

STERILIZATION RACISM: A QUANTITATIVE STUDY OF PAN-ETHNIC AND OTHER ETHNIC DISPARITIES IN STERILIZATION, STERILIZATION REGRET, AND LONG-ACTING CONTRACEPTIVE USE

In the late 1960s and 1970s there were widespread reports of coercive and deceptive sterilizations of women of color in the United States. The women impacted were African American, American Indian, Mexican-origin, and of Puerto Rican descent. These cases painted a troubling picture of reproductive healthcare in the United States that was suggestive of racism. Although a significant scholarship on historical case studies has emerged in recent years, there has been little quantitative study of disparities in sterilization. In this dissertation, I use historical case studies of racially-targeted sterilization abuse to frame a quantitative study of pan-ethnic and other ethnic disparities in the sterilization of women.

First, I review the history of efforts to control the reproductive activities of women of color going back to the colonization of the Americas and through the 1970s. Second, I review and critique quantitative studies of sterilization. Noting the presence of racial disparities uncovered in some studies and given the historical pretext of racist sterilization abuse, I argue that a racism theory of quantitative sterilization outcomes is necessary. Third, I review several racism theories and develop a concept I call “sterilization racism.” I then discuss the methodological limitations of doing a racism study when quantitative data on racism do not exist. In so doing, I argue that my analysis can make a “strong-conceptual/weak-data” case for sterilization racism.

In the data analysis portion of the dissertation, I analyze three outcomes indicative of racist sterilization abuse: tubal sterilization, sterilization regret, and the use of long-acting hormonal contraception (Norplant and Depo-Provera). The analysis of dependent variables proceeds as I partition the sample (drawn from the 1982, 1988, 1995, and 2002 National Survey

of Family Growth). To study tubal sterilization (1), I use a sample of all women using contraception (full sample), to study sterilization regret (2) I limit the sample to sterilized women, and to analyze the use of long-acting hormonal contraception (3), I limit the sample to non-sterile women.

After controlling for a host of confounding factors and using European American women as a reference group, I find pan-ethnic and other ethnic disparities in tubal sterilization. Of special significance is my finding of growing disparities over time for African American and Mexican-origin women compared to European American women. American Indian women are found to have consistently higher rates of sterilization across time. In my analysis of sterilization regret, I find that Latinas (Mexican-origin and Puerto Ricans and Other Latinas) have higher rates of sterilization regret than European American women. When the sample is restricted to women who first gave birth at age twenty or older, African American, American Indian, and Mexican-origin women are all more likely to regret the surgery than European American women, net of confounding factors. Finally, I find that among non-sterile women, African American and Mexican-origin women are most likely to have ever used Depo-Provera, whereas American Indian women are more likely than European American women to have ever or currently be using Norplant. Furthermore, African American women are more likely than European American women to be current users of Depo-Provera. I conclude with a discussion of the limitations of the analysis and how future researchers can collect racism-specific data to provide stronger tests for the concept of sterilization racism.

Sterilization Racism: A Quantitative Study of Pan-Ethnic and Other Ethnic Disparities in
Sterilization, Sterilization Regret, and Long-Acting Contraceptive Use

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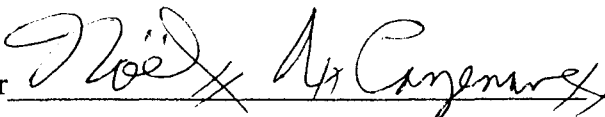
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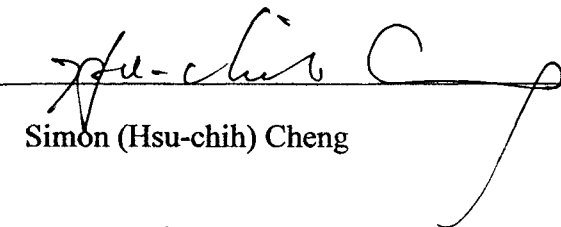
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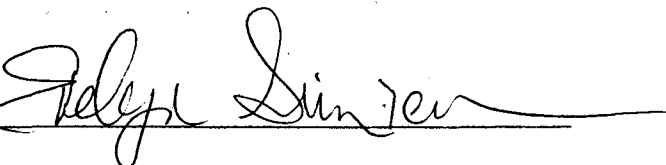
Sterilization Racism: A Quantitative Study of Pan-Ethnic and Ethnic Disparities in Sterilization,
Sterilization Regret, and Long-Acting Contraceptive Use

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Just before completing my dissertation, Michael Jackson passed away. I was suddenly thrown back into childhood memories of attempted moonwalks as well as inspired by his artistic and charitable work on poverty and racism. I hope people will learn from his example about the global reach and transformative power of art and music...

I feel very lucky to have been given the opportunity to pursue a Ph.D. The educational opportunities made available to me have not been completely of my own making. The skin-color privileges bestowed on men of European-descent in the United States give some people great opportunity while restricting the opportunities of others. In this system, I have unjustly benefited and been given access to educational opportunities that have been denied to people of color. My hope is that the prevailing system of white supremacy is severely compromised by the time I retire.

Many people have helped me get to where I am today. My first sociology professor Stephen Adair (Central Connecticut State University) made sociology so interesting that I wound up studying it for the next ten years of my life. After transferring to the University of Connecticut in the Fall of 2000, David Weakliem trained me in quantitative methods and taught me fundamentals about the profession as well as how to carry out careful and high quality quantitative empirical research.

In the Fall of 2004, I took Evelyn Simien's political science course on *Black Feminism*. The seeds of my dissertation were set forth in this class as Dr. Simien lectured on Dorothy Roberts' book *Killing the Black Body*. My wife Angie Beeman introduced me to the documentary *La Operacion* which also set the thinking into motion that became this dissertation.

I thank my dissertation chair and mentor Noel Cazenave for his Racism Theory course. This was the most challenging course I have ever taken. Noel pushed us to create our own racism theory from scratch. This class was the beginning of my work with Noel and he pushed me very hard in his intellectual boot camp. While it was difficult at times, I became a much better sociologist by studying under him. He is truly the "organic intellectual" he is known to be.

My wife Angie Beeman is a savior, mentor and purveyor of life lessons. I have never been the same since she came into my life and I hope that I can someday be as good of a sociologist as she is. I love you bunny. I want to thank my daughter Justice for keeping me laughing and reminding me of the important things in life—Mom and Dad hope the world is better for you.

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CHAPTER ONE

INTRODUCTION TO THE STUDY

In the late 1960s and through the 1970s widespread reports of coercive, involuntary, and/or otherwise non-consenting sterilizations of women of color in the United States surfaced (Littlewood 1977; Davis 1981; Roberts 1997; Chandra 1998; Nelson 2003; Silliman 2004; Gutiérrez 2008). The women impacted were primarily African American, American Indian, and of Puerto Rican and Mexican-origin. Numerous cases painted a troubling picture of the United States government's duplicity in controlling the reproductive fate of women and girls of color.

In June 1973, the Southern Poverty Law Center brought a suit on behalf of three African American girls: Katie, Minnie Lee, and Mary Alice Relf (aged 17, 14, and 12, respectively) against the Department of Health, Education and Welfare (HEW) after the two younger sisters were deceived and coerced into being surgically sterilized and all were used as guinea pigs for the then experimental Depo-Provera birth control injections (Davis 1981; Ordoover 2003).

In 1972, Dr. Connie Pinkerton-Uri, a Cherokee/Choctaw physician, saw a patient in her Los Angeles clinic who asked for a "womb transplant" (Smith 2005). Dr. Pinkerton-Uri later discovered the woman had been given a full hysterectomy at the age of twenty without being informed about the permanency of the procedure. After performing her own investigation, Dr. Pinkerton-Uri convinced Senator James Abourezk (Democrat, South Dakota) to initiate a congressional (GAO) investigation which uncovered that a large proportion (as high as 70,000 out of 150,000)¹ of American Indian women and children were sterilized at Indian Health Services facilities, including a significant proportion of women under age twenty-one (Ralstin-Lewis 2005).

¹ Scholars and activists estimated somewhere between 3,400 and 70,000 out of a total of 100,000 to 150,000 women of childbearing age were sterilized (Ralstin-Lewis 2005:71-72).

In June 1975, ten Mexican-origin women filed a class action lawsuit against Los Angeles County Medical Center, twelve physicians, the State of California, and the U.S. Department of Health, Education and Welfare after evidence of coercive sterilization was uncovered by whistleblower medical residents (Gutiérrez 2008). The Mexican-origin women who filed the class action suit were threatened with deportation, in some cases, if they did not “consent” to tubal sterilization after giving birth. In other cases women were deceived about the permanency of tubal sterilization while still others faced the threat of not receiving painkillers under duress of labor if they did not “consent” to a post-partum tubal ligation. When one of the medical residents remarked on the relatively new maternity ward, the head of the ward, Dr. Quilligan, stated that the hospital had been the recipient of a federal grant, “to show how low we can cut the birth rate of the Negro and Mexican populations in Los Angeles County,” (quoted in Gutiérrez 2008:45).

In Puerto Rico, a long campaign of sterilization supported by the U.S.-based Population Council² culminated in nearly one-third of the island’s women being sterilized between the 1930s and 1970s (Presser 1980). Sterilization became so common in Puerto Rico it was generically referred to as *La Operacion*.³ By the mid 1990s, nearly forty-five percent of women age 15 through 44 were surgically sterilized (Davila 1997). González et al (1982) conducted in-depth interviews of Puerto Rican women in the United States which suggested possible coercive sterilization of Puerto Rican women on the mainland (López 1993; see also López 2008).

These revelations came at a time of intense political protest and consciousness among African Americans and other people of color in the United States during the latter part of the

² The Population Council was established by John Rockefeller III and originally headed by the eugenicist Frederick Osborn (Hartmann 1995).

³ See, for instance, the documentary film *La Operacion* (Garcia and Latin American Film Project 1985).

modern civil rights movement. Such discoveries were particularly troubling because resolution 260 A (III) of the Geneva Convention specifically states that "...acts committed with intent to destroy, in whole or in part, a national, ethnical, racial or religious group..." such as "imposing measures intended to prevent births within [the] group," constitutes genocide. Concerns about genocide were especially apparent among American Indian activists because women from nations with high sterilization rates were sometimes from the least populous nations (Lawrence 2000; Torpy 2000; Carpio 2004; Smith 2005). In line with these concerns, scholars have recently begun to reassess both the eugenics history of the United States and specific cases of sterilization abuse.

In the past several years, a substantial literature on the history of eugenics has provided an overview of the justifications for and occurrences of involuntary sterilization in the United States (Chase 1977; Reilly 1991; Kuhl 1994; Black 2003; Ordovery 2003; Schoen 2005; Largent 2008). This research indicates that eugenic ideology was widely embraced by scholars and implemented and institutionalized by policymakers. While scholarly attention to eugenics in the United States has been significant in the last several years, several meticulously documented case studies of how women of color were targeted for sterilization during the 1960s and 1970s have also been published in recent years (Roberts 1997; Lawrence 2000; Torpy 2000; Nelson 2003; Silliman 2004; Carpio 2004; Schoen 2005; Solinger 2005; Ralstin-Lewis 2005; Gutiérrez 2008; Caron 2008). These studies have provided us with a rich understanding of the motivations, justifications, and socio-historical contexts of the coercive sterilization of women of color during the 1960s, 1970s, and early 1980s. However, little is known about contemporary trends and historical changes in surgical sterilization since the 1980s. This dissertation attempts to fill this gap in the literature by studying statistical racial disparities in sterilization using the National

Survey of Family Growth (NSFG) data. In addition to surgical sterilization, other forms of temporary sterilization proliferated in the United States during the 1990s and 2000s that may have served as alternatives to surgical sterilization.

Norplant implants, which were designed to temporarily sterilize a woman for up to five years, and three-month Depo-Provera shots (both approved by the Food and Drug Administration in the early 1990s) seem to be explicitly targeted at women of color and/or women on public assistance (Samuels, Smith, and Kaiser 1992; Roberts 1997; Kuumba 1999; Neubeck and Cazenave 2001; Smith 2005). In 1990, a *Philadelphia Inquirer* editorial suggested that Norplant should be used to reduce the size of the “underclass” (Kimelman 1990). In doing so, an influential newspaper made an explicit argument that preventing the births of poor African Americans would reduce poverty (Roberts 1997; Neubeck and Cazenave 2001). Such advocacy by an established newspaper in a city with a large African American population echoed the concerns voiced in the 1960s by black nationalists that birth control was a white genocidal plot intended to eliminate people of African descent (see for example Weisbord 1975). A quantitative analysis of national trends in sterilization is significant because it provides statistical patterns that more accurately contextualize the historical and case studies of sterilization abuse.

The Need for and Significance of a Quantitative Study of Sterilization

As noted above, there is rich scholarship on eugenics in the United States and case histories of sterilization abuse. Studies of eugenics have focused on the sterilization of poor European Americans in the early twentieth century (Black 2003; Schoen 2005; Badagliacco and Ruiz 2006). More recent studies of coercive sterilization examined documented cases of abuse against particular groups of women of color and have mainly analyzed incidents from the late 1960s through the early 1980s (Vélez-Ibáñez 1980; Lawrence 2000; Gutiérrez 2008; López 2008).

These studies, however, do not tell us about contemporary and large scale statistical trends in sterilization since the 1970s. Questions such as, “Are there any racial disparities in surgical sterilization?” “If there are disparities, are they changing over time toward more or less equality or are they stable across time?” and “Are racial disparities simply due to omission of controls for fertility, age, and other factors?” cannot be answered by extant studies.

The significance of a quantitative study of sterilization is its ability to contextualize who is getting sterilized and to provide a context for interpreting cases of abuse. Many scholars argue that women of color do not have reproductive choice on the basis of historical, legal, and case study evidence (Roberts 1997; Nelson 2003; Ordoover 2003; Solinger 2005). These studies are full of extensive historical and ethnographic information, but such studies are not generalizable because they are not based on a large and representative random sample of women in the United States. Furthermore, as qualitative historical studies, the inquiries do not provide us with longitudinal quantitative estimates that provide evidence as to whether there have been racially disparate changes over time.

In 1973, 7.6 percent of ever-married European American women had undergone tubal ligation compared to 10.2 percent of African American women and 11.6 percent of Latinas (Chandra 1998). By 2002, 37.8 percent of ever-married African American women were sterilized compared to 22.6 percent of European American women and 29.8 percent of Latinas.⁴ This yields a racial disparity of 6 percentage points for Latinas and about 15 percentage points for African Americans. What are we to make of such disparities? What do they mean? Do they indicate the exercise of reproductive choice? Do they partially reflect the historical coercion of women of color into getting sterilized? Are some women getting sterilized as an exercise of

⁴ These estimates are from my own tabulation of the 2002 NSFG data using the appropriate complex survey sampling weights.

reproductive choice while other women are being pressured or deceived into sealing their reproductive fate?

The need for this study stems from the absence of quantitative research that either engages these questions or poses critical questions about potential coercion. While there are quantitative studies of sterilization by demographers, they are grossly atheoretical. Such studies simply provide quantitative estimates of how different independent variables associate with the likelihood of getting sterilization surgery. In this study, I try to contribute to our understanding of racial disparities in sterilization by using the paradigm of systemic racism to conceptualize and explain their existence. My main objective is to document, interpret, and provide a possible explanation for statistical racial disparities.

The Problem of Unexplained Racial Disparities

Nearly all modern quantitative studies of sterilization use survey data on women collected from the National Survey of Family Growth (NSFG). Analysts typically use a logistic regression model to test for factors that explain the likelihood of becoming sterilized (e.g., Chandra 1998). The models resulting from such exercises contain categorical indicators for survey respondents which signify what ‘racial’ or ethnic group they identify with. The categorical “dummy” indicators typically identify a racial disparity in the likelihood of tubal sterilization such that African American women, and to some extent Latinas, are more likely than European American women, net of control variables, to have been sterilized (Borrero et al. 2007). Racial disparities are often referred to as “residuals” because the control variables cannot explain away (i.e., eliminate the statistically significant difference) between women of color and European American women. Furthermore, racial disparities pose a theoretical problem of interpretation: What should we make of such disparities? What do they mean? What is their underlying

significance?

Explaining racial disparities poses a problem of interpretation because “race” is not a real thing and therefore cannot be a causal factor (Zuberi 2001).⁵ In this dissertation, I will use several approaches to explain racial disparities in the likelihood of sterilization. First, I will test for the potential spuriousness of the association by adding other variables to the regression models to see if the correlation between “race”⁶ and sterilization is due to the failure to take into consideration other factors that explain the likelihood of getting sterilized. Second, I will compare women across time to answer two questions: Are there changes in pan-ethnic and other ethnic disparities across time? Which pan-ethnic and other ethnic groups experienced change over time? I will offer a racism-centered perspective that conceptualizes and explains why there might be pan-ethnic and other ethnic disparities in sterilization. This conceptual approach is unique to both qualitative and quantitative studies of sterilization.

A Racism-Centered Approach to Sterilization

This study explains pan-ethnic and other ethnic disparities in sterilization by using the general paradigm of racism studies. Racism refers to a centuries-old, highly organized system of “race” based oppression that cuts across all institutions and operates at every level of society (Cazenave and Maddern 1999; Feagin 2006). Its systemic properties are clear in Joe Feagin’s definition of racism as “...the complex array of [racist] practices, the unjustly gained political-economic power of whites, the continuing economic and other resource inequalities along racial lines, and the white racist ideologies and attitudes created to maintain and rationalize white privilege and

⁵ The concept of “race” is a human invention that stretches back to roughly the early 1700s (Smedley 2007). At the genetic level, human DNA can only be broken down into haplogroups, but haplogroups do not correspond with ‘racial’ categories (Wells 2006). Furthermore, scholars such as Cazenave have argued that the concept of “race” is not only erroneous, but is injurious because it is an inherently racist ideology (Cazenave 2004). The concept of “race” is noted here as very problematic and henceforth I will use pan-ethnic and other ethnic group designations whenever possible: African American, American Indian, European American, Puerto Rican, and Mexican origin.

⁶ In this dissertation I refer to pan-ethnic and other ethnic groups instead of “racial” groups.

power,” (Feagin 2000:6). This systemic approach to racism makes it clear that racism is not an aberration, “It is a material, social, and ideological reality that is well-imbedded in major U.S. institutions,” (Feagin 2006:2). Since racism operates within every institution and at every level of society, then racism is likely to impact the delivery of healthcare (Smedley, Stith, Nelson, and Institute of Medicine .Committee on Understanding and Eliminating Racial and Ethnic Disparities in Health Care 2003; Malat 2006). Furthermore, scholars such as Dorothy Roberts (1997) have argued that controlling African American women’s reproduction has been a central part of racial oppression in the United States since the era of slavery.

