among these females in the study was 97.6%, which is twice as high as the country's average female literacy rate (Onwuzurike 2001). For this population observed, access to knowledge of contraceptives was not an obstacle; rather, marital relationships prevented usage of materials. Furthermore, the literacy rate observed by this study reiterates the idea that high education relates to better access to information about different health practices. So for Nigeria, as education levels among the female population improve, then so will interest in accessing reproductive health materials.

Conclusion

As seen in this chapter, several factors impact Nigeria's 14 percent contraceptive prevalence. It was calculated that the theoretical contraceptive prevalence for Nigeria should have been around 20 percent, but the five factors positively and negatively affect this rate. Nigeria's partly free status, religious institution and low percentage of women in government presents challenges to promoting contraceptive access. However, literacy rates and international donors seem to promote an interest in increasing reproductive health practices. Nigeria needs to focus on promoting democracy, developing a partnership with religious institutions and improving female representation in government for reproductive practices within the country.

CHAPTER 5:
CASE STUDY OF SENEGAL

With a population of over 13 million people, Senegal has made great strides in establishing democracy and reducing HIV/AIDS within the country. Senegal's HIV/AIDS prevalence is among the lowest in sub-Saharan Africa, but the country still has a low contraceptive prevalence rate. This could be indicative of other factors influencing the prevalence of contraceptives. This case study looks at the relationship between contraception prevalence and factors such as religious institutions, women in government, donor aid for reproductive health programs, governmental democracy, and the female literacy rate. Each section examines the role of the specific variables within the country and their function in developing reproductive health policies around contraception access and usage.

Contraceptive Prevalence

During the larger N-study, a formula suggested that the theoretical contraceptive prevalence for Senegal should have been about 20%; however, as seen in this chapter, there are a few obstacles in the country preventing the actual percentage from matching the theoretical contraceptive prevalence rate. Senegal's predominantly Muslim population encourages safe-sex only within marriage and does not support individuals engaging in premarital relations. Furthermore, the low female literacy rate in Senegal appears to have a negative impact on how people access information in the country. More positively, the institution of gender-based quotas that urge female representation in government and strong international donor contributions allow lawmakers to focus on health issues such as access to contraceptives.

These findings closely match what was found in the multi-variable analysis, which indicated that female literacy and Freedom House score are the greatest indicators of high

contraceptive prevalence. The international donors partner with the Ministry of Health to carry out education on reproductive health as well as to provide materials such as pamphlets, condoms and other contraceptives. This could be an explanation of why the larger-N study observed a positive correlation between Freedom House scores and contraceptive prevalence in sub-Saharan Africa In addition, the Freedom House status of free in the country indicates that the citizens hold the government accountable for its policies; so this could be an explanation of what was observed in the multi-variable analysis. While the regression indicated female literacy as a positive factor, Senegal has low rates in this area and this could be a possible explanation why the country's contraceptive prevalence is lower than expected given its democratic nature.

Religion

Religious institutions are a powerful tool in how a policy is implemented and practiced (Creevey 1996). In Senegal, 94 percent of the population is Muslim and the other 6 percent practice Christianity (5%) or other beliefs (1%) (CIA Factbook 2012). Many of the governmental leaders are Muslim including the president and the prime minister. While it is a secular state, many of the country's civil codes have been adapted from Sharia laws. Specifically in regards to family matters, Islamic teachings are present in laws that relate to marriage, divorce, child and inheritance (Creevey 1996). In 1972, Senegal instituted the Family Code, which states that males are head of the household and women are subordinate to their husbands (Mbow 2006). This regulation is similar to items found within Sharia law.

To understand the role of religion in Senegal, it is necessary to understand the historical context in which Islam developed in the country. During the pre-colonial era of Senegal, three ethnically distinct tribes existed: the Wolof, Tukulor and Serer. The Tukulor group was the most organized and rigid of all the groups, which translated into a conservative social system that

could easily adopt the Islamic patriarchal structure. The Islamic culture was first introduced to the Tukulor during the 11th century and the Wolof and Serer groups converted in large numbers during the twentieth century (Creevey 1996). Many converts learned about Islam through marabouts who were traders who preached the Muslim teachings. During colonization, the French leaders were rarely willing to compromise with the Muslim leaders; however, in Senegal, the French used the rural Muslim leaders to be the administrators of the colony. By 1912, over 60 percent of the population was practicing Muslims and in the 1960s that percentage grew to 90 percent (Creevey 1996).

Religious ideology shapes the mindset of citizens within the country as one study that observed the relationship between religion and safe sex practices among unmarried college students indicated. The study determined that as Muslim religiosity increased, so did sexual abstinence (Gilbert 2008). Islamic teachings based on the Qur'an promote celibacy and sexual relations only within the confines of marriage.

The Islamic religious leaders have influenced family planning policies predominantly through the AIDS fight. Today, Senegal has the lowest rate of HIV/AIDS prevalence in sub-Saharan Africa, which scholars have attributed to the cultural norms such as abstinence until marriage that were established before the prominence of the virus. In addition, the country introduced many awareness campaigns and policies dealing with prostitutes and condoms (Gilbert 2008). In 1995, Muslim leaders aided the government's fight against AIDS and endorsed preservative morals, which means the moral condom. This principle indicated that condoms were permitted in the confines of marriage for health reasons; however, this tool was not promoted outside the context of marriage (Gilbert 2008). In Senegal, President Diouf and members of the National Committee collaborated with religious leaders from the early stages of

HIV/AIDS prevention. The Muslim clerics were essential in promoting messages of behavioral change such as condom use as well as providing counseling, care and treatment to those who were HIV positive (Putzel 2006). It was important that the government requested to partner with religious leaders to effect change in this dominant Muslim country. The participation of the Islamic clerics increased condom use within the country and more people got tested due to the Mosques' public service announcements during services (Putzel 2006). This relationship between religion and the government has continued to be the governing principle concerning reproductive health promotion.

About 5 percent of Senegalese practice a sect of Christianity and it can be assumed that they have more stringent views on the use of contraceptives for their members because most are Catholic (UNAIDS 1999). In the beginning of the AIDS/HIV movement when the government was reaching out to religious institutions, many Christian organizations, especially Catholics, were against any promotion of contraceptives. This posed a challenge to the prevention movement in the country because Christian groups were large providers of health services in Senegal (UNAIDS 1999). Understanding the importance of the movement, the churches developed a more supportive and progressive outlook and began to provide counseling and psychosocial services. Furthermore, instead of distributing condoms, they began referring people to other institutions. The Senegalese Association for Promotion of the Family (ASPF) is an example of a local Catholic organization that partners with USAID to provide natural family planning services in several areas across the nation (USAID and Institute for Reproductive Health 2006). Religious institutions do matter within the secular state and the government encourages progressive policies that still respect faith-based ideology.