In addition to the premises stated above, recent scholarship in medical sociology has called for using sociological concepts of racism to explain pan-ethnic and other ethnic disparities. Jennifer Malat argues that “With both theory and methods sociology has a great deal to contribute to understanding the sources of racial and ethnic variation in medical treatment...Sociology has a strong history of theorizing about race and racism that could guide such work,” (Malat 2006:308). This dissertation takes up this call and provides a conceptualization and application of a theory of systemic racism to explain persistent and changing pan-ethnic and other ethnic disparities in the sterilization of women. My basic conceptual argument is that in different periods of history, racial oppression operates in different ways (Wilson 1996). As such, the particular form of racial oppression that involves controlling the reproductive activities of women of color will operate in historically-specific ways (Roberts 1997). In reference to the period under direct empirical consideration in this dissertation (1980s-2000s), I argue that institutions and ideologies in the post civil rights movement era operate to limit the reproduction of women of color.

Advantages and Limitations of the Study

There are several advantages and disadvantages inherent to the quantitative analysis carried out in this dissertation. This study uses statistical data from the National Surveys of Family Growth (NSFG). The NSFG data contains interviews of women age 15 through 44 from randomly selected and representative multi-stage probability samples (Mosher and Bachrach 1996; Chandra 1998). This study can therefore provide nationally representative patterns for women in different 'racial' and ethnic groups. A nationally representative sample reduces bias and allows us to estimate the pervasiveness of patterns in sterilization within a range of statistical confidence. The NSFG is a repeated cross-sectional survey and the same questions have been asked to samples of women in 1973 and 1976 (for women who were ever married) and for women of all marital statuses (1982, 1988, 1995, and 2002). As such, a statistical analysis of these data can answer questions about racially disparate trends in sterilization.

A great concern in the historical and case study literature on sterilization is the issue of whether women have been coerced or deceived into getting sterilized (Mass 1976; Vélez-Ibáñez 1980; López 1993; Hartmann 1995; Carpio 2004). Disconnected from this history are quantitative studies that have studied samples of sterilized women from the NSFG and tested the likelihood that the women regret having had the surgery (Jamieson, Kaufman, Costello, Hillis, Marchbanks, and Peterson 2002; Borrero, Reeves, Schwarz, Bost, Creinin, and Ibrahim 2007). While "regret" does not automatically imply coercion, a pattern of pan-ethnic and other ethnic disparities in sterilization regret raises questions about coercion and less-than-voluntary decision-making when interpreted in combination with the historical and case study literature—a literature that offers direct evidence of coercion inflicted on women of color. This example illustrates an important limitation of this dissertation: While this study is a racism-centered analysis, data

explicitly collected for the study of racism are not available.

In Chapter Three, I will outline the logic behind what this dissertation offers: the strongest weak case for racism.⁷ By strongest weak case, I mean that I will be making the strongest possible argument that racism causes pan-ethnic and other ethnic disparities in sterilization on the basis of weak data--data not designed for the study of racism. The NSFG allows me to study pan-ethnic and other ethnic disparities in surgical sterilization and pan-ethnic and other ethnic disparities in sterilization regret. By studying pan-ethnic and other ethnic disparities in sterilization regret, the quantitative data may offer circumstantial evidence of racism influencing sterilization because women who regret being sterilized may have faced “race”-based discrimination. Furthermore, I will investigate pan-ethnic and other ethnic disparities in two temporary forms of sterilization: Norplant and Depo-Provera. Following the analysis of surgical sterilization, my analysis of pan-ethnic and other ethnic disparities in temporary sterilization usage will utilize extensive control variables in an attempt to explain away the pan-ethnic and other ethnic disparities.

This study has several other limitations. First, the study is an analysis of a large social survey dataset based on face-to-face paper and pencil interviews conducted by female interviewers in the respondent’s home. In 1995 and 2002 interviews were conducted with laptop computers (Piccinino and Mosher 1998). This face-to-face technique of survey interviewing is less anonymous than a phone-based survey whereas certain sensitive questions may be more honestly answered using computer-assisted interviewing (Czaja and Blair 1996). However one limitation of face-to-face survey interviews is that some respondents may provide more socially desirable answers in the interpersonal context of such an interview compared to phone surveys

⁷ By this I mean that I will be making the strongest conceptual case on the basis of data that are “weak” because they were not designed for the study of racism. The idea of a “strong conceptual/weak data case” was formulated by Noel A. Cazenave as a way of conducting a racism study when data designed for the study of racism do not exist.

(Czaja and Blair 1996:48). Furthermore, surveys that use fixed-questions may not always elicit valid and/or reliable responses that accurately measure the concept under consideration (Circourel 1964)—this impacts all survey research.

A second methodological limitation of the NSFG is that it measures characteristics of the respondents at the time of interview rather than at the time of the sterilization operation (Chandra 1998). This may introduce bias, for example, when estimating the effect of income on the probability of sterilization as some high income women may have had lower incomes when they were sterilized or vice versa.

A third weakness is that while “racial” identification may be stable across one’s lifetime, the reliance on “racial” self-identification can introduce a degree of measurement error that can produce bias in observed racial disparities in sterilization (Saperstein 2006).⁸ This study examines three basic dependent variables: surgical sterilization, regret of surgery among sterilized women, and temporary sterilization (precise definitions are provided in following section). Statistical methods are used to test for pan-ethnic and other ethnic disparities and since the NSFG data are repeated cross-sections, tests for historical change in pan-ethnic and other ethnic disparities can also be estimated. A large number of control variables will be added in an attempt to eliminate the pan-ethnic and other ethnic disparities (Stinchcombe 2005). Even with an attempt to eliminate disparities by adding control variables that adjust for potential confounding factors, a finding of pan-ethnic and other ethnic disparities is not conclusive evidence of racism. However, such results raise questions and call for further research studies that directly and explicitly measure racism.

⁸ Saperstein (2006) shows how there may be differences in racial disparities in income depending on whether observed “race” is used versus self-identified “race”. Saperstein found interviewers may classify higher income people as “white” in distinction to how respondents classify themselves.

Definitions of Key Concepts

When I refer to *surgical sterilization* in this dissertation, the exact type is tubal ligation—often known colloquially as “getting one’s tubes tied.” The various procedures involve the closing of a woman’s fallopian tubes to prevent a fertilized ovum from entering the uterus. Regardless of the exact surgical procedure, tubal ligation entails a form of “tissue crush surgery” that causes scar formation that initiates a blockade of the fallopian tubes (Hwang and Ooi 2004). As a form of contraception, tubal ligation is nearly 99.5 percent effective at preventing pregnancy (Pillitteri 2007) and is generally regarded as permanent sterilization. When I refer to *temporary sterilization* or *long-acting hormonal contraception*, I specifically mean Norplant and Depo-Provera. Norplant is a six-capsule sub-dermal implant that slowly releases 36 milligrams of levonorgestral powder (a hormone used in many birth control pills) that operates by inhibiting ovulation and thickening the cervical mucus so that sperm cannot permeate it (Danforth and Scott 2003). Norplant if used for its full life can sterilize a woman for up to five years and is about 99 percent effective (Samuels, Smith, and Kaiser 1992). Depo-Provera refers to the intramuscular injection of progestin that inhibits ovulation for three months and is also highly effective (Danforth and Scott 2003).

Because this is a study of pan-ethnic and other ethnic disparities, I will clearly and explicitly outline the “race” concept. The “race” concept is a relatively recent human invention that has its origins in the development of slavery in the American colonies (Montagu 1942; Morgan 1975; Smedley 2007). At a biological and genetic level, there are no actual human “races” (Montagu 1942; Cazenave 2004; Graves 2004; Ratcliffe 2004). Following Smedley, “race” is defined as “...a cosmological ordering system that divides the world’s peoples into what are thought to be biologically discrete and exclusive groups...and can be ranked along a gradient

of superiority—inferiority,” (Smedley 2007: 18). To take into account the falsity of the “race” concept I problematize the term by placing it in quotation marks. Pertinent to this study is the concept of pan-ethnic and other ethnic disparities which I define as *net inequality of outcomes conditional on pan-ethnic or other ethnic self-identification*. By net inequality, I am referring to the pan-ethnic and other ethnic disparities that remain after adjusting for potential confounding factors that could conceivably explain away the disparities.

Summary, Organization, and Interconnection of the Subsequent Chapters

In this dissertation, I focus on pan-ethnic and other ethnic disparities in sterilization. Sterilization has been used as a form of population control and specific groups have often been targeted (Littlewood 1977; Hartmann 1995). In the United States, some scholars have argued that women of color were specifically targeted for birth control as a means of limiting population sizes to deal with demographic threats to the racial status quo (Mass 1976; Shapiro 1985; Roberts 1997; Neubeck and Cazenave 2001).

In Chapter Two, I will review historical literature on reproductive control and the targeting of women of color’s reproductive capacity since colonial times. This review entails reference to slavery and colonization of the United States and population control ideologies used to structure and influence the reproduction of women of color. I review the theory and research literature on population control and draw connections between birth control practices and the history of racially targeted population control ideology, policies, and practices. The second half of this chapter is a literature review of the quantitative research on sterilization, sterilization regret, and long-acting hormonal contraceptives. To examine the meaning of pan-ethnic and other ethnic disparities in sterilization outcomes I use the historical literature on coercive sterilization to critique the quantitative literature’s failures.

In Chapter Three, I review theories of racism and offer a theory and conceptual framework for studying and interpreting pan-ethnic and other ethnic disparities in sterilization outcomes. I will provide an overview of the concept of “race” and why it needs to be properly conceptualized in order to adequately understand how sterilization racism operates. I will also outline the logical weaknesses of inferring racism from pan-ethnic and other ethnic disparities and why this study is only able to make a strong-conceptual weak-data case for racism on the basis of existing data.

Chapter Four is the data analysis chapter of the dissertation. Here, I conduct an analysis of trends in pan-ethnic and other ethnic disparities in tubal sterilization among women of color since the early 1980s to focus on the patterns and prevalence of pan-ethnic and other ethnic disparities in sterilization outcomes. Aside from examining such trends, a significant contribution of this dissertation, is its findings on disparity estimates not only between African American and European Americans, but for Latinas (Mexican and Puerto Ricans and Other Latinas) and American Indian women in comparison to European American women. This analytical approach is important because most quantitative research ignores non-“black” women. Establishing a “big picture” of the state of sterilization for women of color can provide us with a more comprehensive understanding of pan-ethnic and other ethnic disparities in sterilization.

In the second section of Chapter Four, I limit the sample to sterilized women and analyze disparities in sterilization regret and trends across time. Although “regret” is not a direct measure of coercion, pan-ethnic and other ethnic disparities in sterilization regret raise questions about the possibility of some women of color being coerced into sterilization surgery. In the third section of Chapter Four, I limit the sample to non-sterile women and examine disparities in the use of two types of temporary but risky long-acting hormonal contraception: Norplant and

Depo-Provera. Because these contraceptive methods were approved in the early 1990s, I rely on the 1995 and 2002 NSFG to estimate pan-ethnic and other ethnic disparities in their usage.

Chapter Five concludes the dissertation with a discussion and interpretation of the significance and limitations of the findings and with several suggestions about how a future racism-centered study--that would be strong both conceptually and in terms of data collected specifically for the study of racism--could be carried out in the future.

CHAPTER TWO

REVIEW OF THE SOCIO-HISTORICAL CONTEXT AND THE QUANTITATIVE LITERATURES ON STERILIZATION

In this chapter, I begin by reviewing the socio-historical context of racially-targeted population control.⁹ Understanding this history is important because the functions of controlling populations vary across socio-historical contexts and such history can provide insight on contemporary sterilization practices. For instance, slaveholders' motivations for enhancing the birthrate of bonded women of African descent are opposite from the intentions of political and economic elites in the 1990s seeking to curtail the birthrate of women of color with Norplant sterilization (Roberts 1997). Since racism varies across historical periods (Wilson 1996), it follows that the means, motivations, and forms of reproductive population control that target women of color will vary across historical periods.

After I discuss the history of racially-targeted population control, I will examine a specific method of population control: female sterilization. This study focuses on two forms of sterilization that have been suggested by eugenicists and others interested in racially-targeted population control: surgical sterilization (tubal ligation) and long-acting provider-controlled hormonal contraception (Norplant and Depo-Provera). Surgical sterilization, in the form of tubal ligation (the scarring and partial destruction of a woman's fallopian tubes) has become one of the most common means of contraception among American women of reproductive age (Chandra 1998:2). This form of sterilization has also been performed coercively on women of color

⁹ Racially-targeted population control was derived by Noel A. Cazenave from his concept of "race population control" (Neubeck and Cazenave 2001: Ch. 6). In this project, racially-targeted reproductive population control refers to the manipulation of the reproductive decisions of specific racialized groups in the United States for political and economic purposes. While focus here is on oppressive reproductive control policies directed at women of color, racially-targeted population control may also include policies and practices attempting to increase the fertility of affluent European American women as a form of "racial betterment" (Stern 2005).

(Davis 1981; López 1993; Smith 2005; Gutiérrez 2008). I focus on these latter two methods because each has a history of being tested on and targeted at women of color (Hartmann 1995; Roberts 1997; Smith 2005). Furthermore, Norplant and Depo-Provera are of interest here because they are provider-controlled forms of sterilization that have many side effects. Both are administered by healthcare providers and while Depo-Provera simply takes time to wear off (three months, though the ability to conceive may not return for a full year), Norplant requires a healthcare provider to remove the implant. Thus, both of these methods temporarily minimize women's control over their ability to reproduce.

In light of the historical focus on sterilization, I will review quantitative studies of surgical and temporary sterilization to assess the strengths and limitations of previous quantitative research in looking at racial disparities. At the end of the chapter I will discuss the potential contributions this study will make to extant knowledge of the causes of pan-ethnic and other ethnic disparities in sterilization. In Chapter Three, I will review theoretical perspectives and methodological issues before presenting my findings.

As I noted above, *how* racism operates varies across historical periods (Wilson 1996). Under antebellum slavery, racial oppression in the United States was direct and dominative (i.e., subject to physical coercion), but under the Jim Crow system, racism was both *aversive* (i.e., based on racial segregation) and *dominative* (Wilson 1996:116). While the structure of racism may shift, Roberts (1997:6) argues that regulating the reproductive activities of African American women has been a central feature of how racism, as a system of oppression, has operated since colonial times. For example, Roberts' work has demonstrated that during slavery, women of African descent were encouraged to have large numbers of children (pro-natalism) because each child would become the property of the slaveholder, thereby augmenting the

slaveholder's wealth. After slavery, women of African descent were discouraged from reproducing (anti-natalism) under the Jim Crow system and subsequent post-civil rights movement era. In the 1950s and 1960s, as Jim Crow segregation was challenged, wealthy "white" political elites called for limiting population in ways that implicitly targeted African American women (Littlewood 1977; Washington 2006).

Roberts (1997) provides important insights for understanding the coercive reproductive experiences faced by African American women. In my literature review, I will extend her discussion to include the contemporaneous histories of other women of color (i.e., American Indians¹⁰ and Latinas). Women from these pan-ethnic groups have historically faced sterilization abuse and other threats to their reproductive autonomy (Lawrence 2000; Silliman 2004). By studying the inter-connected histories of different racialized pan-ethnic and other ethnic groups we may better understand how racism operates to shape reproductive healthcare in the United States. To this end I will examine how in the different socio-historical periods of conquest and slavery, the reproductive activities of women of color were manipulated to serve the interests of colonizers and slaveholders. After surveying the more distant history of reproductive control during slavery and colonization, I will review the history of controlling women of color's reproductive lives in the twentieth century to provide a basis for the years of statistical data (1980-2000s) studied in this dissertation. The connection between the two historical periods is important because each period may reflect both continuity and change in the reproductive experiences of women.

¹⁰ I refer to the original inhabitants of what is now called the United States as "American Indians" because most native people of this country refer to themselves this way (Means 1996).

Women of Color and Population Control under Conquest, Colonization, and Slavery

During slavery, women of African descent, in large part, experienced the subordination of their reproductive lives to the wishes of the slaveholding class (Davis 1981; Roberts 1997; Kuumba 1999). This can be seen in various laws that drew property rights statuses around African American women's babies such as the 1662 Virginia Act "Defining the Status of Mulatto Bastards" which dictated that the slave status of children follows from the slave status of the mother (Jordan 1968:258; Morgan 1975). This law was an extreme departure from the English model upon which colonial laws were constructed and this innovation in legal definition was designed for the purposes of increasing the supply of labor (Solinger 2005). Before the law, a person of African and European descent would have freedom status as long as their father was free. However, the 1662 law did not stipulate the freedom status of children born to an African American father and European American mother. Such children were free following their European American mother's status and their existence increased the size of the free "black" population.

This population increase distressed lawmakers, such as those in Virginia who passed an anti-miscegenation law in 1691, "for the prevention of that abominable mixture..." resulting from "negroes, mulattoes, and Indians intermarrying with English, or other white women as by their unlawful accompanying with one another," (cited in Solinger 2005:31). Because such laws and ones that followed in other states¹¹ made the child of any female slave the property of the slave owner and because nearly all people of African descent were eventually dehumanized to the status of property, it was in the slave owner's interest to coerce (or provide incentives) for

¹¹ North Carolina's legislature passed laws in 1715, 1723, and 1741 that criminalized inter-'racial' sex and marriage. Louisiana later passed laws in 1827, 1830, and 1831 to ensure that no free "black" man could purchase and free his wife until she reached age 31. This was done to ensure that "black" women's reproductive years were lived out in bondage (Smith 2005).

lifetime bondwomen to give birth to as many children as possible (Roberts 1997; Solinger 2005). Thomas Jefferson, who is not only an American icon, but was also a very wealthy slaveholder, reflected this when he said, “I consider a woman who brings a child every two years as more profitable than the best man on the farm...What she produces is an addition to the capital, while his labors disappear in mere consumption,” (Norton 1996:73). Slave owners exercised extensive direct and indirect control and surveillance of the reproductive behaviors of African American women under the slavery mode of economic production.

Plantation owners typically put pregnant bondwomen to work. This resulted in what Dorothy Roberts calls the first “Maternal-Fetal Conflict” (Roberts 1997:39). In the case of disobedience or rebellion, slave owners sought to simultaneously punish pregnant enslaved women while protecting their future property by forcing the woman to lie down in a ditch, so as to protect the fetus, before administering a whip to the woman’s back as punishment for any real or perceived transgressions. Demographically, slavery literally reproduced itself as the subjugation of the reproductive lives of African American women was explicitly designed to perpetuate each new generation of people in bondage (Roberts 1997).¹² This system of reproductive control was similar to yet different from Spain’s attempts to influence the reproductive decisions of women in Puerto Rico.

Spanish colonizers employed various techniques to control the reproductive decisions of women on the island of Puerto Rico. In order to promote slavery in Puerto Rico, the Spanish government issued an astounding number of laws, decrees, and official decisions that dictated

¹² African American women also resisted efforts to control their fertility. Various techniques of abortion and contraception were used by enslaved women to prevent childbirth and conception. Additionally, some enslaved women engaged in infanticide and courts often punished women for this act (but not because they were concerned about the children’s well-being, but rather about lost assets). Given the misery caused by bondage, infanticide is likely to have been an act of mercy to save children from a lifetime of brutality and punishment under slavery. Roberts suggests that by engaging in infanticide women may have also been acting in defiance against the very system of slavery by not reproducing children for enslavement (Roberts 1997).

women's sexual behavior and reproductive decisions (Morales 1992). To address its concern about miscegenation Spain compelled Spanish women to migrate from Europe to Puerto Rico in order to reduce "intermixture" between Spanish men and native and African women.