Women in Government

In 1985, women only made up 13 percent of the executive cabinet and at that time no woman was nominated to oversee powerful cabinet positions such as the Ministry of Labor, Agriculture or Foreign Affairs (Creevey 1991). However, women were elected to serve as heads of Ministry of Women's Affairs and Ministry of Health and Social Welfare because these positions were considered more appropriate for women. Currently, the prime minister is female as well as the Minister of Health and Social Action, the Minister of Women, Families and Children, the Minister of Livestock and Animal Products, the Minister of Energy and the Minister of Urban Development and Housing (Senegalese Government 2013). Of the 32 ministries within the Senegalese government, women are the leaders of five of them. Many of these ministries involve issues surrounding the needs of women and children, just like in 1985.

In Senegal, the first quota mandated that 33 percent of the members must be female. This policy was put in place in 2001 and in 2003 the legislature was only 19.2 percent female (Tripp 2003). During the 2001 parliamentary election, the women's group Citizen Campaign organized to address the issue of under-representation of women within the federal government. The organization worked with communities to encourage women to run for political office. However, even without this quota, Senegal has had more females in parliament than the majority of other sub-Saharan African countries. At the inception of the latest Senegalese constitution in 2001, women's representation was at low and it has increased steadily every year (Kasse 2003). Women in government positions matter because they are better able to advocate for their rights. For example, Senegalese women struggle with land rights, but a study showed women's access to land was related to civic participation. Specifically the study found, "women who led organizations, who were councilors, who were politically active, generally had access to land.

That is what makes us say that civic participation should be encouraged" (Guenette 2012). While this example does not relate to health, it exemplifies that women in positions of power are able to be advocate for their needs.

Currently, women comprise 43 percent of representatives in the federal Senegalese government (CIA Factbook 2012). Women make up more than 50 percent of the population, so one could assume that more females in office means that politicians can better serve the constituents they represent, but this is not necessarily true. In 2010, the state adopted a gender parity law which requires that the candidate lists for all election levels must have equal representation of men and women. This policy also indicated that men's and women's names must alternate on the ballot (i.e. male, female, male, female…etc.). With this new quota in place, Senegal went from 24.7 percent of members of parliament being women to 43 percent (Inter-Parliamentary Union 2012). The government and women's organizations engaged in public awareness campaigns and trained women to run for office, which contributed to the sharp increase in female representation.

With an increase in women in government, there was a greater focus on improving the ministries dealing with the health children and mothers. In recent years, the Ministry of Health and Social Welfare partnered with the Ministerial Leadership Initiative's (MLI) Reproductive Health Division to better understand reproductive health issues within the country. The ministry is concerned that the fees for accessing contraceptives may be a barrier for women and so MLI, along with the ministry, are studying the implications of the fees as well as utilization of the reproductive health services provided (MLI 2009). The Ministry of Health (MOH) also works with international donors such as the Population Council, Family Planning, and many others to encourage safe-sex and provide access to contraceptive materials and information. MOH

provides trained educators for reproductive health programs in order to maximize the effectiveness of the programs. Furthermore, when Senegal's Health and Social Action Minister Awa Marie Coll Seck attended a a family planning conference in London last year, she stated that the Senegalese government needed to improve its reproductive health policies. She stated, "her government's vision is to move the needle from 12 to 27 percent by 2015…. It has set a target of reaching 350,000 women in the next three years" (Da Silva 2013). The country instituted a national day of family planning action last year to break down stereotypes and promote awareness. For Senegal, as more women become elected to parliament, this governmental goal will be given more attention.

International Donor Aid

International donor aid from bilateral and multilateral programs can contribute to the government's goals within the country. On average, 14 percent of donor aid is allocated for health initiatives within the country (World Health Organization 2013). The government is dependent on the international contributors to maintain and fund these programs. In Senegal, examples of large contributors include the US, UK, France and Canada who work towards improving reproductive health through various programs.

In the past few years, USAID and the Institute for Reproductive Health at Georgetown University initiated the Standard Days Methods (SDM) to support the Senegalese Ministry of Health's strategy of tackling issues surrounding reproductive health policies. SDM is a form of cycle beads that encourage natural family planning by indicating to a woman the stages of her menstrual cycle (USAID 2006). Overall, it has a failure rate of 12 percent per year. This program ran from 2005 to 2006 and trained doctors, nurses, midwives and community health workers in Senegal.

Furthermore, each year USAID spends $123 million on aid to Senegal for family planning interventions as well as HIV/AIDS programs (USAID 2012a). According to USAID's report, because "youth aged 10-19 make up more than a quarter of the Senegalese population, USAID/Senegal will consciously target youth in its health programming, particularly in the areas of HIV/AIDS and reproductive health" (USAID 2012b, p. 22). In addition to the US contribution, the Department for International Develop United Kingdom (DFID), also known as UKaid, donates $4.4 million on average to Senegal; one of its largest projects is STEP UP (DFID 2013). Strengthening Evidence for Programming on Unintended Pregnancy (STEP UP) works to provide better access to family planning and safe abortions. The UKaid works with the Population Council and the London School of Hygiene and Tropical Medicine on this program (Machiyama and Cleland 2013).

Another country's aid program is France's Agency for Development (AFD). AFD has been present in Senegal since the end of War World II and continues to work with the government to improve health and education policies. On average, France contributes $280 million for various projects across the country. One of the French governments' top concerns is maternal and infant health and the French are committed to giving grants to countries in need. In Senegal, funds for reproductive health are allocated to the Directorate of Reproductive Health and Child Survival (DSR), located under the General Direction of Health (DNS) in the Ministry of Health (MOH) (AFD 2012). Specifically, AFD works to improve reproductive health in the Louga region.

In addition, Canadian International Development Agency (CIDA), which provides $76 million, has a program that is designed for girls aged 13-18 to increased healthy behaviors in order to decrease the spread of infections and early/ unwanted pregnancies. This program will be

implemented from 2013 to 2017 and will work in partnership with the Lutheran Church in Senegal (Foreign Affairs, Trade and Development Canada 2013).

While donor aid improves the quality of programs through funding, Senegal has to be accountable to the international community. The government works to encourage its initiatives and promote reproductive health policies that will be effective in order to continue to accumulate resources from international donors. WHO reports that contraceptive prevalence rose from 12 percent in 2010 to 21 percent in 2011 (2013). This increase correlates with donor's contributions because as foreign aid increased so did contraceptive prevalence. Furthermore, USAID is working with the MOH in Senegal to increase contraceptive prevalence to 60 percent by 2023. These initiatives are making slow progress within the country and only time will determine if continued spending in the country will contribute to a rise in access and usage across the country.

Government Democracy

According to Freedom House, Senegal is characterized as a free state, which means that political and civil freedoms are fully present. Historically, many of parliamentary institutions within the government originated from French colonialism. In the 1960 to 1970s, Senegal adopted civil rights that made men and women equal under the law: each has the right to vote, hold public office and earn equivalent pay for his or her skills. In addition, women were given liberal maternity leave and freedom of access to social benefits. Today, democracy within Senegal is still alive and prospering throughout the state. According to Freedom House, the most recent election in 2012 was reported to be free and fair (2013). Voter turnout for the presidential election was at 55%, which rose from the past election, which only had a 34.7 % voter turnout.

Senegal has tried to decentralize power away from the central state and allow more local participation in politics. A highly centralized state can contribute to high levels of corruption and

neopatrimonialism. Part of encouraging democracy and maintaining freedom within a state is allowing citizens to have a direct role in politics. So by dispersing the power throughout the state, Senegal is providing opportunities for the citizens to engage in grassroots politics and hold their local governments accountable. In 1996, the Senegalese Ministry of Health established the Bamako Initiative "which privatized the health care system and formalized community management structures for health facilities" (Foley 2001, p. 7). The government was focused on restructuring and decentralizing the national and local governments to allow for this privatized health care to be successful. This allowed the national government to limit its spending on the health sector and look towards local government expenditures to fund programs. In some states, corruption and mismanaged funds have limited the productivity of the programs locally.

Senegal has a proactive government that has instituted policies such as requiring legalized prostitutes to get tested for HIV and STIs every two months and if they are infected, they will lose their license. This encourages the sex workers to seek protection when engaging in high-risk behaviors (Gilbert 2008). In addition since the 1980s, the government budgeted resources to ensure preventive actions in areas of maternal and child morality were implemented. The allocation for this was distributed from "blood screening in all hospitals, sexual awareness campaigns, STD testing, condom distribution and targeting high risk populations with educational materials" (Gilbert 2008, p. 400). The government used media outlets, journalists, religious leaders and politicians to spread the message of safe sex.

The Freedom House designation of free represents the government's willingness to listen to its citizens. With the most recent election in 2012, more women have entered into political office and will most likely be more progressive on health issues. Furthermore, the state has been proactive in promoting HIV/AIDS awareness and collaborating with international donors,

grassroots organizations and religious institutions to deal with the issue in a progressive manner. The democratic ideals of the state do not only exist in federally-funded programs but have also been observed in the schools. Students are learning about reproductive health practices from an early age to decrease the prevalence of sexually transmitted infections and early/unwanted pregnancies (Diop and Diagne 2007). Early intervention programs are funded by international donors and the government's openness to promote the program contributes to the effectiveness of these efforts. In the case of Senegal, democratic establishments do improve the lives of citizens because the citizens hold the government accountable for its responsibilities to the nation.

Female Literacy Rate

The literature indicates that high female literacy rates are positively correlated with better access to information, better healthcare, and a decrease in maternal mortality rates. When women are educated, they will have better understanding of and exposure to reproductive health measures. Senegal has a relatively low female literacy rate of 38.7 percent (CIA Factbook 2012). This low literacy rate can impact how contraceptives are being used and if citizens know how to access them. A 1973 study "illustrated that the opposition of the husband was the second most important reason why women in Senegal did not practice family planning. The most important reason was lack of information" (Mazrui 1994, p. 129).

Furthermore, a more recent study looked at three urban communities in northern Senegal and assessed how adolescents received and retained reproductive health education. When information was presented at school, boys' knowledge about reproductive health improved more than girls'. The study indicated that in its sample, males were more literate than their female counterparts. In this one study, literacy rates correlated with how information was retained over a

12-month period during a pre- and post-survey on reproductive health. Early intervention programs can be effective, but if women have a lower literacy rate than men, the same information being provided to each gender may be not as well understood. The study also suggested that parents lack knowledge on the subject or choose not to discuss information due to religious reasons. This then develops a cycle of one gender having a better understanding and not sharing or permitting the other from gaining access to the information (Diop et. al 2004).

Many times women are unable to get a proper education because of lack of resources: families may only send males to school and girl children often have other duties such as helping the family. Specifically, rural areas have lower literacy rates than the urban cities and women within these remote villages are far behind the female city-dwellers in terms of education and health. Often times it is harder to provide resources such as teachers, books and materials for schools and people in rural areas tend to be in a lower socio-economic class. Increasing female literacy rates will improve the contraceptive prevalence rate because females will be able to better access information if they have the knowledge of how to do so. Basic reproductive health initiatives are important as a start, but further understanding of information will discourage myths about contraceptives.

Conclusion

Senegal, over the last ten years, has made an effort to address the needs of the country such as instituting gender quotas and establishing free and fair elections. This country still is struggling to provide contraceptives to citizens where they are needed. The female literacy rate appears to provide the biggest obstacle to improving the prevalence of contraceptives in Senegal. Religious ideology can be difficult to change especially with issues regarding pre-martial relations, but because of the HIV/AIDS movement, the relationship between faith institutions

and government already exists and condones contraceptives within marriage. For Senegal to increase its contraceptive prevalence rate, it needs to focus on developing educational opportunities for women. The government's continual efforts to partner with international donors will also aid in initiatives to make contraceptives more readily available.