Miscegenation, or unions between Spanish, European, and the native people (Tainos and Caribs), posed a threat to slavery because "intermixture" made it more difficult to justify slavery on "racial" grounds due to the fact that when people with different ancestries had children, there were no hard and fast dividing lines in terms of who was and was not a slave (see e.g., Smedley 2007).

In 1526, the King of Spain ordered a brothel to be established for purposes of preventing marriages and/or children being born from unions between people of Spanish and people of African and/or native descent (Morales 1992). The Spanish crown "...feared that large numbers of mulatas and mulatos would undermine slavery..." (Morales 1992:9) because the racial grounds for legitimating slavery would dissolve. Due to its concern about potential under-population, the Spanish government issued repeated proclamations to regulate women's reproduction.¹³ The aim of regulating reproduction was, in fact, threefold: to ensure a sufficiently populated island, to control "racial mixing," and to uphold slavery as a mode of economic production. Thus, controlling the reproductive decisions of women of color was a central tool in imperial policy (Morales 1992; Kuumba 1993; Kuumba 1996). For Mexican women in Alta California, their experiences were similar to those of the women in Puerto Rico.

Some of the first recorded acts of Spanish colonial domination in Alta California were acts of sexual aggression against native women (Castañeda 1997). Indigenous women were considered sub-human by the Spanish soldiers and routinely violated (Smith 2005). As

¹³ Morales (1992) also notes Arawak women and African women in Puerto Rico developed their own means of regulating their reproduction. The women are likely to have used papaya for inducing abortions and higuera to help themselves conceive.

sociologist Elena Gutiérrez recognizes, “Women’s procreation has been a subject of political interest from the time of the Spanish colonization of Mexico,” (2008:9). In a similar vein to the experiences of African American women under the slave mode of production, Mexican women’s reproduction was subjected to the control of European male colonizers.

Whereas on plantations the aim of controlling African American women’s reproduction was to increase the share of slaves (held as wealth by the planter class), in Alta California, the Spanish encouraged reproduction among native “Hispanicized” women and Spanish soldiers in order to ensure a sufficient population for Spanish colonization. This entailed creating a population that was, from the vantage point of the Spanish crown, “Christian” and patriarchal (Castañeda 1997). As a result, “...racially mixed soldier and settler families were recruited, outfitted, subsidized, and transported by the colonial state to populate Alta California and to reproduce Christian family life and society,” (Castañeda 1997:239). Spanish soldiers were given various inducements such as horses, livestock, and land to reproduce with native women for purposes of colonization (Castañeda 1997). Such unions were the subject of contention however.

Throughout the 1700s various accusations of witchcraft were levied upon American Indian and *mestiza* women (Gutiérrez 2007; see also Erikson 1966). Ramon Gutiérrez (2007) contends that witchcraft accusations are often made to clarify boundaries within various societies. Thus, when the “racial” boundaries of the Spanish aristocracy in New Mexico were under attack from “The birth of large numbers of illegitimate and mixed-blood children...” (Gutiérrez 2007:386), witchcraft accusations served as a response to the perceived attack on Spanish “racial purity.” In New Mexico there was a high sex ratio imbalance and this provoked “racial concerns” about the large number of *mestizo* children in widow or single-headed female

families (Gutiérrez 2007). Concerns about “racial pollution” followed the growth of mixed ancestry people in New Mexico and Alta California (Gutiérrez 2007; McCormack 2007). As Ramon Gutiérrez notes:

The aristocratic privileges that Spanish conquerors had bequeathed to their children in the early 1600s had by the eighteenth century come to be seen as an innate quality of their blood. Since maternity was undeniable while paternity was not, the Spanish aristocracy could only be preserved from pollution by guarding the sexual purity of females and discouraging marriage and other forms of sexual mixing with members of lower classes (Gutiérrez 2007:387).

The reproductively exploitative regimes in Spanish America that targeted Native American women ultimately created a large population of “mixed blood” people. By the 1760s, the Spanish government started issuing “writs of whiteness” in response to the prevalence of people with mixed Spanish and African and Native ancestry (Gutiérrez 2007:386). These writs may be considered officially sanctioned “wages of whiteness” (DuBois 1998) that conferred privileges to people with “noble” European-Spanish ancestry. During the same era, the reproduction of American Indian women in other parts of the continent was limited by genocide and forced migration.

The reproductive activities of American Indian women were principally affected by forced migrations and outright genocide by the federal government in the United States. Upon

Columbus' first contact with native people in the Caribbean, he kidnapped native men, women, and children and brought them back to Europe (Stannard 1992). As has been widely documented, European contact with indigenous people in the Americas was an inherently violent and genocidal process (Churchill 1993). However, the conquest of the Americas by the European powers (Great Britain, Portugal, and Spain) also involved distinct ways of manipulating women's reproductive activities.

The "Trail of Tears" experienced by Cherokee people during the nineteenth century disrupted the elaborate rituals of reproduction among Cherokee women. As part of the colonization process, the Anglo power structure worked diligently to reduce Cherokee women's political power, part of which was enshrined in their roles as biological reproducers (Smith 2005; Solinger 2005). In reference to the forced migration of Cherokee people westward, Solinger cites accounts that U.S. army "troops frequently forced women in labor to continue [marching] until they collapsed and delivered 'in the midst of the company of soldiers'" (Solinger 2005:45). Colonial invaders such as Andrew Jackson encouraged the soldiers under their command to kill American Indian women and children as a means of solidifying the takeover of their lands. The Methodist minister Colonel John Chivington is well known for his policy that stated "kill and scalp all little and big" because "nits make lice" (Smith 2005). Because it involved the systematic killing of a population this approach is inherently genocidal. Anglo-American invaders carried out their genocidal policies by creating conditions under which American Indian women would experience high rates of miscarriage, stillbirth, and overall higher infant mortality. To illustrate how different practices characterized the historical experiences of various people of color, I offer a taxonomy that summarizes how racially-targeted population control operated before the twentieth century (see Table 2.1).

Three Dominant Systems of Racially-Targeted Population Control before the Twentieth Century

Conquest of land, colonization, and the establishment of slavery all involved varying but overlapping methods for controlling racialized population sizes to serve the political and economic objectives of capital accumulation. In this manner, the reproductive activities of women of color were subject to the political interests of conquistadors, colonizers, and slave holders.¹⁴

The Spanish colonization project in what came to be called Latin America entailed the establishment of an elaborate colonial bureaucracy and the imposition of Christianity and Spanish morals on native people (Smedley 2007). Like the English in the North American colonies, the Spanish originally intended to enslave Indians, but disease, pestilence, and mistreatment by the Spanish severely reduced the population (Smedley 2007). The Spanish crown responded by outlawing Indian slavery and allowing Africans to be imported as slaves. Smedley (2007) notes that despite a plethora of confusing and contradictory anti-“miscegenation” laws that tried to regulate who could reproduce with whom, extensive inter-“racial” mixing nonetheless occurred throughout Latin America and the Caribbean—which undermined the power of white supremacy (Smedley 2007). While Spanish laws ultimately proved ineffective at preventing inter-“racial” unions, strictly enforced English laws regulating inter-“racial” reproduction were an important part of the Anglo-American process of colonization and conquest.¹⁵

Conquest involves seizing a geographical territory and purging or severely diminishing the population of its original inhabitants. For the multitude of peoples and cultures now called

¹⁴ Kuumba has argued that imperial racist and capitalist power structures literally colonize the wombs of women of color (Kuumba 1999).

¹⁵ As Audrey Smedley notes, unlike the North American colonies where there were severe legal penalties for inter-“racial” marriage, none of the Latin colonies created or enforced laws that strictly prohibited inter-marriage (Smedley 2007:144).

American Indians (or Native Americans), their population history after European contact is one of having the newly emerging white power structure purge their ancestors from seized ancestral lands and cause genocide by germs, force, and broken treaties (Stannard 1992). As noted in Table 2.1, the Spanish policy was to encourage reproduction between American Indian women, who had been acculturated into Spanish life and Christianity, and Spanish soldiers. In addition, marriage of Spanish men to high-status American Indian women was encouraged by the Spanish Crown in some circumstances (Smedley 2007:144). These policies ensured the replacement of indigenous cultures and ways of life with European culture so as to facilitate the accumulation of capital (Almaguer 1994). As Almaguer states, "...in Anglo conceptions of progress, Indians were generally seen as obstacles to civilization," (1994:23).

For women of African descent, the population policy developed under Anglo-American slavery was one that encouraged their reproduction. This "pro-natalist" policy was different from the "anti-natalist" genocidal policy used on American Indians in North America. The idea was to accumulate land capital by de-populating areas where American Indians lived and re-populating those areas with people of African descent who labored under a system of slavery. Population control and racial oppression were directly connected to the imperatives of capital accumulation under the slave mode of production

Table 2.1: Types of Racial Oppression, Main Objectives, and Consequential Population Policy during Conquest, Colonization, and Slavery in the Americas, 1600s-Late 1800s.

Genesis and Types of Racial Oppression	Objectives	Population Policy
Conquest	Seize territory to control land	Discourage reproduction and perpetuate genocide of indigenous people (English and Spanish colonialism)
Colonization	Control of land and expansion of empire	Encourage reproduction of “Hispanicized” native women with soldiers (Spanish colonialism)
Slavery	Exploitation of labor and accumulation of capital	Encourage reproduction of African-origin women (English colonialism)

POPULATION CONTROL AFTER SLAVERY

Eugenics and the Origins of Population Control Ideology

One of the first demographic theorists, Thomas Malthus, is also regarded as a “founding father” of scientific racism (Chase 1977:22). Standard introductory demography textbooks still present the basics of Malthus’ theory (e.g., Weeks 2008) and his essay was very influential on contemporaries like Charles Darwin and Herbert Spencer (Spiegel 1991). Malthus, an English theologian turned economist, devised a theory (1798) which stated that unless human population growth was slowed by “preventative checks,” its size would double every twenty-five years while agricultural growth would only grow at an arithmetic rate provoking an imbalance between population needs and food supply (Hartmann 1995:14). This rapid growth in the size of the population was conceptualized as a catalyst to catastrophe.

Although some contemporary writers still think his theory is correct, Malthus is generally regarded as wrong in his prediction of inevitable mass starvation (Weeks 2008). Contrary to Malthus’ predictions, population growth may slow not because of “natural preventative checks” but because of improving standards of living. For example, people in agricultural societies that

were transitioning to industrial societies did not need large numbers of children (Hartmann 1995). One critique of Malthus is the “demographic transition” theory which has been advanced by sociologists (Thompson 1929). Under the demographic transition, societies shift, with increasing industrialization, from high death and birth rates to low birth and death rates. Studies of the transition in Less Developed Countries (LDCs) indicate that economic development (i.e., industrialization) is important in a transition from high birth and death rates to low birth and death rates (Crenshaw, Christenson, and Oakey 2000).

Although Malthus’ predictions have been at odds with empirical demographic data and dynamics (Chase 1977; Crenshaw, Christenson, and Oakey 2000), his theory has its fair share of supporters. For instance, biologist Paul Ehrlich’s *The Population Bomb* is a neo-Malthusian doomsday prophecy which warns of the dangers of “unchecked” population growth (Ehrlich 1971).¹⁶ Notwithstanding the fact that Malthusian theories are wrong, they have been very influential on public policy. Social policies influenced by Malthusian theory informed sterilization programs for women in the 1920s and 1930s (Shapiro 1985). While Malthusian justification for controlling the reproduction of non-“white” populations continued unabated, a different justification was provided by eugenics with its emphasis on presumed biological inferiority of people of color.

The eugenics movement was begun by nineteenth century English biologists and social scientists who attempted to apply Darwinian Theory to human beings. The goal was to improve the “human stock” by encouraging the reproduction of “fit” individuals. Eugenics was in large part the brainchild of Charles Darwin’s cousin, Sir Francis Galton (Reilly 1991; Zuberi 2001:34). Galton defined his science as that “...which deals with all influences that improve the inborn

¹⁶ Civil Rights activist Julian Bond said of Ehrlich’s popular book, “[it was] a theoretical bomb in the hand of frightened racists, as well as over the heads of black people, as the justification for genocide,” (Littlewood 1977).

qualities of a race; also with those that develop them to the utmost advantage,” (Stern 2005:11).¹⁷ As American scientists and political leaders embraced eugenics, they began implementing eugenics principles in laws. Proponents of eugenics argued that non-“white” populations were contaminating the “white race” and that certain proactive measures such as enhancing the fertility of upper-class “white” women (positive eugenics) and “checking” (negative eugenics) the reproduction of working-class “white” women and especially people of color and non-“white” immigrants were needed (Chase 1977; Ordover 2003). Thus, in varying degrees a mixture of population control ideologies and eugenics ideologies have been used by political elites as justifications for controlling the reproduction of women of color.

Controlling the Reproduction of Women of Color

Before the civil rights movement. In the twentieth century, limiting reproduction by women of color became a major focus of the state and the medical establishment in the United States. In the 1960s, government social programs (Aid to Families with Dependent Children) were used by political elites to implement policies intended to minimize reproduction by women of color. State legislators passed various laws before the 1960s that ultimately set the stage for sterilizing women of color.

Legally sanctioned punitive sterilizations were originally directed at male prisoners and the physically and mentally disabled (Largent 2008). The U.S. Supreme Court case of *Buck vs. Bell* (1927) set the stage for the sterilization of women (Ordover 2003). Between 1928 and 1932, the percent of sterilizations received by male patients dropped from 53 percent to 33

¹⁷ After Darwin’s *On the Origin of Species* was published in 1859, scientists became interested in human variation. Francis Galton, after traveling through Africa, set out to prove that there was a hierarchy of human ‘races’ that placed Anglo-Saxons at the top and people of African descent at the bottom (Larson 1995). He also went so far as to claim that there was a hierarchical difference between English people in England and those who left to populate the Americas. He argued that in England, “Better class Englishmen prefer to live in the high intellectual and moral atmosphere of the more intelligent circles of English society, to the self-banishment among people of altogether lower grades of mind and interest” and that “...England has certainly got rid of a great deal of refuse, through means of emigration,” (quoted in Graves 2001:92).

percent (Ordoover 2003:135). The Buck vs. Bell case was significant in that it set a legal precedent for states to carry out forced sterilization (especially of women) on the basis of the determination of “feeble-mindedness” by a physician.¹⁸ Following the Buck vs. Bell decision, the number of states with enforced sterilization laws increased to thirty (Roberts 1997). Around the time of the Great Depression, eugenically minded political elites shifted their interests concerning reproduction toward African Americans and other women of color.

Several factors have been cited as contributing to the reproductive oppression of women of color during the era of legalized segregation (Solinger 2005:141-2). First, many social scientists in the United States contributed to defining the sexuality of women of color as the “most sexualized.” This rendered any legal right to freedom from rape or any notion of reproductive rights as simply inapplicable to women of color. A second factor was the ideology pushed by Planned Parenthood of America (PPA) that only families with economic wealth had the right to reproduce. As noted by Solinger, in 1948, the soon-to-be director of PPA, William Voigt, published a book, *Road to Survival*, which introduced the idea of paying people to not have children (Solinger 2005). A third factor was, “white resistance to the growing call for civil rights often [taking] the form of claiming that mothers who weren’t white couldn’t or shouldn’t be raising future citizens,” (Solinger 2005:142). Even prior to World War II and during the Great Depression, the prospect of establishing birth control clinics in neighborhoods where African American people lived became a cause célèbre’ among some of the nation’s elite (Littlewood 1977; Roberts 1997; Shapiro 1985).

¹⁸Carrie Buck was sent to live with a peace officer after her mother was declared “feeble-minded” and institutionalized in 1920. In 1923, Carrie Buck became pregnant as a result of rape by her guardian’s nephew (Ordoover 2003). When she told the family of her guardian, she was declared “feeble-minded” and sent to the same Virginia colony as her mother (Solinger 2005:31-32). The Buck vs. Bell (1927) Supreme court decision “...was part of a deliberate and determined effort to situate women as the primary candidates for sterilization,” (Ordoover 2003:135). The court decided that Carrie Buck (and her daughter and mother) were “feeble-minded” thus making them “promiscuous” thereby allowing government supported sterilization of “defectives” to be justified, in the words of Justice Oliver Wendell Holmes, because “three generations of imbeciles are enough,” (Roberts 1997:102).

One account has it that the well-known Speaker of the House in the 1940s, Sam Rayburn (D-Texas), “was ‘brought to his feet with enthusiasm’ when a discussion of birth control focused on rural southern Negroes...’Now you’re really talking, when you’re getting birth control to them,’ he is said to have exclaimed,” (Littlewood 1977:15-16). In North Carolina after World War II, a social worker, Moya Woodside, wrote a report (1950) which detailed the state’s sterilization program. The report placed “an extreme emphasis on African-American women’s sexuality,” (Ordovery 2003:163) and made many outrageous claims that pathologized the reproduction of women of color in contrast with the “responsible” sexual behaviors of “white” women. The more well-known Margaret Sanger often heralded as the heroine of the birth control movement, wrote in a letter (1939) about her proposed “Negro Project”:

[t]he mass of Negroes, particularly in the South, still breed carelessly and disastrously, with the result that the increase among Negroes, even more than among whites, is from that portion of the population least fit, and least able to? rear children properly (quoted in Davis 1981: 208).

The dehumanizing language used by Moya Woodside and Margaret Sanger corresponds to racist and sexist controlling images¹⁹ of African American women and reflects a dominant ideological construction of “black” women as unfit and hyper-fertile mothers who are interested in extracting welfare benefits (Roberts 1997; Collins 2000; Neubeck and Cazenave 2001). Furthermore, Sanger’s “Negro Project” was pushed forward by groups interested in population

¹⁹ Controlling images refer to racist and sexist stereotypes and caricatures of women of color that serve in the sustenance of racial, class, and gender oppression (Neubeck and Cazenave 2001:32).

control to create family planning centers that “...sought to find the best way of reducing the black population by promoting eugenic principles...” and were placed in areas like Macon County, Alabama, where other acts of medical racism such as the Tuskegee syphilis studies took place (Washington 2006). Sanger decided to distribute family planning information in African American churches:

The most successful educational approach to the Negro is through a religious appeal ... We do not want the word to get out that we want to exterminate the Negro population, and the minister is the man who can straighten out that idea if it occurs to any of their more rebellious members (quoted in Washington 2006: 197).

In this “approach” making particular types of family planning services available to women of color suggests that notions of reproductive “choice” are indeed much more complex in a racially oppressive society. Such arguments were designed to legitimize a eugenics-based rationale for giving birth control to women of color. In 1938, Sanger funded an educational campaign for African American fieldworkers and the following year birth control clinics were opened up in Nashville and at Fisk University to serve African Americans. In obtaining funding from Clarence Gamble (heir to the Procter and Gamble company), Margaret Sanger wrote him in a note, “There is a great danger that we will fail because the Negroes think it a plan for extermination. Hence let’s appear to let the colored run it,” (Roberts 1997:78). While such conversations may give the impression that Sanger was a bona-fide white supremacist content to

eliminate African Americans, the political alliances she made with wealthy eugenicists may have been for strategic purposes.

The issue of Sanger's racial bigotry and her advocacy of making birth control available to women of color are more complex than it at first seems. Scholars such as Linda Gordon (Gordon 1976) and Angela Davis (Davis 1981) have argued that Sanger espoused racist eugenics ideologies which informed her work on birth control. Roberts (1997) argued that while Sanger did not express belief in the inherent inferiority of people of African descent, Sanger believed that "black" reproduction caused social disadvantage. Accordingly, when such beliefs were translated into social policy "...these principles inevitably produced policies designed to reduce Black women's fertility," (Roberts 1997:81). More direct policies were applied on the island of Puerto Rico in the late 1930s following the legalization of sterilization there.

Population control programs were established by the United States government in 1930s Puerto Rico as the island industrialized and a large mass of peasant farmers were stripped of their land in a colonization-industrialization project known as Operation Bootstrap. Operation Bootstrap's main consequence was that it generated high levels of unemployment and potentially revolutionary movements (Mass 1976). As part of the colonization process, U.S. capitalist interests were attracted by tax-free investment opportunities and potentially cheap labor guaranteed by the federal government and the Puerto Rican government. Puerto Rican women were considered an important part of the cheap labor equation and sterilization was implemented as a means of "freeing" them for employment rather than providing child-care programs (Hartmann 1995). Women were encouraged to be sterilized, many times at low or no cost. The sterilizations were subsidized by International Planned Parenthood and the Puerto Rican government (which received funds for that specific purpose from the U.S. government).

By the mid-1960s, one-third of ever-married Puerto Rican women (aged 20-49) (on the island) had been surgically sterilized (Presser 1980). Some mainstream demographers and historians argue that because more women entered the labor force, they decided to get sterilized (Presser 1980; Briggs 2002). Critics of imperialism argue that sterilization was instituted as a means of controlling women laborers so that they would spend less time on child rearing and more time at work, with the added benefit that reducing the population size would function to prevent revolutionary movements, which seemed to be a trend in various Latin American countries (Mass 1976; see also Rodriguez-Trias in Hartmann 1995).

Sterilization from the Modern Civil Rights Movement Era and Beyond

Since the 1960s, women's rights groups (and to some extent ethnic nationalist groups) have raised concerns over racially oppressive population control after reports surfaced among activists and women of color that African American, Puerto Rican, Mexican, and American Indian women in the United States were being sterilized without their consent (Davis 1981; Shapiro 1985; Roberts 1997; Silliman, Bhattacharjee, Davis, Women, Population, and Environment 2002; Nelson 2003). One of the key cases that brought racially-targeted sterilization abuse to national attention was the 1973 case of the Relf sisters—two African American early adolescent-aged sisters who were sterilized at an Alabama family planning clinic that received federal funds.

The sterilizations of the Relf sisters. The sterilizations of Minnie Lee and Mary Alice Relf were performed by the Family Planning Clinic of the Montgomery Community Action Committee which was funded and controlled, at the federal level, by the Office of Economic Opportunity (OEO). This case is often cited as an example of sterilization abuse in the form of surgical sterilization (Shapiro 1985), but the case also involved other dimensions of reproductive abuse such as the use of the Relf sisters (including Minnie Lee and Mary Alice's older sister

Katie, aged 17) as guinea pigs for “investigational drugs” (i.e., Depo-Provera injections twenty years prior to their approval by the Food and Drug Administration).

Parental permission for the administration of these shots was never sought nor obtained by the healthcare providers who gave them to the Relf sisters. In early March 1973, Katie Relf was taken to the Family Planning Clinic for insertion of an IUD (intra-uterine device) without permission being sought from her parents. Katie, who was a minor, acquiesced at the urging of clinic staff to accept insertion of the device. Several months later, a clinic Nurse picked up Mrs. Relf and her two youngest daughters and drove them to a physician’s office. Mrs. Relf thought the girls were being taken for the Depo-Provera shots that they had been receiving. Mrs. Relf and her daughters were then transported to the local hospital where the girls were assigned a room. Hospital staff asked Mrs. Relf, who was unable to read or write, to put an ‘X’ on a consent form (later determined to be a document authorizing tubal sterilization for her two youngest daughters). No informed consent was sought nor were details on the nature of the surgical procedure provided (Relf vs. Weinberger 1974). Mrs. Relf was driven home after signing the consent form.

Minnie Lee and Mary Alice were left alone in the hospital ward where a nurse came in and had Minnie Lee sign a document which indicated that she was over age twenty-one (she was in fact fourteen years old). Minnie Lee did not understand what the document meant or authorized (Relf vs. Weinberger 1974). At this point, neither the parents nor the daughters met the physician who was going to perform the operation nor were the two young adolescents or parents aware of what was going to happen to them. Before the operation, Minnie Lee borrowed change from another patient in the ward, called her mother, and asked her mother to take her and her sister home. However, Mrs. Relf did not have any means of getting to the hospital. The next

morning, both sisters were placed under an anesthetic and surgically sterilized. A little known fact is that on the same day the nurse picked up Minnie Lee and Mary Alice, and brought them to the clinic, she returned to the Relf home and attempted to pick up Katie, the eldest sister, to go to the hospital for sterilization. Katie locked herself in her room and refused to go.

The complaint filed by the Southern Poverty Law Center (SPLC) indicated that the sterilizations were abusive and coercive because 1) neither the mother nor her daughters sought for the two young women to be surgically sterilized, 2) prior to the operation neither the mother nor her daughters met the physician who would perform the operation, and 3) before the operation no physician or other healthcare provider discussed the permanent consequences of tubal sterilization with either the mother or her daughters (Relf vs. Weinberger 1974). During the trial one of the sisters was asked if she planned to have children and she answered “yes,” which indicated she was never made aware of the consequences of the surgery. Furthermore, as noted in the legal complaint filed by the SPLC:

When Community Action moved the Relfs to a public housing project in 1971, the Family Planning Service began the unsolicited administration of experimental birth control injections to Katie. No parental permission was sought or given. Indeed, the agency sought out the Relf children as good experimental subjects for their family planning program. The F.D.A. approved this experimental drug for use by the Family Planning Service of the Montgomery Community Action Committee (Relf vs. Weinberger 1974: 9).

In addition to the use of the daughters as unwilling test subjects for Depo-Provera, the clinic used federal funds to pay for the surgery (which arguably qualifies as state sanctioned sterilization). The main reason the clinic stopped injecting the girls with Depo-Provera shots is because it was found to cause cancer in beagle dogs and thus it was decided that sterilization would be an appropriate substitute for the shots (Nelson 2003). Not long after the Relf case, other African American, Native American, and Latina women came forth with similar stories (Davis 1981; Shapiro 1985; Roberts 1997; Nelson 2003). This case is illustrative of a larger pattern of reproductive abuse targeted at women of color.

While some scholars cite it as a case of sterilization abuse, the case has greater significance because it touches upon many elements of racially-targeted sterilization abuse: coercive surgical sterilization, assumptions about sexual behavior of two young women of color, use of a dangerous unapproved sub-permanent sterilizing drug (Depo-Provera), coercing consent to have an IUD inserted (Katie), and manipulating parents through the welfare system to allow their children to be used as a ‘test case’ for the state to see if it could limit the reproductive abilities of women of color. In the end, two young women, at the age of 12 and 14 respectively were robbed of their ability to have children, thereby stripping them of their human right to procreate. In the next section I provide a contextual backdrop that elucidates the larger historical realities prevalent at the time.

The context of social unrest. In the 1960s, scholars and policy elites developed a renewed interest in Malthusian overpopulation ideology. The publication of books such as entomologist Paul Erlich’s (1968) *The Population Bomb* attest to this development. In the book, the author used hyperbolic statements such as “The battle to feed all humanity is over,” (quoted

in Mosher 2008:53) to claim that birthrates were out of control and would inevitably result in a Malthusian and environmental catastrophe of too many people and too little food by the 1970s.

Erlich's failed rhetorical prophecy of overpopulation was able to influence and reinforce the beliefs of fellow travelers in charge of government policy. In a secret 1974 document (declassified in 1990), known as National Security Study Memorandum 200 (NSSM 200), (signed by Henry Kissinger), it was claimed that in "extreme cases where population pressures lead to endemic famine, riot and breakdown of social order...government action, labor conflicts, sabotage, or civil disturbance, the smooth flow of needed materials [to the United States] will be jeopardized," (quoted in Mosher 2008:215). NSSM encouraged governments abroad to intervene in women's reproductive decisions (Mosher 2008). Similarly, physicians and government diplomats argued that the "hyper-fertility" of women in Latin America created "revolutionary pressures," (Solinger 2005:164). A case in point would be the use of Puerto Rico and Puerto Rican women as a test case for implementing massive sterilization-focused population control programs as means of deflating demographic "revolutionary pressures" (Mass 1976).²⁰ A more recent theoretical concept developed by the Central Intelligence Agency is "Youth Bulge Theory."

The Youth Bulge Theory argues that the demographic structure of a society determines whether that society will have incidents of "social unrest" (Fuller 1995).²¹ Such thinking appears to have been prevalent in the United States in the early 1960s. For instance, in the late 1960s, there was the concern in the Nixon administration, reported in a *Washington Post* article, about a "demographic siege," of a "striking bulge" of African American 5 to 9 year olds who

²⁰ One scholar argues that the sterilization of Puerto Rican women has been portrayed as a purely colonial tool and that women in the documentary *La Operacion* (1985) are misquoted to support the hypothesis that mass sterilization of Puerto Rican women was not completely coercive and that some women were exercising agency (Briggs 2002).

²¹ Youth Bulge Theory has been applied as a theory of "unrest" in African and Muslim countries to explain terrorism.

would be teenagers in the 1970s that would consequently produce “....an age group with problems that can create social turbulence,” (White 1969). This came on the heels of the wave of urban rebellions and riots waged in American cities between 1965 and 1968 (Littlewood 1977; Nelson 2003). A government sponsored advertisement in the late 1960s portrayed a link between “overpopulation” and “urban decay, crime, and pollution” with the image of a “black” man depicted as a mugger (Solinger 2005:182-83). Such images reinforced a racist ideology that people of color were reproducing too much and consequently generating social disorder. This ideological framing gave credence to establishing policies of regulating the reproduction of women of color through the state.

Welfare racism and sterilization. The public assistance program for poor children and their families, established in 1935 during the Great Depression as Aid to Dependent Children (ADC), was operated in a racially exclusive manner (Quadagno 1994; Neubeck and Cazenave 2001). From the program’s beginning various eligibility requirements were applied that produced a racially-exclusionary system of benefit payouts (Neubeck and Cazenave 2001:59-62). These included “suitable home policies,” “man in the house policies,” and residency requirements. While on their face such policies seem “color-blind,” Neubeck and Cazenave (2001) argue that state variants of these guidelines were implemented to deny benefits to women and children of color. This was accomplished through both racial disparities in eligibility requirements and benefit levels. After World War II, the public assistance rolls began to “darken” as women and children of color gained access to programs that previously excluded them. As women of color began to use public assistance in the United States, caseworkers and others often manipulated the stigmatizing situation to influence the reproductive activities of women of color.

In the case of the Relf sisters I outlined above, their parents were receiving public assistance and when the medical staff visited them they acquiesced in part due to the deception involved, but also because of the implied threat of public assistance benefit loss for failure to comply. Similarly, in 1965, Ruth Nial Cox, an African American woman, was sterilized at Washington County Hospital in North Carolina (Ordover 2003). Ms. Cox stated that when she turned eighteen years of age, a welfare caseworker told her that unless she underwent a tubal sterilization, her family would no longer receive public assistance benefits (Roberts 1997). The doctor was said to have told Ms. Cox that the procedure would eventually reverse itself. Harriet Washington (2006) reported on her stint as a social worker in upstate New York during the 1980s where she had looked over old case files from the 1960s and 1970s and found that social workers who performed “man in the house” raids would often coerce African American women into getting sterilized. In sum, “whites” have used the public assistance system as a means of controlling the reproductive activities of women of color.

Coercive and deceptive sterilizations targeting women of color. Throughout the 1960s and 1970s women of color continued to find out and raise publicly that they had been the victims of coercive and deceptive sterilizations. On reservations where American Indians lived, the federal Indian Health Services (IHS) engaged in a campaign of sterilizing native women. For instance, Dr. Connie Pinkerton-Uri, an American Indian physician, began looking into sterilization patterns after a twenty-six year old woman walked into her Los Angeles clinic and asked for a “womb transplant” (Lawrence 2000). The IHS doctor who performed the hysterectomy on the woman told her six years earlier that the procedure was reversible. The woman left Dr. Pinkerton-Uri’s office in tears (Lawrence 2000). Myla Vincenti Carpio

introduces her work on the coercive sterilization of American Indian women with an account from a woman who called into an American Indian radio talk show in 2002:

I had been sterilized at the age of eleven, at the IHS [Indian Health Service] hospital here in the early 1950s. I got married in the 1960s and I went to the doctor and he told me that I had a partial hysterectomy. [When I was a child] they were giving us vaccinations and mine got infected and a nurse came and gave me some kind of shot so I wouldn't hurt. When I woke up my stomach was hurting and I was bleeding (quoted in Carpio 2004:40).

After several years of her own investigation, Dr. Uri convinced the Democratic Senator from South Dakota, James Abourezk, to initiate what later became a Government Accounting Office (GAO) investigation (Ralstin-Lewis 2005). As D. Marie Ralstin-Lewis and others have noted (2005: 80-81) noted, "The GAO report (HRD-77-3) has been called 'only the tip of the iceberg of United States government sponsored sterilizations conducted on American Indians.'"

American Indians--following Dr. Uri's research--accused the federal government of sterilizing nearly 25 percent of American Indian women of childbearing age (15 through 44) in the 1970s (Lawrence 2000; Smith 2005). Senator Abourezk noted that the high rate of sterilization of Native American women (3,406 women), given their smaller relative population size would be on the scale of sterilizing 452,000 European American women (Ralstin-Lewis 2005). Other activists reported different figures. Women of All Red Nations (WARN) reported that nearly 50 percent of native women had been sterilized (Smith 2005). The limitations of the

GAO study included the fact that its focus was restricted to only a handful of IHS hospitals, its reliance on IHS documents, and its failure to interview medical staff and women who were operated on (Carpio 2004). The experiences of American Indian women are troubling because with such low population numbers in the United States and higher levels of infant mortality and morbidity at all ages, a high rate of sterilization could result in *de facto* genocide, especially for less populous American Indian nations.

In a vain similar to the experiences of American Indian women, Puerto Ricans in the United States and in Puerto Rico (as a colonial possession) share much in common with respect to sterilization. Demographers and other historians have suggested that sterilization is a “grassroots response by Puerto Rican women” to control their own fertility (Presser 1980; Briggs 2002). In contrast, González et al. (1982) contend that “because of the high rate of unemployment in Hartford, the housing crisis, and inadequate and poorly distributed health, educational, and social services, Puerto Rican women face enormous social and economic pressures which push them toward sterilization as their only birth-control option,” (González et al. 1982:55). One of the significant findings in this study was that in the 153 households on a two block neighborhood in Hartford, CT, over 50 percent of the women were sterilized. More recently, anthropologist Iris López conducted an ethnographic and interview study of sterilized Puerto Rican women in New York City and found that some of her interviewees were coerced or deceived into getting sterilized (López 2008). A large number of her respondents thought there was a distinction between getting one’s tubes “tied” vs. “cut” although medically there is no distinction and many were pressured by healthcare workers. While “La Operacion” (the term for surgery in general used to describe tubal sterilization by Puerto Rican people owing to how

omnipresent it became) was pervasive in Puerto Rico, Puerto Rican women in the United States also encountered a system of reproductive population control that encouraged their sterilization.

Mexican-origin women's reproductive practices have long been characterized by the American media using controlling images (Collins 2000) of the "hyper-fertile" Latin woman. This image can be traced back to Spanish conquest (Gutiérrez 2003; 2008). Sociologist Elena Gutiérrez has argued that the stereotype of Mexican and other Latin American origin women as "breeders" can foster policies and practices which "...leave ample room for individual coercion and the implementation of abusive policies," (Gutiérrez 2008:127). Anti-immigration sentiment evinces a heavy-handed obsession with the reproductive capacities of women of Mexican-origin (Chavez 2004; 2008). In the lead up to Proposition 187 (a 1994 California ballot initiative to prohibit undocumented migrants from using social services and other aspects of public assistance) a specific point was made by the governor to deny undocumented immigrants any type of medical care. Governor Pete Wilson made explicit a policy to deny *prenatal care* to undocumented immigrants (Chavez 2008). This is a precise move that illustrates how racially-targeted population control operates at the structural level when political elites design state policy to discourage the fertility of Mexican-origin women. By not making pre-natal care (in addition to other social services) available, the likelihood of infant mortality is increased and the ideology that Mexican-origin people should not have children in the United States is legally sanctioned.

In the 1970s, ten Mexican-origin women sued the Los Angeles County hospital after they were coerced into getting sterilized. Many of the women spoke only Spanish but were given English consent forms and some women were denied painkillers until they signed the consent form (Vélez-Ibáñez 1980; Gutiérrez 2008). One whistleblower, a medical student who was

employed by the hospital where the sterilizations (of possibly hundreds) took place, testified that the sterilizations were “part of a concerted attempt by the doctors at the Women’s Hospital of Los Angeles County Medical Center to reduce the birth rate of Mexican-origin women...in accordance with an attitude widespread in the hospital community that the high childbearing rates of Mexican-origin women contributed to many social problems and could effectively be remedied through sterilization,” (Gutiérrez 2008:2).²² Surgical sterilization is therefore justified on the grounds that it eliminates social problems and poverty. In the early 1990s, newer forms of temporary provider-controlled sterilization drugs were introduced that were claimed by some to be the solution to social problems such as poverty.

New Forms of Sterilization: Norplant and Depo-Provera

Norplant. In December of 1990, a new birth control pharmaceutical drug was approved by the U.S. Food and Drug Administration (Samuels et al. 1992; Roberts 1997). The drug, Norplant, was designed to temporarily sterilize a woman for up to five years. Norplant involved the surgical insertion of six silicone rods into a woman’s upper arm (Burnett and Songster 2000:258). Over its life course, the Norplant insertion slowly releases levonorgestral—a hormonal contraceptive that is chemically similar to the ingredients of birth control pills (Roberts 1997).

The origins of Norplant are of interest because the blueprints for the contraceptive device were devised by Population Council scientists during the late 1960s, as the anti-war and civil rights movements were reaching their apex. Development of the drug began in the late 1960s when the idea of overpopulation was promoted in popular books such as Erlich’s *The Population Bomb* (as noted above) and proposals for involuntarily preventing women’s reproduction took

²² According to Dr. Bernard Rosenfeld, one of the whistleblowers at LACMC in the Madrigal vs. Quilligan case coercive sterilization practices persist today (personal communication to Thomas Volscho, May 29, 2008).

center stage such as in Dwight Ingle's book *Who Should Have Children?* (Ingle 1973). In fact, as Dorothy Roberts reports, Ingle proposed the idea of an "antifertility agent" to be placed under the skin of every woman of childbearing age (Roberts 1997:110). The idea of putting an "antifertility agent" in local drinking water supplies was also reviewed as a potential approach to "the overpopulation problem" by a social scientist in *Science* (Berelson 1969).