CHAPTER 6:
CONCLUSION

This thesis examined the following question: how do factors such as religious majorities, percentage of women in government, international donor aid, democracy and female literacy rates inform reproductive health policies in sub-Saharan Africa? This paper first examined the existing literature surrounding each factor, which aided in the understanding of the large-N study. The large-N study provided bi-variable and multi-variable analysis of the five factors in relation to contraceptive prevalence and also determined that no factors presented multicollinearity. The cases of Nigeria and Senegal were used to further explore the factors' influence on reproductive health policies. This section will compare the two case studies and analyze how different factors has led to similar contraceptive prevalence in these two countries. The initial hypotheses in regards to each factor were as follows:

> ***Hypothesis 1****: A majority population of one religion will negatively correlate with contraceptive prevalence percentages.*
>
> ***Hypothesis 2:*** *High percentages of women in government will positively correlate with contraceptive prevalence percentages.*
>
> ***Hypothesis 3:*** *High percentages of international donor aid as put on government health budgets will positively correlate with contraceptive prevalence percentages.*
>
> ***Hypothesis 4:*** *Freedom House Score of free will positively correlate with contraceptive prevalence percentages.*
>
> ***Hypothesis 5:*** *High female literacy rates will positively correlate with contraceptive prevalence percentages.*

The large-N study determined that a Freedom House score of free (i.e. democracy) and female literacy rate positively and strongly correlated with contraceptive prevalence. This multi-variable analysis indicated that the percentage of female representatives in government, external resources to health care and religious majorities did not have a strong influence, either positively

or negatively, on contraceptive prevalence. The analysis included all sub-Saharan African countries that reported a contraceptive prevalence score to the WHO. Each country maintains different policies, so while that multi-variable analysis shows the influence of each factor based on percentages and dummy variables, it does not present the reasons why the specific factors had an influence and others did not. The case studies of Nigeria and Senegal provided a deeper understanding of how the factors affected the low contraceptive prevalence rates. The hypotheses presented closely match the large-N study results, but for the case studies, the analyses varied on the relationship between variables and contraceptive prevalence.

For Nigeria, my analysis determined that international donor aid and high female literacy rates were the two factors promoting the use of contraceptives in the country. However, the status of partly free from Freedom House and percentage of women in government did not appear to have a positive or negative influence on contraceptive prevalence. Religious leaders of the Christian and Muslim faith often promote programs that advocate abstinence before the use of contraceptives. Furthermore, the status of partly free indicates that the citizens of Nigeria do not have full freedom in political and civil liberties. This means that while Nigerians can vote in elections, maybe they do not have an arena to protest and advocate for reproductive health. However, the concept of reproductive health is not a pressing concern for the majority of the Nigerian population. Even a lack of freedom of the press and media can inhibit citizens' knowledge about contraceptives. Donor aid appears to be a strong influence in attempting to improve reproductive health practices through its education and access initiatives. In addition, studies done in Nigeria observed that female literacy correlated with women's access and contraceptive use within the country.

With the case of Senegal, international donors, the level of democracy and women in

government appear to have the strongest influence on promotion of contraceptive use. Donors' funding for many of the programs have been seen as helpful to providing reproductive health resources to the people. With the government's status of free and mandating gender quotas, Senegal has been able to encourage reproductive health programs and ministries focused on the issue of health promotion. In addition, just like in Nigeria, religious institutions promote abstinence and natural family planning methods. However, in Senegal, the factor of religion positively impacted the contraceptive prevalence rate and has become more open to improving reproductive health practices. Whereas in Nigeria,, many religious groups are trying to enforce stricter policies such as Sharia law and making distribution of condoms illegal. Furthermore, the large-N study indicated that high literacy would lead to higher contraceptive prevalence rates and the reversal of this is observed. The female literacy rate is low and therefore could be adversely affecting the promotion of contraceptives throughout the country. The low female literacy rate within the country, specifically in the rural areas, presents a challenge to providing women an opportunity to gain access to reproductive health information and materials.

Future exploration of reproductive health policies in sub-Saharan Africa should analyze how the indicated factors shape policies in countries with high contraceptive prevalence, as seen in Swaziland. Furthermore, it will be interesting to observe contraceptive prevalence rate patterns after the MDGs end in 2015. The MDGs are focused on improving the livelihood of people globally and the movement to improve reproductive health contributes to that initiative. Governments and donors have been working together to reduce AIDS and maternal mortality rates with the use of contraceptive and reproductive health access is one way to accomplish those goals.

Improving reproductive health through increasing contraceptive prevalence benefits

individuals within society and the government. The use of contraceptives can be used to space births and prevent sexually transmitted infections. In many societies, women who engage in sexual activities early without the use of contraceptives become pregnant and do not complete their education. Furthermore, children who are born into a household with an uneducated mother often suffer other challenges such as malnutrition and lack of basic necessities. International donors have recognized this fact and are working to improve this situation through grassroots initiatives and funding government programs.

From the case studies, it was concluded that contraceptive prevalence is impacted by each factor observed, however, by varying degrees. Religious institutions can be good public health advocates, such as during Senegal's HIV/AIDS prevention programs, and encourage methods such as abstinence or contraceptive use within marriage. Furthermore, democracy level impacts people's participation in government both on a political and civil level, while women in government have an opportunity to provide substantive legislation regarding reproductive health policies. However, it was determined that female literacy rates have the most effect in improving contraceptive prevalence which ultimately means women who are more educated can take better care of themselves. While each factor contributes to how contraceptives are accessed and used, governments and donors need to continue to value the importance of educating the female population. As previously mentioned, contraceptives can better the livelihood of women, which in turn improves their children's lives. Thus a focus on education, along with the help of the other factors, will increase contraceptive prevalence and reproductive health overall.

BIBLIOGRAPHY

Agency for Development France (AFD). 2012. *Annual Report.* Retrieved from http://www.afd.fr/webdav/shared/PUBLICATIONS/INSTITUTIONNEL/rapports - annuels/AFD_Rapport_2012_EN_Vdef.pdf.

Aina, I. 1993. "Mobilizing Nigerian Women for the National Development: the Role of the Female Elites". *African Economic History,* University of Wisconsin-Madison. 21: 1-20.

Anyanwu, J and Erhikajpor, A. 2007. "Health Expenditures and Health Outcomes in Africa. African Development Bank: Economic Research Working Paper Series 91".

Birdsall, N., Kelley, A., and Sinding, S. 2001. *Population Matters: Demographic Change, Economic Growth, and Poverty in the Developing World.* New York: Oxford University Press.

Bongmba, E. 2004. "The African Renaissance and Religion". In Religion, Conflict and Democracy in Modern Africa: the Role of Civil Society in Political Engagement. Edited by Samuel Elolia. 2012. Eugene: Pickwick Publications.

Canadian International Development Agency (CIDA). 2012. *Project Profile for United Nations Population Fund Institutional Support 2012.* Retrieved from http://www.acdicida.gc.ca/cidaweb/cpo.nsf/vLUWebProjEn/93F49C2A428BA95385257C0000364344?OpenDocument.

Castles. F. 1994. "On Religion and Public Policy: Does Catholicism Make a Difference?" *European Journal of Political Research* 25: 19-40. Retrieved from http://onlinelibrary.wiley.com/store/10.1111/j.14756765.1994.tb01199.x/asset/j.14756765.1994.tb01199.x.pdf?v=1&t=hmwrp47q&s=c7c4f0295d957d03829ba46b239a8dd88dfabefb.

Castro-Leal, F., Dayton, J., Demery, L., and Mehra, K. 2000. "Public Spending on Health Care in Africa: Do the Poor Benefit?" *Bulletin of the World Health Organization* 78(1): 66-74. Retrieved from http://www.who.int/bulletin/archives/78(1)66.pdf.

Central Intelligence Agency. 2013. *The World Fact Book.* Retrieved from https://www.cia.gov/library/publications/the-world-factbook.

Cheru, F. 2002. *African Renaissance: Roadmaps to the Challenge of Globalization.* New York: Zed Books.

Christian Health Association of Nigeria (CHAN). 2013. Retrieved from http://www.channigeria.org/index.html.

Creevey, L. 1991. "The Impact of Islam on Women in Senegal". *Journal of Developing Areas.* 26 (3): 267-307. Retrieved from http://www.jstor.org/stable/pdfplus/1581646.pdf?&acceptTC=true&jpdConfirm=true.

Creevey, L. 1996. "Islam, Women and the Role of the State in Senegal". *Journal of Religion in Africa.* 26 (3): 267-307. Retrieved from http://www.jstor.org/stable/pdfplus/1581646.pdf?&acceptTC=true&jpdConfirm=true.

Da Silva, I. 2013. "Senegal Seeks to Curb the Baby Boom". *Inter Press Service Johannesburg*. Retrieved from http://0-www.lexisnexis.com.catalog.sewanee.edu/lnacui2api/results/docview/docview.do?docLinkInd=true&risb=21_T18830639019&format=GNBFI&sort=BOOLEAN&startDocNo=1&resultsUrlKey=29_T18830639023&cisb=22_T18830639022&treeMax=true&treeWidth=0&selRCNodeID=97&nodeStateId=29126601en_US2E9A18CFF75C44F286221C9F8600BB98,1&docsInCategory=64&csi=361913&docNo=14.

Department of International Development. 2013. *Annual Report and Accounts 2012-13.* Retrieved from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/208445/annual-report-accounts2013-13.pdf.

Diop, N., Bathidja, H., Toure, I., Dieng, T., Mane, B., RamaRao, S., Adamchak, S., Wong, E., Ndoye, A., Sy, A., and Fall, B. 2004. *Improving the Reproductive Health of Adolescents in Senegal.* Retrieved from http://www.popcouncil.org/pdfs/frontiers/FR_FinalReports/Senegal_Youth.pdf.

Diop, N. and Diagne, A. 2007. "Mainstreaming Adolescent Reproductive Health in Senegal: Enhancing Utilization of the Findings from the Youth Reproductive Health Project" *Population Council.* Retrieved from http://www.popcouncil.org/pdfs/frontiers/reports/Senegal_Scaleup_process.pdf.

Druce, N. and Oduwole, Y. 2005. *Reproductive Health Commodity Security Country Case Study: Nigeria.* Retrieved from http://www.heart-resources.org/wp-content/uploads/2012/10/Reproductive-Health-Commodity-Security-Nigeria.pdf.

Ellis, S and Haar, G. 1998. "Religion and Politics in Sub-Saharan Africa". *The Journal of Modern African Studies*, 36(2): 175-201. Retrieved from http://journals.cambridge.org/action/displayFulltext?type=1&fid=17484&jid=MOA&volumeId=36&issueId=02&aid=17483.

Ellis, S and Haar, G. 2004. *Worlds Of Power: Religious Thought and Political Practice in Africa*. New York: Oxford University Press.

Englebert, P. 2009. *Africa: Unity, Sovereignty and Sorrow.* Boulder: Lynne Rienner Publishers.

Federal Ministry of Health Nigeria. 2011. *Nigeria: Contraceptive Logistics Management System Assessment Report.* Retrieved from http://deliver.jsi.com/dlvr_content/resources/allpubs/countryreports/NG_ContLogiMana.pdf.

Federal Ministry of Women Affairs and Social Development. 2013. Retrieved from http://www.womenaffairs.gov.ng/the_ministry/index.htm.

Federation of Muslim Women's Association in Nigeria (FOMWAN). 2013. Retrieved from http://www.fomwan.org/about_fomwan.php

Feyisetan, B. 2000. "Spousal Communication and Contraceptive Use among the Yoruba of Nigeria". *Population Research and Policy Review*. 19(1): 29-45.

Foley, E. 2001. "No Money, No Care: Women and Health Sector Reform in Senegal" *Urban, Anthropology and Studies of Cultural Systems and World Economic Development.* 30 (1): 1-50. Retrieved from http://0-www.jstor.org.catalog.sewanee.edu/stable/pdfplus/10.2307/40553416.pdf.

Foreign Affairs, Trade and Development Canada. 2013. *Project Profile: Protecting Adolescent Health and Rights*. Retrieved from http://www.acdi-cida.gc.ca /cidaweb/cpo.nsf/vWebCSAZEn/B9A0E94B691DEF1185257AD9003B1ACF.

Freedom House. (2012) Freedom House Score. Retrieved from http://www.freedomhouse.org/regions/sub-saharan-africa.

Gifford, P. 1998. *African Christianity: Its Public Role.* Indianapolis: Indiana University Press.

Gilbert, S. 2008. "The influence of Islam on Aids Prevention Among Senegalese University Students". *AIDS Education and Prevention.* 20 (5): 399-407. Retrieved from http://0-web.ebscohost.com.catalog.sewanee.edu/ehost/detail?sid=4134d0f1-e2ae-46f0-be6d24761dcfc5df%40sessionmgr111&vid=1&hid=118&bdata=JnNpdGU9ZWhvc3QtbGl2ZQ%3d%3d#db=sih&AN=35228246.

Glennie, J. 2008. *The Trouble with Aid: Why Less Could Mean More for Africa*. New York: Zed Books.