By the early 1990s, it became clear that Norplant was being targeted at women of color-- African American women and American Indian women (Roberts 1997; Thomas 1998; Neubeck and Cazenave 2001). A 1993 study by the Native American Women's Health Education Resource Center indicated that Norplant (and Depo-Provera) were being aggressively marketed by the IHS and that doctors were routinely giving Norplant to developmentally disabled American Indian women (Smith 2005). Norplant was not marketed to European American women. The *Wall Street Journal* subtly suggested that women of color are the main users of the drug when a writer stated "Norplant, which is primarily used by low-income, inner-city women," (Cohen and Hensley 2000). Although Norplant was taken off the market in the United States in 2002 by its distributor (Wyeth Pharmaceuticals) in July of 2006 as a result of mounting lawsuits, a successor to Norplant, Implanon, which consists of a single silicon rod, was expected to begin distribution in the United States in 2007. Although Norplant is currently off the U.S. market, knowing its history is important for understanding past efforts to control the reproductive activities of women of color. Understanding the history of Norplant is also important because of similar contraceptive technology that may be available in the future.

Depo-Provera. Depo-Provera is an intramuscular injection of progestin that inhibits ovulation for three months (Gibbs and Danforth 2008). The shot works by preventing ovulation as well as by thickening the cervical mucus to prevent the penetration of sperm (DeGroot and

Jameson 2006). Normal ovulatory menstrual cycles may not return for up to several months after the last injection (Gibbs & Danforth, 2008). Depo-Provera (henceforth DP) is a provider-controlled form of contraception that has several advantages compared to other methods of birth control.

A single injection of DP is effective in preventing conception for three months. This is an advantage over the pill because the user does not have to remember to take it every day. Since DP does not contain estrogen, risks associated with increased estrogen levels are absent. Other advantages, from a population control perspective, is that DP benefits from the “injection mystique” in that “in many areas of the Third World, people associate injections with safe, effective, modern medicine, and are thus eager to receive them,” (Hartmann 1995:201). Although there are various benefits from DP as a contraceptive, there are also concerns about potential side effects.

The potential side effects of DP include irregular menstrual bleeding and weight gain (Berenson, Odom, Breitkopf, and Rahman 2008), adverse effects on bone density (Pitts and Emans 2008), and a potentially increased risk of cervical cancer (McFarlane-Anderson, Bazuaye, Jackson, Smikle, and Fletcher 2008). On the idea that DP directly increases the risk of depression, the evidence is weak (Westhoff 2003; Berenson, Odom, Breitkopf, and Rahman 2008). However, it is possible that since DP leads to weight gain, depressive symptoms may be triggered by weight gain as a secondary side effect. Another concern with DP is the increased risk of sexually transmitted diseases (Martin et al. 1998). Concerns about the potential carcinogenic side effects of DP were substantial enough that the Food and Drug Administration (FDA) prevented the original manufacturer, Upjohn, from distributing it for contraceptive purposes several times in the 1970s and 1980s (Silliman 2004; Caron 2008). Although Upjohn

was based in the United States and the FDA banned DP for contraceptive purposes, the company marketed the shot for contraceptive purposes in other countries.²³

From its inception, the development of Depo-Provera was fraught with charges of discrimination against women of color because women of color disproportionately served as “guinea pigs” to test this drug both internationally and within the United States (Ordover 2003; Caron 2008). From 1967 through 1978, the largest test of Depo-Provera on humans ever conducted was carried out using a disproportionate number of African American women (Smith, 2005). In the documentary film, *The Ultimate Test Animal*, Karen Branan interviewed several of the thousands of African American women who were unaware at the time that they were participating in a clinical trial of DP at the Grady Clinic in Atlanta, Georgia (Branan 1985).

The documentary also found racial disparities in the way patients were informed of the FDA’s stance on DP. For one European American woman, a physician stated: “Ok, now as always, you are aware that Depo-Provera is not approved by the Food and Drug Administration, we talked about that... You’re also aware about the beagle dogs developing breast tumors, some of them malignant when given Depo-Provera over a long period of time,” (Branan 1985). This can be compared to how an American Indian patient was informed of the FDA’s stance on DP: “Another thing that you need to know is that this shot is not approved for use for birth control by the FDA, which we think is stupid.... You’re obviously not a beagle dog and you obviously do not get as high a dose as they gave the dogs, but in any case we are obligated to tell you that,” (Branan 1985). The differences are suggestive of how racial discrimination in the reproductive healthcare provider-patient interaction may operate and should encourage us to think more carefully about racial discrimination in reproductive healthcare.

²³ Shipments of Depo-Provera in the 1990s and 2000s are heavily targeted at the African continent. USAID sends more shipments of Depo to Mozambique, Tanzania, and Nigeria than anywhere else in the world (Mosher 2008)

Limitations of Historical, Case Study, and Ethnographic Studies of Sterilization

The history of controlling the reproductive activities of women of color in the United States is developed around rich case studies of documentary, ethnographic, and other qualitative evidence which indicates that women of color were targeted for sterilization by policymakers, elites, and physicians. The literature I have reviewed indicates that while much is known about specific cases of coercive and/or deceptive sterilizations of women of color, we know less about nationwide trends in surgical sterilization and use of temporary agents like Norplant and Depo-Provera.

What are the nationwide trends in the tubal sterilization of women in the United States? Are there racial disparities in who has been sterilized? One possibility is that the historical and case study evidence presented thus far are specific and isolated cases of abuse that are not representative of the experiences of women of color. Another possibility is that there are pan-ethnic and other ethnic disparities in sterilization and the use of long-acting provider controlled contraception such as Norplant and Depo-Provera. To begin to answer these questions, I will review quantitative empirical studies of tubal sterilization, sterilization regret, and the use of Norplant and Depo-Provera. By reviewing the quantitative studies of sterilization, we can get a picture of who gets sterilized, who regrets getting sterilized, and who is most likely to use long-acting hormonal contraceptives that function as temporary sterilization.

REVIEW OF QUANTITATIVE STERILIZATION STUDIES

In this section, I review several multivariate studies of three sterilization outcomes: tubal sterilization, sterilization regret (i.e., desire for reversal) after tubal sterilization, and Norplant and Depo-Provera usage. First, I focus on tubal sterilization not only because it is the most popular method (Chandra 1998), but because it is the method most commonly associated with

sterilization abuse (Ross 1994). Second, I examine sterilization regret (desire for reversal of tubal sterilization surgery) because remorse may indicate less-than-voluntary decision-making. Finally, I focus on two provider-controlled methods of temporary sterilization, Norplant and Depo-Provera, that were involuntarily tested on and given to women of color in the United States and abroad (Smith 2005).

Studies of the Correlates of Female Sterilization

Sterilization studies are typically highly technical assessments of how a series of variables impact the likelihood of a woman undergoing sterilization. None of the studies reviewed here use a racism approach to examine or interpret disparities in sterilization, yet the entire set of studies reviewed find some type of “racial” disparity in sterilization. In this dissertation, I interpret pan-ethnic and other ethnic disparities, in their multivariate context, as *net inequality of outcomes conditional on pan-ethnic or other ethnic group identity*²⁴ Furthermore, most of the studies do not offer any evidence or arguments of interpretation beyond simply explaining variation in the probability of undergoing sterilization using a list of socio-demographic, fertility history, and other variables.

One of the earlier multivariate statistical studies of sterilization differs from the rest in that the author takes seriously the issue of racial discrimination (Shapiro et al. 1983; Shapiro 1985). Shapiro tested the following hypotheses 1) Fertility Thesis: women with higher parity (i.e., number of previous live births) are more likely to get sterilized because they do not want any more children; 2) Racial Thesis: “minorities” are more likely to get sterilized because of discriminatory practices that seek to curtail the growth of “minority” populations, and 3) Poverty/Class/Welfare Thesis: Sterilization will be inversely related to socio-economic status

²⁴ By net inequality, I mean racial disparities that remain after adjusting for potential confounding factors that could conceivably explain away racial disparities.

(Shapiro, Fisher, and Diana 1983:1849). Shapiro's (1983) study is remarkable because it is much more critically minded (in terms of discussing issues of power, racial, and class discrimination) than nearly all of the other quantitative studies of sterilization.

Shapiro tested these hypotheses using the 1976 National Survey of Family Growth (NSFG) and limiting the sample to ever-married women with three or more live births. He finds support for the Fertility Thesis, and the Poverty/Class/Welfare thesis, but not the Racial Thesis. In fact, he finds that "minorities" are *less likely* to be sterilized. There are several problems with this study. First, the author performs a logistic regression²⁵ on a sample limited to women who have had three or more live births while not providing a reason for doing so. Second, the dependent variable used by the author collapses several different types of sterilization (tubal ligation, hysterectomy, vasectomy, and other sterilizing operations vs. not surgically sterilized) into a dichotomous measure. This is problematic because hysterectomies are typically done for medical reasons unrelated to contraception (Godecker, Thomson, and Bumpass 2001) and vasectomies are usually acquired by wealthy European American men and not as part of any eugenics program. Finally, it is worth noting that Shapiro collapses Latinas and African Americans into a single dimension: "minorities." Shapiro et al.'s (1983) study contributes to the literature by showing that women receiving public assistance are more likely to be sterilized. Other studies have focused on racial disparities in addition to other explanatory factors.

For example, Mosher and Goldscheider (1984) examined how religious factors influenced contraceptive use. In their study, they use "a very large national sample of married

²⁵ Logistic regression is a statistical method that differs from linear regression in that the dependent variable is assumed to be a dichotomous outcome whereas linear regression assumes a continuous outcome. Use of the linear regression model for a dichotomous dependent variable (the linear probability model) poses problems for interpretation in that predicted probabilities can fall outside the bounds of (0,1). Multinomial logistic regression, which is mentioned below, is a further application of this technique when the dependent variable is composed of several discrete categories (Gelman and Hill 2007).

women to show that religious affiliation and race are important factors affecting the contraceptive practice of married couples,” (Mosher and Goldscheider 1984: 101). The authors combine the 1973 and 1976 NSFG (which only included ever-married respondents) and use cross-tabular analysis to stratify by “race” and religion.²⁶ The authors focus on their finding that differences in contraceptive practices between religious groups have converged (once large differences between religious groups in the 1950s were much smaller in the 1970s). Regarding racial disparities, the authors note: “In general, differences in contraceptive use by race are larger than those by religion...This paper has documented that the role of religious and racial differences in contraception should be considered,” (Mosher and Goldscheider 1984:109). In light of what they find it is interesting to note that the authors virtually ignore the evidence of racial disparities and never discuss the possibility of discrimination.

Likewise, a Centers for Disease Control study of surgical sterilization (Chandra 1998) repeatedly notes a pronounced racial disparity in sterilization between 1973 and 1995. According to the author, “Tubal ligation accounted for the bulk of the increase in surgical sterilization since 1973 across all three racial/ethnic groups, but this was particularly the case among black women,” (Chandra 1998: 4). In a somewhat impromptu manner and after repeatedly noting the glaring increase in tubal sterilization for African American women, the author estimates a logistic regression where the dependent variable is the same collapsed dichotomous outcome measure as in the Shapiro study, but using 1973 and 1995 NSFG data. The author finds a statistically significant lower likelihood of ever-married African Americans and Latinas getting sterilized than European American women (ever-married age 15 through 44).

²⁶ The authors also used a dummy-variable (multiple classifications) regression to make an adjustment to observed proportions sterilized controlling for age and education.

Because the author has collapsed several different types of sterilization into a single dichotomous measure, the critiques of Shapiro I mentioned above also apply. Furthermore, the author does not disaggregate Latina into more specific ethnic groups (e.g., Puerto Rican, Mexican, Cuban, etc.). Finally, the author makes a logically fallacious interpretation of racial disparities by concluding that, “In these regression models, black race did not show a significant net effect on surgical sterilization in either 1973 or 1995....,” (Chandra 1998:6). Such an interpretation is incorrect because “black race” is not a real thing and therefore it cannot “show a significant net effect” on anything (Zuberi 2001). A better interpretation would be that there is an unexplained racial disparity that is unaccounted for by the variables in the model such that African American women have a greater (or lesser) likelihood of having been sterilized than comparable European American women.

In more recent studies, such as (Bumpass, Thomson, and Godecker 2000; Godecker, Thomson, and Bumpass 2001), researchers have explicitly limited their studies to tubal sterilization. In Bumpass et al. (2000), the authors find that African American women in married couples are 2.2 times more likely and Latinas 1.8 times more likely than similarly situated European Americans to have undergone tubal sterilization. Also, African American and Latino men are much less likely to have undergone a vasectomy, but “Nonetheless, the higher rate for black wives (tubal sterilization) *more than compensates* for the low rate (vasectomy) among black husbands,” (Bumpass et al. 2000: 943, emphasis added). Similarly, Godecker et al. (2001) find an unexplained higher rate of tubal sterilization among African American women. In Table 3 of their study, their Cox Regression models indicate that African American women have a 55 percent higher risk of tubal sterilization than a comparable European American woman conditioning on cohort, region, education, marital history, and parity. The unexplained higher

rate for Latinas disappears after adjustments for parity and marital status. While these analyses are sophisticated, they commit the error of collapsing various Latin American ethnic groups into a single homogenous category. Furthermore, none of these studies use any type of racism or discrimination theory to try and explain the unexplained higher likelihood of women of color undergoing sterilization.

The most recent study of tubal sterilization (Borrero et al. 2007a) is unique in that it is published in a highly regarded medical journal (*Obstetrics and Gynecology*). A brief allusion is made to racist reproductive control programs when the authors state, “Because there has been a history of involuntary sterilization of poor and minority women in the United States, it is important to understand the factors that underlie persistent racial or ethnic differences in sterilization rates,” (Borrero et al. 2007a: 94). However, most of the study is framed as a study of accounting for disparities with little time spent on their etiology. None of the other quantitative studies of sterilization make any reference to this history either in reviewing literature or in speculating about the interpretation of statistical results that contain “racial” disparities.

Borrero et al. (2007a) use the most recent NSFG survey (2002) and estimate a logistic regression where the dependent variable is the respondent’s answer of “yes” or “no” to having ever been tubally sterilized. This study explicitly examines “race” as an important variable and finds evidence that African American women are about 23 percent more likely to have ever been tubally sterilized than European American women after holding constant age, insurance status, poverty, education, parity, marital status, and religion. The authors find no statistically significant difference between Latinas and European American women. This study is useful, but

may be statistically underpowered,²⁷ and since the earlier NSFG surveys asked the same question about having ever been sterilized, a more methodologically sound approach would be to pool the 1982, 1988, 1995 and 2002 NSFGs into a single dataset and obtain estimates that can be tested for change over time (a summary of various multivariate sterilization studies is presented in Table 2.2).

I propose to correct many of the limitations in the aforementioned studies by using the waves of the NSFG stretching from 1982 to 2002 to estimate historical trends in pan-ethnic and other ethnic disparities in sterilization. Furthermore, I plan to include American Indian women and to disaggregate, to the extent possible, the pan-ethnic category of Latinas in order to get more nuanced and historically informative estimates of sterilization patterns. In the next section, I will review several studies of post-sterilization regret among women in the United States. Because the historical and ethnographic literature has emphasized coercion targeting women of color, it follows that we should observe higher rates of sterilization regret among women of color.

²⁷ Statistical power refers to the sample size needed to make accurate and better statistical inferences (Gelman and Hill 2007).

Table 2.2: Previous Studies that Consider Racial Disparities in Female Sterilization

Study	Type of Sterilization	“Race” Categories	Sampling Technique and Statistical Method	Data Set and Sample Size	Outcomes
Shapiro et al. (1983)	Any type of sterilization surgery	“Nonwhite Race”	Multi-stage probability, logistic regression.	NSFG (1976) N=4,651	Women of color <i>less</i> likely sterilized (p<.05)
Mosher and Goldscheider (1984)	Any type of sterilization surgery	“Black” and “White”	Multi-stage probability, cross – tabulation.	NSFG (1973 and 1976) N=14,048	“Black” women more likely sterilized
Eckhardt and Hendershot (1984)	Any type of sterilization surgery	“Black” and “White”	Multi-stage probability, linear probability model	NSFG (1976) N=8,611	“Black” women <i>less</i> likely to be sterilized
Chandra (1998)	Any type of sterilization surgery	“Hispanic,” “Non-Hispanic Black,” “Non-Hispanic White or Other”	Multi-stage probability, logistic regression	NSFG (1973 and 1995) N=9,797 N=10,847	“Black” women <i>less</i> likely to be sterilized
Bumpass et al. (2000)	Tubal sterilization, Vasectomy	“White,” “Black,” and “Hispanic”	Multi-stage probability, multinomial logistic regression	NSFG (1995) N=2,158	“Black” women more likely to be sterilized, husband less likely to use vasectomy
Godecker et al. (2001)	Tubal sterilization	“White,” “Black,” and “Hispanic”	Multi-stage probability, Cox proportional hazards	NSFG (1995) N=10,277	“Black” women <i>more</i> likely to be sterilized
Borrero et al. (2007)	Tubal sterilization	“White,” “Black,” and “Hispanic”	Multi-stage probability, logistic regression	NSFG (2002) N=7,643	“Black” women <i>more</i> likely to be sterilized

Studies of the Correlates of Female Post-Sterilization Regret

Since tubal sterilization is a permanent procedure, the issue of whether women who have undergone the procedure later express regret is a topic of interest among scholars (Henshaw and Singh 1986). An analysis of racial disparities in sterilization regret is important because remorse may indicate that the choice was less-than-voluntary. Authors of sterilization regret studies typically estimate a logistic regression with a dichotomous response category to the question of whether or not respondents desire to have their sterilization procedure reversed. The studies I review are restricted to samples of women in the United States. The two major datasets used in sterilization regret studies are the Collaborative Review of Sterilization (to which I do not have access)²⁸ and the National Survey of Family Growth (NSFG).

As in the study of tubal sterilization, Borrero et al. have also used the 2002 NSFG to examine sterilization regret (Borrero et al. 2007b). The authors stated as their objective, “to examine the independent effects of race/ethnicity and insurance status on the desire for tubal sterilization reversal,” (Borrero et al. 2007b:272). A problem with their study is that the concept of both “ethnicity” and “race” are not real “things” (Zuberi 2001) and therefore cannot have “independent effect(s)” on anything. The authors are instead attempting to isolate unexplained sub-group differences delineated by respondents “racial” self-identity after controlling for confounding factors.

In their study, Borrero et al. (2007b) estimate the “effects” of “race/ethnicity,” insurance status, age at sterilization, poverty, education, parity, and marital status on the desire for reversal of tubal sterilization. When examining the entire sample, the authors do not find evidence of racial disparities in sterilization regret. However, when they performed estimates on a sample of

²⁸ I do not have access to this unique clinical dataset because of privacy restrictions imposed by the data collecting entities.

women age 30 or older at the time of sterilization, African American women are nearly three times as likely as European American women to desire reversal.

Another study, which used clinical data from the U.S. Collaborative Review of Sterilization found that, “Among women 30 years or younger at sterilization, those who were unmarried (31.0%) or black (29.5%) had the highest cumulative probabilities of regret during the 14 years after sterilization,” (Hillis et al. 1999:893). One of the major limitations of these data is that the authors’ “...findings cannot be directly extrapolated to the entire United States because our cohort was not specifically selected to represent the entire population of women undergoing sterilization in this country (e.g., our cohort included a higher percentage of black women than in the U.S. population of women who undergo tubal sterilization),” (Hillis et al. 1999:894). An unanswered question is why there are so many “black” women in their particular population, despite the limitations of the sampling framework noted by the authors.

A later analysis of the U.S. Collaborative Review of Sterilization (Jamieson et al. 2002) found similar patterns. With regards to racial disparities, they found “Young age at the time of sterilization, black race, less education, and the husband or partner feeling more favorably about the sterilization than the wife were all risk factors for regret among women who underwent tubal sterilization,” (2002: 1075). The limitations of sterilization regret studies based on the U.S. Collaborative Review of Sterilization (CREST) include a non-representative sample and a short time period of five years. An analysis of the NSFG, however, can solve the problem of a non-representative sample and can detect overall historical trends in sterilization regret if they exist. Furthermore, the NSFG is publicly available and has more comprehensive pan-ethnic and other ethnic category identifiers than CREST.

Past research is limited in that analysts have only focused on single cross-sections and have not tested for historical trends in sterilization regret. American Indians have been ignored in the research as have the experiences of Latinas. I propose to rectify these problems in the literature by conducting a study of sterilization regret among sterilized women that examines historical trends from the early 1980s to the early 2000s and includes estimates for American Indian women and Latinas in addition to African American and European American women. While my analysis of sterilization regret is focused on sterilized women, what about unsterilized women? In the following section I will review the literature on the use of long-acting hormonal contraception by non-sterile women. Long-acting provider-controlled contraception functions as temporary sterilization. Since this is the closest method to permanent sterilization, it follows that there may also be pan-ethnic and other ethnic disparities in its usage. In the next section I will discuss the literature on Norplant and Depo-Provera use.

Studies of the Correlates of Norplant and Depo-Provera Usage

There are very few studies of the likelihood of Norplant or Depo-Provera usage. Since Norplant and Depo-Provera are controversial forms of temporary sterilization that became available in the 1990s (possibly as a substitute for permanent tubal sterilization), it is important to understand racial disparities in their usage. Sociologist Jennifer Malat's benchmark study of racial disparities in Norplant use stands as one example where a study examined racial disparities carefully. As a justification for her study, the author stated, "How race impacts Norplant use in the United States is unknown. The few published studies that have quantitatively examined Norplant use by race represent only limited geographical areas and ignore the significance of race in understanding medical and reproductive issues," (Malat 2000:1298). Malat used the 1995 NSFG to study racial disparities in Norplant usage. The dependent variable is whether or

not the respondent is currently (within the last month) using Norplant for contraception. Specifically, Malat tested for differences between African Americans, Native Americans, and “Whites.” She included a dummy for “Hispanic origin” but did not integrate this into her other measures of ethnicity. Control variables included type of clinic the woman visited to obtain Norplant, method of paying for the implant, poverty status, parity, education, and marital status. In her multiple logistic regressions she finds that once clinic provider, payment method, and socio-economic variables are controlled, the disparities between African Americans and “whites” disappear. However, differences in (current) Norplant use between Native Americans and “Whites” remain statistically significant even with all the control variables.

One interesting thing to note about Malat’s (2000) study is that in she presents two pieces of data by ethnicity and “Hispanic” origin: the percent of women who have ever used Norplant and the percent of women who are currently using it. The author does not analyze “ever use” as a dependent variable. This is important because racial disparities in *some kind of exposure* to Norplant might be important evidence if discriminatory dispersal of the implant is taking place, as critics contend (Roberts 1997).

The literature on racial disparities in Norplant usage is limited to Malat’s study, whereas a few clinical studies exist on Norplant that indicates evidence of higher Norplant usage among young African American women (e.g., Cullins et al. 1993). However a clinical study is not a random sample of the population. I have not been able to locate studies of racial disparities in Depo-Provera usage. Since Norplant and Depo-Provera have been approved only since the early 1990s, I will use the 1995 and 2002 NSFG (the only NSFGs with data on Norplant and Depo-Provera) to look at short-run trends in Norplant and Depo-Provera usage and test for pan-ethnic

and other ethnic disparities in both ever-use and current usage. This will comprise the final empirical aspect of the dissertation.

Summarizing the Next Steps

The data analysis chapter (4) will be organized following the way the sample is partitioned. First in Section One of Chapter Four, I will test for the existence and potential trends in racial disparities in tubal sterilization among women. In Section Two, I will take the part of the sample from Section One which has been sterilized and test for the existence and potential trends in racial disparities in sterilization regret. Finally, I will take the other part of the full sample from Section One, women who have not been surgically sterilized, and test for the prevalence and patterns of racial disparities in Norplant and Depo-Provera usage. Because most of the literature is both ahistorical and atheoretical, I have provided a review of the history of controlling the reproductive activities of women of color in this chapter. In the next chapter (Chapter Three), I will provide a review and a conceptualization of racism theory that can explain the existence and persistence of racial disparities in sterilization outcomes. This will include a discussion of how to conduct a racism study when data designed to study racism are not available.

CHAPTER THREE

THEORIES AND METHODS FOR THE STUDY OF RACIALIZED PAN-ETHNIC AND OTHER ETHNIC DISPARITIES IN STERILIZATION

In this chapter, I present the theories, methods, and methodological issues pertinent to this dissertation. In the theory section, I review the rational choice theory of contraceptive sterilization and then, noting its limitations for explaining racial disparities, I develop a racism theory of racial disparities in contraceptive sterilization. My review of non-racism theories is sparse because scholarly works on contraceptive use is limited by what C. Wright Mills called “abstracted empiricism” (Mills and Gitlin 2000:50). That is, in quantitative studies of sterilization, there is much accounting of statistical differences, but little theoretical reflection on why the differences exist.

In the methods and methodological issues sections of this chapter, I present literature on the methodological challenges to studying racism when data designed for the study of racism are unavailable. I argue that the data analysis in this dissertation is a “strong-conceptual weak-data” case²⁹ for racism because my data are limited to pan-ethnic and other ethnic *disparities* in reproductive healthcare outcomes. A sole focus on racial disparities is limiting because they do not tell us anything about the causal mechanisms that produced them. Thus, one could make the argument that racial disparities in sterilization, after adjustment for potential confounding variables, reflect the exercise of choice by women of color that differs from European American women’s preferences for sterilization. Similarly, one could make the argument that reproductive healthcare providers discriminate against women of color and push them toward sterilization. Below I will explore the problem of interpreting racial disparities as causal effects and the

²⁹ Noel Cazenave came up with this idea to overcome the conundrum of doing a racism study without racism-specific data.

difficulties of eliminating alternative explanations for racial disparities given limitations³⁰ in the available data. The next section begins with a review of rational choice theories of contraceptive usage.

Rational Choice Theories of Contraception

Rational choice theories of contraception are based on Subjective Expected Utility (SEU) theory (Weisman, Plichta, Nathanson, Chase, Ensminger, and Robinson 1991). SEU theory posits that individuals decide on a single course of action out of a set of possible courses of action based on costs and benefits of the outcomes of each action. The SEU of a given decision to use contraception vs. to not using it is a weighted sum of the valuations arising from that action's possible outcome: getting pregnant vs. not getting pregnant (Weisman et al. 1991:131). A rational actor minimizes the relative cost-to-benefit ratio and maximizes the SEU. If the cost of getting pregnant, for an individual woman, is too high relative to the subjective benefits, then a rational choice would include using some type of birth control to prevent a "costly" pregnancy.

The rational choice theory suggests that women with more children (higher parity) may choose sterilization (or long-acting hormonal contraception) as the costs of another child increase when economic resources remain fixed. However, this theory does not explain why women of color would use sterilization or long-acting hormonal methods at a higher rate than European American women. Furthermore, the rational choice model cannot provide an explanation for why women of color may regret getting sterilized at a higher rate than European American women. Issues of power and discrimination are ignored by this model. As you have seen, numerous instances of abuse and coercion concerning women of color getting sterilized have

³⁰ By limitations, I mean that the quantitative dataset I use in this dissertation does not contain measures of racism or coercion in reproductive healthcare. Instead, I rely on several reproductive healthcare outcomes to make a case that racially-targeted discrimination *may* be generating the disparities.

been documented by historians and other scholars (Roberts 1997; Nelson 2003). I now turn to developing a racism-based theory of racial disparities in sterilization.

TOWARD A RACISM THEORY OF STERILIZATION

The Mythical Concept of "Race"

Before outlining a racism theory of sterilization, it is necessary to accurately conceptualize the concept of "race." The "race" concept is a relatively recent human invention that has its origins in the development of slavery in the American colonies (Jordan 1968; Morgan 1975; Allen 1994; Graves 2004; Smedley 2007). Whether slavery preceded racism or whether racism existed before slavery is not a resolved question, but the most thorough review of historical and economic literature indicates that "race" developed as an ideological construct to justify slavery and then the relationship became reciprocal (Feagin 2000; Smedley 2007).

At a biological and genetic level, there are no actual human "races" (Graves 2004; Ratcliffe 2004). This is an important point for me to make here because many sociologists, including quantitative methodologists who have studied sterilization, use multiple and mutually contradictory conceptualizations of "race" in the same journal article and interpret "race effects" as genetic, cultural, or leave it up to the reader to interpret them as a "Rorschach blot," (Zuberi 2001; Cazenave 2004; Zuberi and Bonilla-Silva 2008). Aside from its work as an ideology that justifies a system of "race"-based oppression, "race" cannot have any type of causal effect. By not appropriately conceptualizing "race" as a socio-political construction, social scientists commit logical errors in their scholarship as well as contribute to the reification of the "race"

concept (Marks 2008). That is, by using this term uncritically they further legitimize this spurious concept.³¹

In brief, the concept of “race” is not benign, neutral, or value-free. Therefore, in this dissertation, I refer not to women belonging to “race” groups, but to racialized pan-ethnic or other ethnic groups. Arguably, it is much more accurate to use pan-ethnic group (e.g., African-American, European-American, Asian-American) and other ethnic terms (e.g., Puerto Rican and Mexican-origin) than “racial” categories because “race” cannot be measured reliably, has no basis in genetics, and is only a recent invention in human history that was designed for socially oppressive purposes. Furthermore, other color-based descriptions such as “yellow” to describe Asians or “red” to describe American Indians have fallen out of usage.³² Thus, I use the terms African American as opposed to “black,” American Indian as opposed to “Indian” or “red,” Puerto Rican, Mexican or Latina as opposed to “Hispanic” or “brown,” and European American as opposed to “white” or “Caucasian.”

The Paradox of the Myth of “Race” and Reality of Racism

Following the work of anthropologist Audrey Smedley, in this dissertation, “race” is defined as “...a cosmological ordering system that divides the world’s peoples into what are thought to be biologically discrete and exclusive groups...and can be ranked along a gradient of superiority—inferiority,” (Smedley 2007:18). “Race” as a biological concept is an illusion but as a social and political concept serves a very functional illusion for white supremacy. In this dissertation, I conceptualize “race” as an ideology³³ that, beginning with colonization and slavery, has justified

³¹ Furthermore, it is appropriate to recognize that the concept of “race” and “racial” categories themselves are hierarchical by definition (Wilson 1996; Cazenave 2004; Smedley 2007) and subsequently “inherently racist” (Neubeck and Cazenave 2001:23). The concept of “race” is confusing, erroneous, and injurious (Cazenave 2004:5).

³² I thank Angie Beeman for pointing this out to me.

³³ Ideology refers to “a set of beliefs that explains and justifies some actual or potential social arrangements,” (Robertson 1988:176). “Race” is a subservient ideology to a system of racial oppression. The “race” ideology functions to explain and legitimize the organization of a racist society.

“race”-based group privilege. That the concept of “race” is a social, political, and ideological construction leads to a paradox about racism.

If “race” does not exist, then how can racism exist (Rattansi 2007)? Racism exists because if actors define the concept as real, then it is real in its consequences (Merton 1995). The concept of “race” has been defined as real for nearly four hundred years and it has been used to organize institutions such as the economy, state, family, religion, and educational systems in accordance with the reproduction of inequality and oppression (Feagin 2000). In order to understand the reality of racism, it is therefore necessary to understand that the existence of human “races” is a socio-politically perpetuated myth and ideology (Cazenave 2004) that effectively legitimizes and justifies the systemic inequality organized around invented “racial” lines. In this dissertation, I argue that the ideology of “race” (especially as it is embodied in “controlling images”) is integral to understanding racial discrimination in reproductive healthcare outcomes such as sterilization (more detailed discussion to follow). In brief, while “race” is an ideology, *racism* is a system of oppression.

Racism as Central to the Organization of the United States

This study conceptualizes racial disparities in sterilization by drawing from the body of literature that falls under the general paradigm of racism studies. In this study, I assume that racism is systemic. Racism therefore refers to a centuries-old, deeply institutionalized, highly organized *system* of oppression (Cazenave and Maddern 1999; Feagin 2006). In this dissertation, I define racism as Noel A. Cazenave and Darlene Alvarez Maddern have as “...a highly organized system of race-based group privilege that operates at every level of society and is held together by a sophisticated ideology of color/race supremacy,” (1999:42). It is important to recognize, as Cazenave and Maddern note that, “Racist systems include, but cannot be meaningfully reduced

to, racial bigotry,” (1999:42). Racism is a major foundation stone and organizing principle of the United States that includes racist ideologies, attitudes, emotions, habits, actions, and institutions that structure white supremacy (Feagin 2006). To understand racism as a system of oppression, I begin by reviewing the theoretical perspective of systemic racism.

Systemic Racism

The systemic racism perspective conceptualizes racism as a deeply ingrained structural basis for the organization of society that operates at all levels and in all institutions in society (Cazenave and Maddern 1999b; Feagin 2000; Feagin 2006). Racism was developed first as an ideology and then later as a comprehensive system of oppression by colonizing Europeans who enslaved people of African descent and committed genocide against American Indians in pursuit of their land.

Racism is systemic because it includes economic and political resources, prejudices, emotions, discriminatory practices, and racialized institutions engineered by “whites” to establish and sustain white supremacy. As Joe Feagin notes, “At the heart of systemic racism are discriminatory practices that generally deny Americans of color the dignity, opportunities, and privileges available to whites individually and collectively,” (Feagin and Barnett 2004:1103). Therefore, when “whites” individually and collectively subvert women of color from controlling their reproductive decisions, they have carried out a key discriminatory practice that is at the heart of a system of racial oppression.³⁴

This systemic perspective on racism is useful for analyzing forced or coerced sterilization because it emphasizes the discriminatory practices of racism and traces its historical origins to slavery and legalized segregation. Referring back to slavery and the rape of enslaved women,

³⁴ Dorothy Roberts notes that controlling the reproductive behaviors of “black” women is a central feature of racial oppression in the United States (Roberts 1997:6). We might extend Roberts’ insight and state that it involves not only African American women, but other women of color (Latinas, American Indians, and Asians) as well.

Joe Feagin argues that no other group's (African Americans) history has been so fundamentally shaped by the sexual coercions of "white" men (Feagin 2000:46).³⁵ Furthermore, systemic racism theory emphasizes the social reproduction of racist relations. Intergenerational transfers of wealth (the product of slave labor) are passed from one generation of "whites" to the next and continually re-invested in the accumulation of ever increasing amounts of wealth held and controlled by "whites." Much of this wealth was accumulated by controlling the fertility of African American women and the simultaneous systematic annihilation and forced migration of American Indians from their ancestral lands. These forms of racially-targeted population control enabled the inter-generational transmission of capital and wealth that extends into the present.

Finally, as I noted earlier, systemic racism also has an ideological component that is used to justify and rationalize racial oppression. For example, racist stereotypes are deployed as what Patricia Hill Collins (Collins 2000; see also Jewell 1993; Simien 2006) refers to as "controlling images" to justify sterilization abuse targeted at women of color.

Internal Colonialism and Reproductive Imperialism

The internal colonialism perspective has been applied as a theory of racism since the 1960s in the United States. Internal Colonialism theory is an outgrowth of theories developed to explain European colonialism. Internal Colonialism theories resonated with the anti-imperialist movements in Africa and Latin America in the 1950s and 1960s as well as with social movements against white supremacy in the United States. Internal Colonialism theorists argued that urban ghettos, slums, and barrios were in a similar position as less developed countries in Africa and Latin America in their relation to Europe and the United States (Carmichael and Hamilton 1967; Blauner 2001; Gutiérrez 2004). Thus, people of color in the United States are

³⁵ This observation is not entirely accurate because "white" men have inflicted sexual violence on women from other ethnic groups such as American Indians, Latinas, and Asians (Smith 2005; Chavez 2008; Cho 2008). Feagin's view is a consequence of centralizing white-on-black oppression in his work on systemic racism (Feagin 2000:3).

treated as colonial subjects. Internal colonialism theorists argue that colonization generates a “colonization complex” that includes: a) involuntary and forced entry; b) colonizing powers destroying the indigenous culture; c) members of the colonized group being governed by representatives of the dominant group; and d) the system of dominate-subordinate relations being buttressed by a racial ideology (Blauner 2001:66). While not explicitly working from the Internal Colonialism perspective, Kuumba (1999) presents various concepts that connect population control to colonialism (see also Mass 1976). One of those concepts is “reproductive imperialism.” Reproductive Imperialism is a type of domination that manipulates population processes coercively in the interests of maintaining racial domination, capitalist labor interests, and male domination (Kuumba 1999:448).

This concept underscores the idea that under colonialism the fertility of “first world” people is encouraged while that of “third world” people is discouraged. In the U.S., reproductive imperialism suggests that the colonizers (European Americans) will work to reduce the fertility of women of color and possibly increase the fertility of European American women. Going further, Kuumba (1999:450) states that “African women’s wombs are a key site of control in this tension between production and reproduction, and have become the territory to be dominated.” We may add that the wombs of other women of color (such as American Indians, Puerto Ricans, Mexicans, and Asians) are key sites of control. In a similar vein, the colonial and white power structure will condition aid on the basis of the acceptance of policies and practices that limit fertility in developing countries (Kuumba 1999).

Limiting fertility is a precondition for African, Latin American, and other “post”-colonial regions to obtain U.S.-based financial aid and bank loans while fertility limitation is also a precondition for women of color in the United States being provided public assistance (e.g.,

family caps).³⁶ While the “internal colonialism” perspective provides important concepts for understanding racial oppression, it does not offer a systematic theory of racism that connects different periods of history to different forms of racial oppression. Nonetheless, Kuumba’s (1999) concept of “reproductive imperialism” (as a biological or bodily form of “internal colonialism”) is a great analogy to colonialism (one that indicates that colonization can be as invasive as controlling women’s reproductive system), but ultimately it does not explain the mechanisms and processes behind racial disparities in sterilization.