Guenette, L. 2012. *Women and Land: Case Study Senegal.* Retrieved from http://www.idrc.ca/EN/Documents/Senegal-in-focus-case-study-women.pdf.

Hardee, K., Agarwal, K., Luke, N., Wilson, E., Pendzich, M., Farrell, M., and Cross, H. 1999. "Reproductive Health Policies and Programs in Eight Countries: Progress Since Cairo". *International Family Planning Perspectives*, 25. Retrieved from http://www.guttmacher.org/pubs/journals/25s0299.html.

Human Development Reports (HDR). 2012. *International Human Development Indicators.* Retrieved from http://hdr.undp.org/en/statistics.

Inter-Parliamentary Union. 2013. *Women in National Politics*. Retrieved from

http://www.ipu.org/wmn-e/classif.htm.

Imam, A. 2013. "Women, Muslim Laws and Human Rights in Nigeria". *Wilson Center*. Retrieved from http://www.wilsoncenter.org/publication/women-muslim-laws-and-human-rights- nigeria-0.

Inter-Parliamentary Union. 2013. *Women in National Politics*. Retrieved from http://www.ipu.org/wmn-e/classif.htm.

IRIN. 2006. "Tanzania: African Muslim Clerics Divided on Condom Use". Retrieved from http://www.irinnews.org/report/62716/tanzania-african-muslim-clerics-divided-on-condom-use.

IRIN. 2008. "Nigeria: No Condoms for Anambra State". Retrieved from http://www.irinnews.org/report/77644/nigeria-no-condoms-for-anambra-state.

Kanj, M. and Mitic, W. 2009. *Promoting Health and Development: Closing the Implementation Gap.* Presented at the 7th Global Conference on Health Promotion in Nairobi. Retrieved from http://www.who.int/healthpromotion/conferences/7gchp/Track1_Inner.pdf.

Kasse, A. 2003. *Women in Politics in Senegal.* Paper presented at the International Institute for Democracy and Electoral Assistance conference. Retrieved from http://www.quotaproject.org/CS/CS_Senegal-Aminata_Kasse-final%202-6-2004.pdf.

Kenny, J. 1996. "Sharīa and Christianity in Nigeria: Islam and a Secular State". *Journal of Religion in Africa*. 26 (4): 338-364.

Leslie, A. 2006. *Social Movements and Democracy in Africa: The Impact of Women's Struggle for Equal Rights in Botswana.* New York: Routledge.

Longwe, A., and Smits, J., (2013). "The Impact of Family Planning on Primary School Enrollment in Sub-national Areas within 25 African Countries". *African Journal of Reproductive Health*. 17 (22): 23-38.

Machiyama, K. and Cleland, J. 2013. Insights into Unmet Need in Senegal. *STEP UP Research Report.* London School of Hygiene and Tropical Medicine. Retrieved From http://r4d.dfid.gov.uk/pdf/outputs/StepUp/STEP-UP-unmet-Family-Planning-need-Senegal.pdf.

Manus, U., and Bateye, B. 2012. "Religion and Social Change in Multi-Ethnic Nigerian Society". In Religion, Conflict and Democracy in Modern Africa: The Role of Civil Society in Political Engagement. Edited by Samuel Elolia Eugene: Pickwick Publications, 277-301.

Mazrui, A. 1994. "Islamic Doctrine and the Politics of Induced Fertility Change: An

African Perspective". *Population and Development Review*. 20: 121-134 Retrieved from http://www.jstor.org/stable/pdfplus/2807943.pdf?acceptTC= true&acceptTC=true&jpdConfirm=true.

Mbow, P. 2006. *The Secular State and Citizenship in Muslim Countries: Bring Africa into the Debate.* Retrieved from http://www.wluml.org/sites/wluml.org/files/import/english/pubs/pdf/dossier28/penda-en.pdf.

McQuillan, Kevin. 2004. "When Does Religion Influence Fertility?" *Population and Development Review*. 30 (1): 25-56.

Ministerial Leadership Initiative (MLI). 2009. *Senegal Program Focus*. Retrieved from http://www.ministerial-leadership.org/country/senegal/program-focus.

Moyo, D. 2009. *Dead Aid: Why Aid is Not Working and How There is a Better Way for Africa.* New York: Farrar, Straus and Giroux.

Nesbit, P. 2001. *Religion and Social Policy*. New York: Alta Mira Press.

Nigerian National Assembly. 2013. Retrieved from http://www.nass.gov.ng/.

Norton, K. 2013. "Literacy and Women's Health". *Proliteracy Worldwide*. Retrieved from http://www.proliteracy.org/Downloads/ProLiteracy_international-programs-publications-and-training_critical-issues-literacy-and-womens-health.pdf.

Odimegwu. 2005. "Influence of Religion and Adolescent Sexual Attitudes and Behavior among Nigeria University Students: Affiliation or Commitment?" *African Journal of Reproductive Health*. 9(2): 125-140.

OECD. 2011. *Aid to Health*. Retrieved from: http://www.oecd.org/dac/stats/49907438.pdf.

Okoronkwo-Chukwu, U. 2013. *Female Representation In Nigeria: The Case of the 2011 General Elections and the Fallacy of 35% Affirmative Action.* Retrieved from http://www.academia.edu/2778499/FEMALE_REPRESENTATION_IN_NIGERIA_THE_CASE_OF_2011_GENERAL_ELECTIONS_AND_THE_FALLACY_OF_35_AFFIRMATIVE_ACTION.

Olaniyan,O. and Lawanson, A. 2010. *Health Expenditure and Health Status in Northern and Southern Nigeria: A Comparative Analysis Using NHA Framework*. Paper presented at the 2010 CSAE conference held at St Catherine College, University of Oxford, Oxford, UK. Retrieved from http://www.csae.ox.ac.uk/conferences/2010-EDiA/papers/451-Lawanson.pdf.

Oriji, J. 2011. *Political Organization in Nigeria since the Late Stone Age*. Retrieved from http://0-www.palgraveconnect.com.catalog.sewanee.edu/pc/doifinder/

10.1057/9780230116689.

Onwuzurike, B. 2001. *Knowledge, Attitude and Practice of Family Planning amongst Women in a High Density Low-Income Urban of Enugu, Nigeria*. African Journal of Reproductive Health (1118-4841), 5 (2), p. 83.

Patterson, A. 2011. *The Church and AIDs in Africa: The Politics of Ambiguity*. Boulder: First Forum Press.