Gendered Racism and Racist Controlling Images

The concept of gendered racism helps explain how racial oppression is gendered (Essed 1991:31). Racism operates differently for men and women. An example of gendered racism for African American men is the “absent father” stereotype or the myth of the “black rapist” (Essed 1991: 31). For African American women various images have been used by political elites in different historical epochs, such as the image of the “jezebel” and “mammy” following slavery and the legal segregation era (Jewell 1993: 37) whereas the images of “black” women as “matriarchs,” “baby mamas,” and “welfare queens” were created in the post-civil rights movement era by social scientists (Collins 2000; Neubeck and Cazenave 2001; Simien 2006), possibly as part of a white racial backlash against the perceived overzealousness of the civil rights movement (Cazenave 2007). These powerful “controlling images” are used to justify the racial oppression experienced by women of color.

Racist controlling images of African American women. “White” controlled and owned media and cultural producers promoted “Jezebel” images of African American women during slavery. These images functioned to justify the sexual violence inflicted by European American

³⁶ Family caps refer to policies which deny or reduce additional benefits to women who should have children while on public assistance. The family cap policy is designed on the idea that women of color have children to receive an increased “welfare check,” (Neubeck and Cazenave 2001; Smith 2007:5).

male slave owners on women and children of African descent. European American male slave owners used enslaved women to “breed” future generations of people held in bondage who were then accumulated as wealth holdings (Hogan 1984; Jewell 1993; Collins 2000; Simien 2006).

The *jezebel* is the stereotype of a sexually aggressive “black” woman promoted by media during slavery to explain the high birth rates of bonded women and numerous allegations of sexual assault claimed by enslaved women (Davis 1981; Jewell 1993; Collins 2000). The contemporary term *hoochie mama* (a sexually promiscuous “black” woman) is suggestive and similar to the image of the *welfare queen* who provides sexual favors to numerous men as evidenced by her having numerous children with different partners (Collins 2000:83). As a *welfare queen* she has more children to obtain a larger public assistance check from the state (Neubeck and Cazenave 2001). Thus, “controlling images” are ideological justifications for historically specific types of racial oppression that make the oppression seem valid and justified (Collins 2000:69). The image of the *mammy* prevalent during legal segregation, sought to create an asexual picture of African American women perhaps to cover-up the sexual depredations committed by “white” men under the prior slave-based mode of production and to justify the exploitation of African American women as domestic employees who were forced to invest in the “white” children of their employers at the expense of their own children.

In the post-civil rights movement era, the *welfare queen* image became more prevalent as women of color gained access to Aid to Families with Dependent Children (AFDC) in the 1960s after years of being locked out by racially-exclusionary policies and practices (Gilens 1999; Neubeck and Cazenave 2001). Legislatures placed policy features (e.g., family caps) in various forms of state and national-level public assistance legislation (such as AFDC and Medicaid) that were designed to prevent the “pathological” reproduction of African American women and other

women of color (Neubeck and Cazenave 2001; Smith 2007). Just as racist controlling images of African American women may play a role in shaping patterns of sterilization outcomes; racist controlling images of American Indian women are also likely to be important.

Racist controlling images of American Indian women. Stereotypes of American Indian women fall into two categories of *squaw* and *Indian princess* (Mihesuah 1996; Bird 1999). The *Squaw* image depicts American Indian women as dirty, subservient, abused, alcoholic, and ugly, who love to torture “white” men while the *Indian princess* image depicts American Indian women as exotic, beautiful, “princesses” who leave their society to elope with suave European American men (Mihesuah 1996:61). The *squaw* image suggests a dirty and sinful body in need of cleansing and, consequently, sterilization (Smith 2005:92). The distinction between the *princess* and *squaw* controlling image depends (in literature and mythical accounts such as *Pocahontas*) on the relation between the American Indian women and “white” men. The *Indian princess* stereotype is a depiction of an American Indian woman (e.g., Pocahontas) who “To be ‘good,’ must defy her own people, exile herself from them, become white, and perhaps suffer death,” (Green 1975:704). Opposed to this image is the *squaw* that signifies irresponsible reproduction.

The *squaw* is the “darker twin” of the “*princess*,” (Green 1975:711). In this image, the *squaw* has the same vices as “Indian” men such as drunkenness, thievery, and stupidity (Bird 1999). As a controlling image of American Indian women’s reproductive behaviors, *squaws* who live with “Indian” men “...work for their lazy bucks and bear large numbers of fat ‘papooses,’ (Green 1975:711). Unlike the “*princess*,” the *squaw* depiction may be overweight, darker in skin tone, have a problem with alcohol and fewer “European features” than the “*princess*.” Another characteristic of the *squaw* is that she is not capable of the same human

emotions as “white” women and therefore neglects her children (Bird 1999; Beeman 2007). Thus, the *squaw* controlling image may be an important stereotype that reproductive healthcare providers rely on to suggest sterilization for American Indian women. Related yet subtle and culturally distinct racist controlling images of Latinas are prevalent in U.S. media and culture.

Racist controlling images of Latinas. In a similar vein to American Indians, controlling images of Latinas may fall into some variant of the *harlot* or *marianismo* (Chavez 2008:74). The *harlot* controlling image depicts a “hot Latina,” a lusty, hyper-sexualized seductress with a flaring temperament driven by her nymphomania (Berg 2002:71). The *marianismo* on the other hand is a controlling image of Latinas depicting a dependent, passive, obedient and faithful wife or mother. She remains virginal until marrying her lifelong male partner (Velásquez, Arellano, and McNeill 2004:63). Anthropologist Leo Chavez argues that the *marianismo* “...is merged with the hot Latina stereotype into one hybrid image: the hyper-sexuality of the hot Latina combines with the abundant fertility and uncontrolled reproduction of the Mariana mother to produce the ‘Latina threat,’” (2008:75) that is part of the larger demographic “Latino Threat.” Thus, this racist and sexist controlling image suggests that sexual behaviors of the “hot Latina” combine with pro-natalist and Catholic religious values to generate high rates of fertility among “brown” women. Controlling images of Mexican-origin women and Other Latinas therefore suggest that they are “hyper-fertile baby machines” and that they “breed like rabbits,” (Gutiérrez 2008: xi).

Since pervasive racist controlling images frame and caricature women’s sexuality and reproductive decisions, healthcare providers may rely on them when providing reproductive healthcare. If discrimination against women of color by reproductive healthcare providers is producing racial disparities in sterilization, then the controlling images I have reviewed may play

an important role. While the concepts of gendered racism and controlling images provide important tools for the study of racial disparities in sterilization they do not offer an overarching theoretical framework. Below I review a comprehensive theory of racism.

Carter A. Wilson's Theory of Racism

Comprehensive theories of racism are rare. A notable exception is the theoretical perspective outlined in political scientist Carter A. Wilson's (1996) book: *Racism: From Slavery to Advanced Capitalism*. The main insight of Wilson's approach is that racial oppression varies with each mode of production in U.S. history (slavery, debt peonage/industrial capitalism, and advanced capitalism). Wilson's work outlines a comprehensive view of racism that emphasizes the role of *economic* structures, *political* processes, and a racist *culture* (including particular types of white racist psychological orientations that arise under different historical conditions).

Three assumptions underlie this model; a) racism was established by wealthy European Americans during a specific stage in history, b) wealthy European Americans' establishment of racism coincided with the material conditions of slavery, and c) racism is sustained by the white power structure in historically-specific ways (Wilson 1996:33). According to Wilson, capitalist elites use economic, political, and cultural/psychological institutions to maintain racism. The economic base of society encompasses the mode of production and racial oppression is rooted in the economic base. Different modes of production can be identified by the way that the dominant capitalist class exploits the subordinate classes and extracts surplus value (Wilson 1996: 20). Racial oppression facilitates an exploitative process of capital accumulation that functions to concentrate wealth and property (i.e., the means of production) within the capitalist class. As Wilson puts it, "Racial oppression is grounded in this economic base, which in turn sustains racial oppression," (1996: 33).

For example, under the slavery mode of production, racism came into existence because “...slavery provided the material basis for racism,” (1996: 54). Therefore, direct domination characterized this form of racial oppression where plantation owners owned the main means of production (land) and owned the laborers (lifetime bondsmen and bondswomen) and controlled them through direct domination over their bodies (Hogan 1984). Under the subsequent Jim Crow system, domination was not as direct but control was achieved over sharecroppers and tenant farmers through threat of starvation and permanent debt. In addition, the capitalist class sustains racism, in part, by capturing the state and crafting state policy.

Wilson argues that under the slavery-based mode of production, racial oppression functioned through direct domination. Direct domination characterizes population control because, during slavery, the fertility of African American women was closely and directly monitored and controlled (though never completely) by the plantation class and overseers. This enabled plantation owners to accumulate capital and wealth (as much of a plantation owner’s assets were valued not only in terms of land, but in terms of human beings) by manipulating the reproductive behaviors of African American women (and men, though to a lesser extent).

According to Wilson’s model racism is sustained in part by a racist culture that the dominant class originated. As an example, consider Query 14 in Thomas Jefferson’s Notes on the State of Virginia where he lays down various racist ideas about African Americans: “But in this country, the slaves multiply as fast as the free inhabitants. Their situation and manners place the commerce between the two sexes almost without restraint,” (Jefferson 1853:158). One of the main racist cultural images under slavery, of women of African descent in the United States, was the stereotype of the *jezebel*, a caricature of “black women” as being sexually available and promiscuous.

The *jezebel* image legitimized the plantation owners' direct efforts at controlling the reproduction of his female slaves. In a more contemporary context, the controlling image of the *welfare queen* legitimizes the state's efforts at limiting the fertility of "black" women. In the next section, I synthesize ideas from the aforementioned theoretical perspectives into a conceptualization of systemic gendered racism as part of the sustenance of white racial supremacy.

Toward a Theory of Sterilization Racism

The theories I reviewed above can be synthesized into a theory of pan-ethnic and other ethnic disparities in sterilization based on the following assumptions. First, I assume that racism is central to the history and organization of the United States (Feagin 2000). Following Carter A. Wilson's (1996) political economic theory of racism and Neubeck and Cazenave's (2001:35) application of his approach to welfare racism, at the center of American society is a racist culture. This racist culture stems from the development of capitalist class interests in early American capitalism that has taken on a life of its own, is partially independent of its economic functions, but also serves political and psychological functions such as promoting the public and psychological "wages of whiteness" (DuBois 1998; Roediger 1999). Second, following Kuumba (1999), I assume that the system of racism in the United States contains elements of *reproductive imperialism* whereby a key site of contention in the reproduction of white racism is the wombs of women—both women of color (anti-natalism) and European American women (pro-natalism). Third, the racist culture generates, promotes, and reproduces controlling images (Collins 2000) of women that define their sexual and reproductive behaviors. Women of color's free reproductive behaviors constitute a threat to "white racial hegemony" as "biological and social producers" of "the Other" (Neubeck and Cazenave 2001:31).

Racist controlling images thus serve a “racial control” function in that they provide culturally-defined ideological constructs that legitimize efforts to control the reproductive behaviors of women of color. Sociologist Elena Gutiérrez writes, “My research has shown that for women of color, racist stereotypes exist to justify the control of their fertility...” (Gutiérrez 2008: xiii). Thus, following Neubeck and Cazenave’s (2001:35) conceptualization of welfare racism, I argue that controlling images of women of color may be utilized by reproductive healthcare providers when providing contraceptive counseling and services to women. With this intellectual context the reader can better appreciate the main concept of this dissertation, sterilization racism.

Sterilization Racism. I conceptualize *Sterilization Racism* as the organization of racist controlling images, policies, and practices of delivering reproductive healthcare that operate to constrain the reproductive activities of women of color.³⁷ Sterilization racism’s main effect is to take reproductive decisions away from women of color. The controlling images deployed include the *welfare queen* for African American women, the *hot Latina* or *marianismo* for Latinas, and the *squaw* for American Indian women. The invisible standard of judgment to which women of color’s reproduction is compared against is that of the “responsible” reproductive behavior of middle-class European American women.

Figure 3.1 below is a theoretical diagram of how sterilization racism may operate (assuming parity, age, and other variables are held constant). In the context of seeking reproductive healthcare services, a woman interacts with a reproductive healthcare provider. The reproductive healthcare provider views the patient through the cognitive lens of stereotypes and racist controlling images. If the woman appears “black,” then she may be discriminated against as a *jezebel*, *hoochie mama*, and/or *welfare queen*. Since these controlling images suggest a

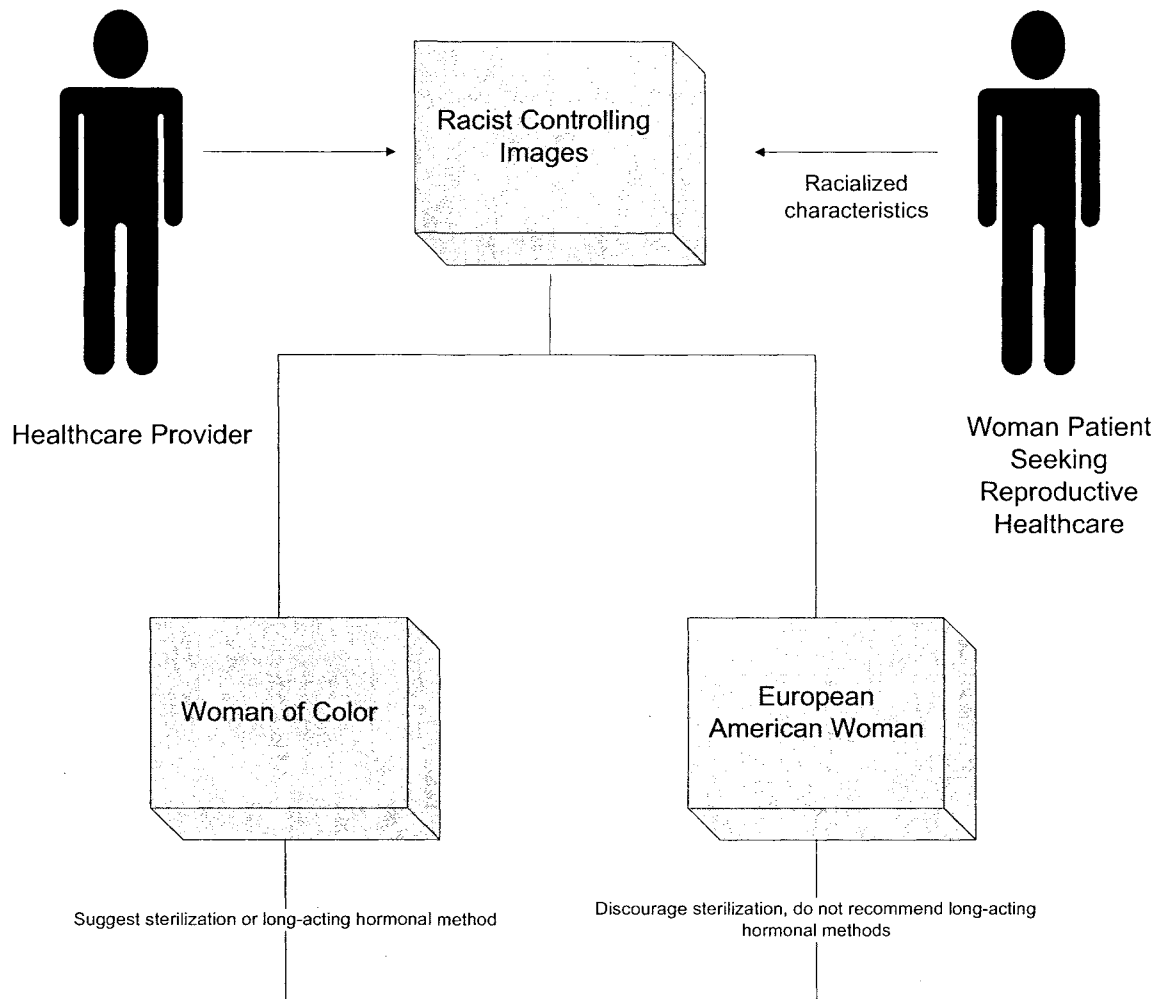
³⁷ This conceptualization follows closely Neubeck and Cazenave’s (2001:36) definition of welfare racism.

sexually “loose” woman who cannot control her sexual urges and may have too many children, then sterilization, an intra-uterine device, or long-acting hormonal methods such as Norplant or Depo-Provera will be suggested by healthcare providers because they eliminate or prevent conception.

Similarly, if the woman appears “Hispanic,” then the racist controlling image of a *hot Latina* or *marianismo* (with their implications of hyper-fertility) may lead to her being encouraged to get her tubes tied or to use Depo-Provera. If the woman is an “Indian,” then she may be viewed as a *squaw* who has “painless childbirths” who is “too dumb to use birth control,” and therefore should be encouraged to get her tubes tied, use an intra-uterine device, Norplant, or Depo-Provera. However, if the woman appears “white,” then she is likely to be positively stereotyped as a competent user of birth control or in the event that she has had no or few children and given that she may change her mind, she may not be encouraged to undergo sterilization or use long-acting hormonal methods.³⁸

³⁸ Low income European American women may be stereotyped as “irresponsible reproducers” compared to higher income European American women. Thus, sterilization outcomes of poor European American may be shaped by class oppression. The assumption in my model is that class differences are held constant (i.e. controlled for). Shapiro’s (1985) study looks at class oppression in shaping sterilization outcomes.

Figure 3.1: Theoretical Model of Racial Discrimination in Reproductive Healthcare.



The strong sterilization racism argument in Figure 3.1 cannot be directly tested with the data used in this dissertation. Instead, I present the model as a potential explanatory causal mechanism that may explain racial disparities in sterilization. We can infer that if the model is true as a representation of the discriminatory process of sterilization racism, then we should observe higher rates of sterilization among women of color, net of confounder variables.

Hypothesis 1: *Women of color are more likely to be sterilized than European American women.*

Historically, there are more documented cases of women of color being sterilized coercively or deceptively than European American women. Regretting having undergone a tubal sterilization may be an indication of coercion to accept the surgery (Ramanathan and Mishra 2000). Moreover, deception about its permanency as a medical procedure may cause higher levels of regret (López 2008). Thus, the sterilization racism model predicts:

Hypothesis 2: *The likelihood of sterilization regret will be greater among women of color than among European American women.*

We can therefore expect, of those who undergo tubal sterilization, that women of color will be more likely to regret getting sterilized than European American women. This is due to the theorized higher likelihood of coercion and deception (something the quantitative data used in this dissertation can indirectly measure). Finally, among non-sterile women, the closest contraceptives to surgical sterilization are the long-acting hormonal contraceptives Norplant and Depo-Provera. The sterilization racism model predicts that among non-sterile women:

Hypothesis 3: *The likelihood of using long-acting hormonal contraceptives like Norplant and Depo-Provera will be greater among women of color than among European American women.*

The long-acting birth control methods Norplant and Depo-Provera were tested on women of color before being approved by the Food and Drug Administration (Hartmann 1995; Roberts 1997; Andrea Smith 2005). From their introduction, Norplant and Depo-Provera have been targeted at women of color. Furthermore, because Norplant and Depo-Provera are temporary forms of sterilization, they undermine women's autonomy over reproductive decisions.