Peiffer, C and Englebert, P. 2012. "Extraversion, Vulnerability to Donors and Political Liberalization in Africa". *African Affairs*. 111(444): 355-378.

Pew Research Religion and Public Life Project. 2012. *The Global Religious Landscape*. The Pew Research Institute. Retrieved from http://www.pewforum.org/2012/12/18/global-religious-landscape-exec.

Population Reference Bureau. 2010. *Is Education the Best Contraceptive?* Retrieved from http://www.prb.org/pdf/IsEducat-Contracept_Eng.pdf.

Prezeworski, A., Alvarez, M., Cheibub, J., and Limongi, F. 2000. *Democracy and Development: Political Institutions and Well-Being in the World, 1950-1990.* New York: Cambridge University Press.

Putzel, J. 2006. *A History of State Action: The Politics of AIDs in Uganda and Senegal.* Retrieved from http://rds.refer.sn/IMG/pdf/16PUTZEL.pdf.

Ranis, G. 2000. "Economic Growth and Human Development". *World Development*. 28 (2): 197-219.

Revised National Health Policy. 2004. *Federal Ministry of Health Abuja: Federal Republic of Nigeria.* Retrieved from http://osgf.dammy.net/payload?id=19d51d38-c75f-4461-91ce-f6a6d2298b87.

Rice, S., Graff, C., and Pascual, C. 2010. *Confronting Poverty: Weak States and U.S. National Security*. Washington: Bookings Institution Press.

Sahn, D. E. 2003. "Urban-Rural Inequality in Living Standards in Africa". *Journal of African Economies.* 12 (4): 564-597.

Siegle, J., Weinstein, M., and Halperin, M. 2004. "Why Democracies Excel". *Foreign Affairs*. 83 (5): 57-71.

Sen, A. 1999. *Development as Freedom.* New York: Alfred A. Knopf, Inc.

Senegalese Government. 2013. Retrieved from http://www.gouv.sn/-Le-Gouvernement-.html?debut_articles=20.

Staudt, K. 1997. *Women, International Development and Politics: the Bureaucratic Mire*. Philadelphia: Temple University Press.

The Paris Declaration on Aid Effectiveness. 2005. Retrieved from http://www.oecd.org/development/effectiveness/34428351.pdf

Tripp. A. 2003. *The Changing Face of Africa's Legislatures: Women and Quotas.* Paper presented at the International Institute for Democracy and Electoral Assistance conference. Retrieved from http://www.quotaproject.org/cs/cs_tripp_2004.pdf.

Tripp, A. 2006. *African Women's Movements: Changing Political Landscapes.* New York: Cambridge University Press.

Turshen, M. 2010. *African Women: A Political Economy*. Retrieved from http://0-www.palgraveconnect.com.catalog.sewanee.edu/pc/doifinder/10.1057/9780230114326.

UNAIDS. 1999. *Acting Early to Prevent AIDS: The Case of Senegal*. Retrieved from http://data.unaids.org/publications/irc-pub04/una99-34_en.pdf.

United Nations. 2013. *Millennium Development Goals Report 2013*. Retrieved from http://www.un.org/millenniumgoals/pdf/report-2013/mdg-report-2013-english.pdf.

UN Guidelines on Reproductive Health. 2013. *United Nations Population Information Network (POPIN), UN Population Division, Department of Economic and Social Affairs with support from the UN Population Fund (UNFPA).* Retrieved from http://www.un.org/popin/unfpa/taskforce/guide/iatfreph.gdl.html.

United Nations Development Programme (UNDP). 2013. *Nigeria: A boost for Women's Participation in Politics.* Retrieved from http://www.undp.org/content/undp/en/home/ourwork/democraticgovernance/successstories/nigeria--a-boost-for-women-s-participation-in-politics/

United Nations Population Fund (UNFPA). 2013. *Building Bridges Among Faith-Based Organizations and Secular Development Practitioners.* Retrieved from: http://www.unfpa.org/culture/fbo.html.

United Nations Population Fund (UNFPA). 2013b. *Global Contraceptive Commodity Programme (GCCP)*. Retrieved from: http://web.unfpa.org/procurement/alliances.htm.

USAID and Institute for Reproductive Health. 2006. *Role of the Standard Days Method in Repositioning Family Planning: Senegal.* Field Notes. Retrieved from http://irh.org/wp-content/uploads/2013/04/Senegal_FN_06_color.pdf.

USAID. 2012a. *Where Does the Money Go?* Retrieved from http://www.usaid.gov/

documents/1870/where-does-money-go-excel-spreadsheet.

USAID. 2012b. *Senegal Country Development Cooperation Strategy: 2012-2106.* Retrieved from http://www.usaid.gov/sites/default/files/documents/1860/SenegalCDCS.pdf.

United States Agency for International Development (USAID). 2013. *Family Planning Program Overview*. Retrieved from http://www.usaid.gov/sites/default/files/documents/1864/fp_overview.pdf.

World Bank. 2013. *Literacy Rate, Adult Female.* Retrieved from http://data.worldbank.org/indicator/SE.ADT.LITR.FE.ZS.

World Health Organization 2013a. *Global Health Observatory: World Health Statistics 2013.* Retrieved from http://www.who.int/gho/publications/world_health_statistics/2013/en/index.html**.**

World Health Organization. 2013b. Family Planning. Retrieved from http://www.who.int/mediacentre/factsheets/fs351/en/index.html.

World Health Organization. 2013c. *Structural Adjustment Programmes (SAPs).* Retrieved from http://www.who.int/trade/glossary/story084/en/.

World Health Organization. 2012a. "Chapter 5: The Socioeconomic Benefits of Investing in Women's Health". *Addressing the Challenge of Women's Health in Africa*. Retrieved fromwww.afro.who.int/index.php?option=com_docman&task=doc_download&gid=8210&Itemid=2593.

World Health Organization. 2012b. "African Region Statistics Summary". *Global Health Observatory Data Repository.* Retrieved from http://apps.who.int/gho/data/view.country.

World Health Organization. 2010. "Maternal Health: Investing in the Lifeline of Healthy Societies and Economies". *African Progress Panel*. Policy Brief. Retrieved from http://www.who.int/pmnch/topics/maternal/app_maternal_health_english.pdf.

Yontcheva, B and Masud, N. 2005. *Does Foreign Aid Reduce Poverty? Empirical Evidence from Nongovernmental and Bilateral Aid.* Retrieved from http://books.google.com/books?hl=en&lr=&id=0lq2g5ROJnIC&oi=fnd&pg=PA1&dq=international+aid+effectiveness+in+improving+health&ots=uYXHkjPCZk&sig=7GYP7rPotRacYAKQ9jxQ_aIyWI#v=onepage&q=international%20aid%20effectiveness%20in%20improving%20health&f=false.

Youde, J. 2010. "The Relationship Between Foreign Aid, HIV and Government Health Spending". *Health Policy Planning* 25 (6): 523-528. Retrieved from http://heapol.

APPENDIX

Appendix 1
Multivariable Regression Table (Stata Program Used)

```
. regress CP Fhouse WinG ER Rel FLR, robust

Linear regression                               Number of obs =      30
                                                F(  5,    24) =    8.63
                                                Prob > F      =  0.0001
                                                R-squared     =  0.6658
                                                Root MSE      =      11
```

CP	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
Fhouse	3.788383	4.199815	0.90	0.376	-4.879609	12.45638
WinG	.158	.1918275	0.82	0.418	-.2379126	.5539125
ER	.0612615	.1578757	0.39	0.701	-.2645778	.3871009
Rel	-.0499119	.0919064	-0.54	0.592	-.2395975	.1397736
FLR	.6476421	.1069482	6.06	0.000	.4269117	.8683724
_cons	-11.19115	8.844925	-1.27	0.218	-29.44617	7.063879

Appendix 2
Correlation Matrix to Observe Mutlicollinearity (Stata Program Used)

Any value with a 0.5 or higher is considered to be a strong relationship. This is seen between female literacy and contraceptive prevalence.

```
. corr Fhouse WinG ER Rel FLR CP
(obs=30)
```

	Fhouse	WinG	ER	Rel	FLR	CP
Fhouse	1.0000					
WinG	-0.0851	1.0000				
ER	-0.3004	0.4027	1.0000			
Rel	0.3113	-0.0217	-0.0856	1.0000		
FLR	0.1541	0.1952	-0.1830	0.0644	1.0000	
CP	0.1710	0.2766	-0.0636	0.0075	0.8002	1.0000

Appendix 3
Data used in larger-N study

Country	Freedom House score	Percentage of women in government (%)	External resources for health as a percentage of total expenditure on health (%)	Religion percentages for majority group in the country (%)	Female Literacy rates (%)	Contraceptive Prevalence (%_
Angola	not free	34	2.2	47 (Indigenous Beliefs)		
Benin	free	7	34.6	27 (Christian)	30.3	17
Botswana	free	8	9.2	72 (Christian)	85.6	53
Burkina Faso	partly free	16	41.3	61 (Muslim)	21.6	16
Burundi	partly free	35	46.8	83 (Christian)	61.8	22
Cameroon	not free	17	4.3	40 (Indigenous Beliefs)	64.8	23
Cape Verde	free	21	18.3	93 (Christian)	80.3	61
Central African Republic	partly free		35.5	35 (Indigenous Beliefs)	44.2	19
Chad	not free	15	15.1	53 (Muslim)		
Comoros	partly free	3	40.5	98 (Muslim)		
Congo	not free	11	11.2	50 (Christian)	78.4	45
Cote d'Ivoire	partly free	10	11.2	39 (Muslim)	47.6	13
Democratic Republic of the Congo	not free	7	31.4	50 (Christian)	57	18
Djibouti	not free	13		94 (Muslim)	58.4	18
Equatorial Guinea	not free	18	1.8	93 (Christian)		

Eritrea	not free	22	69.1	69 (Muslim)		
Ethiopia	not free	22	44.3	44 (Christian)	28.9	29
Gabon	not free	17	1.1	75 (Christian)		
Gambia	not free	8	47.4	90 (Muslim)		
Ghana	free	11	14.2	71 (Christian)	65.3	24
Guinea	partly free		12.3	85 (Muslim)	30	9
Guinea-Bissau	not free	14	45.1	50 (Muslim)	42.1	14
Kenya	partly free	23	38.8	83 (Christian)	84.2	46
Lesotho	free	27	25.5	80 (Christian)	95.6	47
Liberia	partly free	12	57.4	86 (Christian)	56.8	11
Madagascar	partly free	15	17.6	52 (Indigenous Beliefs)	61.6	40
Malawi	partly free	22	52.4	83 (Indigenous Beliefs)	68.5	46
Mali	not free	10	26	95 (Muslim)	24.6	8
Mauritania	not free	18	7.9	100 (Muslim)	52	9
Mauritius	free	19	3.7	48 (Hindu)		
Mozambique	partly free	39	69.8	28 (Christian)	42.8	12
Namibia	free	26		90 (Christian)	88.5	55
Niger	partly free	13	28	80 (Muslim)	15.1	11
Nigeria	partly free	7	5.4	50 (Muslim/ Christian)	50.4	14
Rwanda	not free	52	46.3	57 (Christian)	67.5	52
Sao Tome and Principe	free	18	25.3	70 (Christian)	60.1	38

Senegal	free	43	14	94 (Muslim)	38.7	13
Seychelles	partly free	44	10	82 (Christian)		
Sierra Leone	Free	12	19.9	60 (Muslim)	32.6	8
Somalia	not free	14		90 (Muslim)	25.8	15
South Africa	free	41	2.1	36 (Christian)		
South Sudan	not free	18		20 (Indigenous Beliefs)	16	4
Sudan	not free	21		90 (Muslim)	63.2	9
Swaziland	not free	27	19.4	40 (Indigenous Beliefs)	87.3	65
Togo	partly free	15	17.4	29 (Christian)	48	15
Uganda	partly free	35	27	42 (Christian)	64.6	30
United Republic of Tanzania	partly free	36	41.2	35 (Muslim)	60.8	34
Zambia	partly free	12		75 (Christian)	51.8	41
Zimbabwe	not free	35		50 (Indigenous Beliefs)	80.1	59

ACKNOWLEDGEMENTS

I would like to thank the Politics Department at The University of the South for inviting me to write this honors thesis. Furthermore, I would like to thank the professors who have taught me within the department thus far because without their investment in me, I would not have made it to this point. I am appreciative of Dr. Melody Crowder-Meyer for helping me learn Stata in a very short period of time and for reviewing my data for the large-N study. Finally, I am very thankful for Dr. Amy Patterson and Canon Gideon B. Byamugisha who spent numerous hours meeting with me and reviewing my drafts. They constantly motivated me to be a better student, writer and researcher.