Hypotheses 1 through 3 will be tested using statistical data on whether or not women have been sterilized, whether sterilized women regret the surgery, and whether non-sterile women have ever or are currently using Norplant or Depo-Provera for contraception. Before I discuss the

methods of this study, I will identify the methodological limits of a study of racism based on quantitative data and data not designed for studying racism.

METHODOLOGICAL ISSUES IN THE STUDY OF RACISM

Problems with the Race and Ethnic Relations Paradigm

Recent scholarship in sociology has questioned dominant methodological orientations to the study of “race” and racism (Steinberg 2007; Zuberi and Bonilla-Silva 2008). One part of this critique is conceptual and involves the dominant Racial and Ethnic Relations paradigm’s minimization of racism (Steinberg 2007). The Race and Ethnic Relations approach still has a stronghold on most sociological research on “race” (Feagin and Vera 2001). It envisions a sociology of “race” that portends studying “relations” between “racial” and ethnic groups by emphasizing ideas of harmony and stability and treating conflict as deviation from an otherwise unproblematic and peaceful multi-ethnic and multi-“racial” social order (Wellman 1993; Cazenave and Maddern 1999; Bonilla-Silva 2003). The Race and Ethnic Relations paradigm therefore offers little to our understanding of racial disparities in sterilization because it does not stress unequal power relationships and does not offer a viable conceptual framework for understanding discrimination.

Not only is this paradigm weak for conceptualizing sterilization racism, data for studying sterilization racism does not exist. The best solution therefore is to use the best available data-- that analyzed by most previous studies of sterilization in the United States-- to test for racial disparities by eliminating alternative explanations for outcomes (sterilization, sterilization regret, and use of long-acting hormonal contraception) that may reflect sterilization racism.

Logic and Limitations of Eliminating Alternative Explanations for Racial Disparities

Quantitative regression methods are often deployed in the social sciences to adjudicate between competing theories of a social phenomenon. The racism theory used in this study makes a simple causal argument that racism causes ‘race’-based differences in sterilization outcomes. Quantitative regression methods are designed to eliminate “...the alternatives to a given simple causal theory that is weakly supported by an observed correlation, by examination of the relations among variables having relatively simple and abstract measures, such as can be created by a few survey questions,” (Stinchcombe 2005: 2). This is done, if the theory is correct, by showing that a difference between people of color and European Americans remains when important variables are controlled. Since the controls do not eliminate the direct “effect” of “race,” “...this would be good evidence that, in spite of our valiant calculation efforts, we cannot eliminate the direct effect of ‘race’ discrimination,” (Stinchcombe 2005: 5). Although Stinchcombe’s observation is important, it does not recognize that quantitative studies do not actually measure discrimination, they measure “racial” disparities in the outcome under study. An association between self-identified “race” and a dependent variable, even after adjustment for potential confounder variables, does not provide definitive evidence of racial discrimination. A statistically significant association between “race” and sterilization is a pattern we would expect to see if the sterilization racism model (see Figure 3.1) is accurate, but such a finding only offers suggestive evidence of racial discrimination.

Conceptualization and Data

The best available quantitative data on sterilization (the National Survey of Family Growth) was not collected for the purpose of studying racism. Therefore, this weakness must be acknowledged. To think about this more concretely, theoretical conceptualizations can be

ranked along a continuum from strong to weak. Likewise, data can be ranked from strong to weak in terms of how well it corresponds to the theoretical conceptualization (see Table 3.1 below).

Table 3.1: Strong and Weak Cases of a Test for Sterilization Racism.

	Strong Data	Weak Data
Strong Theoretical Conceptualization	A	B
Weak Theoretical Conceptualization	C	D

Cell (A) in the Table 3.1 is an ideal situation where one has a strong and clear theoretical case plus data that are designed with the aim of directly testing hypotheses derived from the particular theory. Cell (D) is the least desirable situation where one has a weak theoretical case and data that are ill-suited to test the theory. This dissertation makes a strong theoretical case on the basis of weak empirical data (cell B) because the main dataset (i.e., the National Survey of Family Growth) does not contain direct measures of racism that allow for a direct test of the sterilization racism concept. Although I have developed a theoretical conceptualization of sterilization racism, I must rely on data that are weak and not designed for the study of racism. By making a “strong-conceptual weak-data case,” the sterilization racism hypotheses predict that we should find, net of controls, evidence of racial disparities in sterilization outcomes.

In explaining racial disparities in sterilization, previous analysts have controlled for parity (number of previous live births), age, religion, welfare status, class, region of country, age at first live birth, etc. If a statistical correlation between “race” and sterilization remains, even after controlling for this battery of competing alternative explanations, the result strengthens but does

not prove the racism theory. In the next section, I cover the data and methods used to test the sterilization racism hypotheses.

DATA AND METHODS

National Survey of Family Growth Data

The main dataset I use to test the three sterilization racism hypotheses is the National Survey of Family Growth (NSFG). This dataset is a multi-stage probability sample of women age 15 through 44 collected in 1973, 1976, 1982, 1988, 1995, and 2002. The NSFG surveys women (and as of 1995 men) on issues pertaining to family life, marriage and divorce, pregnancy, contraception, lifestyle and health behaviors. In the first two data collection cycles (1973 and 1976), the sample frame was limited to ever-married women. From 1982 onward, the samples consist of all women age 15 through 44 in the United States. Given the limited sampling frame of the first two survey waves (i.e., ever-married women); I restrict my analysis to the 1982, 1988, 1995, and 2002 samples.

The full sample of women is limited to women age 15 through 44 who are not pregnant, not seeking pregnancy, and not sterile.³⁹ Women who have had hysterectomies, whose husbands had vasectomies or another unknown type of surgery, were removed from the sample. This yields the appropriate “at risk” group for surgical sterilization (Shapiro 1985). After these restrictions, the 1982 sample had 6,172 respondents, 6,571 in 1988, 8,526 in 1995, and 6,005 in 2002 for a total pooled sample size of 27,274 respondents.

In order to appropriately analyze the NSFG, and given that it is a repeated cross-sectional sample, the appropriate and statistically most desirable strategy is to pool all available waves into a single data file and control for temporal trends (Firebaugh 1997). This technique will yield

³⁹ Broken down by ethnicity, the pooled sample consists of 8,044 African Americans (29.5 percent), 374 American Indians, 1.4 percent), 15,334 European Americans (56.2 percent), 1,929 Mexican-origin women (7.1 percent), and 1,593 Puerto Ricans and other Latinas (5.8 percent).

statistical power (because it is based on multiple samples), allows for the test of trends, and provides the most accurate parameter estimates due to the large sample size. Following Chandra (1998:6) and given that the design effect weights were not included in all survey years; I use the reciprocal of the mean weight within each survey year to scale down the significance levels of the odds ratios.⁴⁰ An important component of the “strong-conceptual weak-data” case presented in this dissertation is explanation by subtraction, or the use of control variables to try and explain racial disparities. Below I outline the expected effects of the control variables used to adjust or “explain away” racial disparities in sterilization.

Control Variables

Table 3.2 summarizes the expected associations between all the control variables and each of the three dependent variables (sterilization, sterilization regret, and Norplant/Depo-Provera use). For sterilization, we expect older and multi-parous women to have a higher likelihood of having been sterilized. One reason for this expectation is the fact that the American College of Obstetricians and Gynecologists long relied on an age-parity formula for determining candidates for tubal sterilization (Gutiérrez 2008).⁴¹

Another reason why having more children should increase the likelihood of sterilization is that some women may be satisfied with already having all the children they want (Shapiro, Fisher, and Diana 1983:1849) and each subsequent child-birth can strain economic resources, thereby motivating a rational actor to use birth control (Weisman et al. 1991) or get sterilized. For sterilization regret, age at the time of the surgery should have an effect on the likelihood of regret. Past studies indicate (Hillis et al. 1999; Borrero, Reeves, et al. 2007) that women sterilized at younger ages are more likely to regret the surgery—therefore I predict age (at

⁴⁰ This involves taking each respondent’s final weight and dividing by the mean final weight within the survey year.

⁴¹ While these age-parity guidelines were relaxed in 1969, it is likely that most physicians still apply the guidelines.

sterilization) is inversely related to regret. For Norplant and Depo-Provera, we should expect age to be inversely related to likelihood of usage as younger women are more likely to use these contraceptives than older women (Cullins et al. 1993). Furthermore, I control for whether women had their first live birth as a teenager (age 19 or younger). The earlier the onset of motherhood, I argue, the more likely women are to get sterilized (if they began motherhood at younger ages) less likely to regret sterilization, and more likely to use Norplant or Depo-Provera.

Religious differences in sterilization are likely because Catholics are least likely to undergo tubal sterilization while Protestants are most likely to have the procedure (Bumpass, Thomson, and Godecker 2000). Research on religion and sterilization regret leads me to expect that Catholics would be more likely to regret sterilization and Protestant less likely to regret it. In extending this to Norplant and Depo-Provera, we may expect Protestants to be more accepting of these forms of temporary sterilization than Catholics. Stycos and colleagues argued that sterilization may be seen as a “sin” by Catholics (Stycos, Back, and Hill 1956).

Married women and divorced/widowed/separated women are more likely to have been sterilized than never-married women (Borrero et al. 2007a). We may expect that higher levels of education and income decrease the likelihood of sterilization (Shapiro et al. 1983). Since low-income women may be pressured into accepting sterilization, we may expect higher levels of income and education to be associated with a lower likelihood of sterilization regret (Jamieson et al. 2002). Furthermore, since Norplant and Depo-Provera have been described as contraception for lower income women (Cohen and Hensley 2000) and because Medicaid subsidized Norplant and may currently subsidize Depo-Provera, we should expect education and income to be inversely associated with likelihood of usage of both methods. Below, I outline the statistical methods used to run these analyses.

Table 3.2: A Summary of the Predicted Effects of Each Control Variable on the Three Outcomes.

	Sterilization	Sterilization Regret	Norplant/Depo
Age*	+	--	--
Parity	+	--	+
Teen Birth	+	--	+
Married	+	--	--
Div/Wid/Sep	+	?	?
Never-Married	--	+	+
Catholic	--	+	--
Protestant	+	--	+
Other Religion	+	?	?
Poverty/Income	--	+	--
Education	--	+	--

Note: For column two, age refers to “age at sterilization” and not current age. “+” signifies a factor that increases likelihood of sterilization, “-“ signifies a factor that decreases sterilization, and “?” signifies an effect that could go in either direction.

Descriptive Statistics of the Three Samples

In Table 3.3, I provide descriptive statistics of each of the four waves of the NSFG used in the analysis. The percent of women who underwent tubal sterilization increased from 1982 to 1995 and then tapered off close to the 1982 level by the year 2002 (18.6%). One possible reason for the slowdown in the growth of sterilization is the availability of more contraceptive options (such as Depo-Provera). This pattern for the sample as a whole closely follows the experiences of European American women (because European Americans are the majority of the population). However, the patterns in sterilization surgeries are much different for women of color. Although

the percentage sterilized for women of color tapers off somewhat between 1995 and 2002, the levels do not dip back to their 1982 starting point like they do for European American women.

Other trends in the sample include European Americans as a decreasing percentage of the population and an increase in the percentage of Mexican-origin and other women of color. The percentage of childless women increases in the 1980s but then decreases in the mid-1990s and into the 2000s. The percentage of women with three or more live births decreases in the 1980s but increases between 1995 and 2002. Women whose first birth occurred as a teenager fluctuates somewhat but is lower in 2002 and then in 1982. The percentage of never-married women holds steady in the 1990s, but drops off by the early 2000s.

Table 3.3: Descriptive Statistics on Women Age 15 through 44 From the National Survey of Family Growth Samples, 1982-2002.

	1982	1988	1995	2002
Tubal Sterilization	17.10	20.95	22.09	18.61
African American	13.43	13.92	14.75	15.15
American Indian	0.85	2.18	1.51	1.05
European American	77.48	73.35	71.74	67.97
Mexican-origin	4.07	5.03	7.04	9.91
Puerto Rican/Other Latina	4.17	5.52	4.96	5.92
Age 15 to 19	20.76	18.82	17.04	18.83
Age 20 to 24	21.40	18.30	16.33	17.22
Age 25 to 29	19.28	19.05	16.56	15.29
Age 30 to 34	16.38	17.65	17.99	15.73
Age 35 to 39	12.45	14.93	17.16	16.30
Age 40 to 44	9.73	11.25	14.93	16.64
No Children	46.79	47.40	44.27	44.54
One Child	15.31	15.90	16.43	17.02
Two Children	19.94	20.97	22.08	19.96
Three or More Children	17.96	15.73	17.22	18.48
First Birth as Teenager	19.86	17.99	18.91	18.06
Currently Married	44.10	42.47	42.45	39.29
Divorced/Widowed/Separated	13.24	14.16	14.34	10.62
Never Married	57.34	56.63	56.79	49.91
Catholic	34.24	32.14	29.64	29.19
Protestant	55.77	58.63	53.12	51.54
Other Religion	4.20	2.94	5.02	4.93
No Religious Preference	5.79	6.29	12.22	14.34
0 to 149% Poverty Line	26.59	25.84	24.14	30.57
150% to 249% Poverty Line	22.08	17.74	20.62	21.19
250% to 349% Poverty Line	17.42	16.18	14.22	16.19
350% or More Poverty Line	33.91	40.24	41.02	32.04
Less than High School	25.14	25.14	22.23	23.38
High School	36.29	32.65	34.11	28.30
Some College	23.94	25.40	24.80	28.50
College Graduate	14.62	16.81	18.87	19.82
N	6,172	6,571	8,526	6,005

Notes: All figures are percentages using weights to make them representative of all women age 15 through 44 in the United States.

The percentage of women with no religious preference increases substantially by 5.8 percent in 1982 to about 14.3 percent by 2002. The percentage of women with an income from 0 to 149 percent of the poverty line declines into 1995 but increases by 2002. Unsurprisingly, college graduates are an increasing proportion of women age 15 through 44 in American society. In the next section, I discuss the statistical methods used to test the hypotheses in this study.

Statistical Methods

The basic method used for quantitatively studying the dependent variable of whether or not one is tubally sterilized (a dichotomous variable) is a straightforward application of binary logistic regression (Gelman and Hill 2007). Binary logistic regression is appropriate when modeling a dichotomous outcome because linear regression assumes that the dependent variable is measured on a continuous scale. Since the dependent variables are binary outcomes, logistic regression can produce predicted probabilities of a woman, given a set of characteristics (parity, age, “race,” etc.), being sterilized.

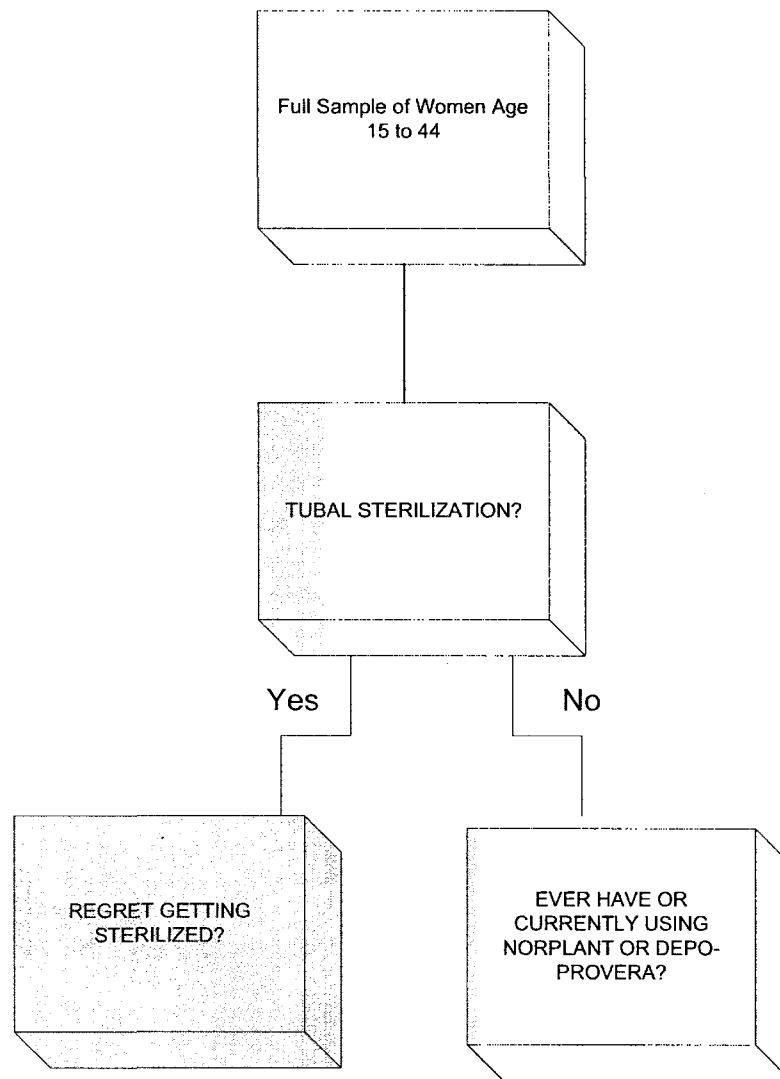
The basic form of the logistic regression equation can be represented as follows:

$$(y_i=1) = \text{logit} - 1 X_i\beta,$$

assuming that outcomes y_i are independent given these probabilities. The dichotomous outcome is sterilized or not (where sterilized $y_i=1$). The $X_i\beta$ represents the set of independent variables which include age, parity, age at first birth, education, income, religion, and pan-ethnic and other ethnic identity (African American, American Indian, Mexican, and Puerto Rican and Other Latina) with European American left out as a reference group, and a dummy variable for year of the survey (1988, 1995, and 2002 with 1982=reference). The results will be represented as odds ratios as is common practice in medical sociology (see Borrero et al. 2007a).

In Figure 3.2, I diagram how I partition the sample in each stage of the analysis. In stage 1, we have the full sample of women. The first logistic regression model is fit to the first outcome variable: sterilized vs. not sterilized. Then two sub-samples are taken from the full sample: sterile women and non-sterile women.

Figure 3.2: Outline of the Logic of Analysis of Sterilization Racism based on NSFG data, 1982-2002.



Among the women who have been sterilized, the outcome variable of *sterilization regret* (i.e., desire for reversal) is tested for racial disparities after adjustment for the pertinent control variables (age at sterilization surgery, parity, whether first birth was as a teenager, marital status, religious preference, poverty status, educational attainment). Among non-sterile women, I use the 1995 and 2002 NSFG (because Norplant and Depo-Provera were only officially approved by the FDA in 1990 and 1992 and only asked about in these two waves of the survey), and test for

racial disparities in Norplant and Depo-Provera use. With Norplant or Depo-Provera as outcome variables, I will first estimate two separate logistic regressions on whether the respondent has *ever* used Norplant or ever used Depo-Provera. Then, I will estimate a multinomial logistic regression to estimate what contraceptives respondents are currently (within the last twelve months) using. In the next chapter, I present the results of these analyses.

CHAPTER FOUR

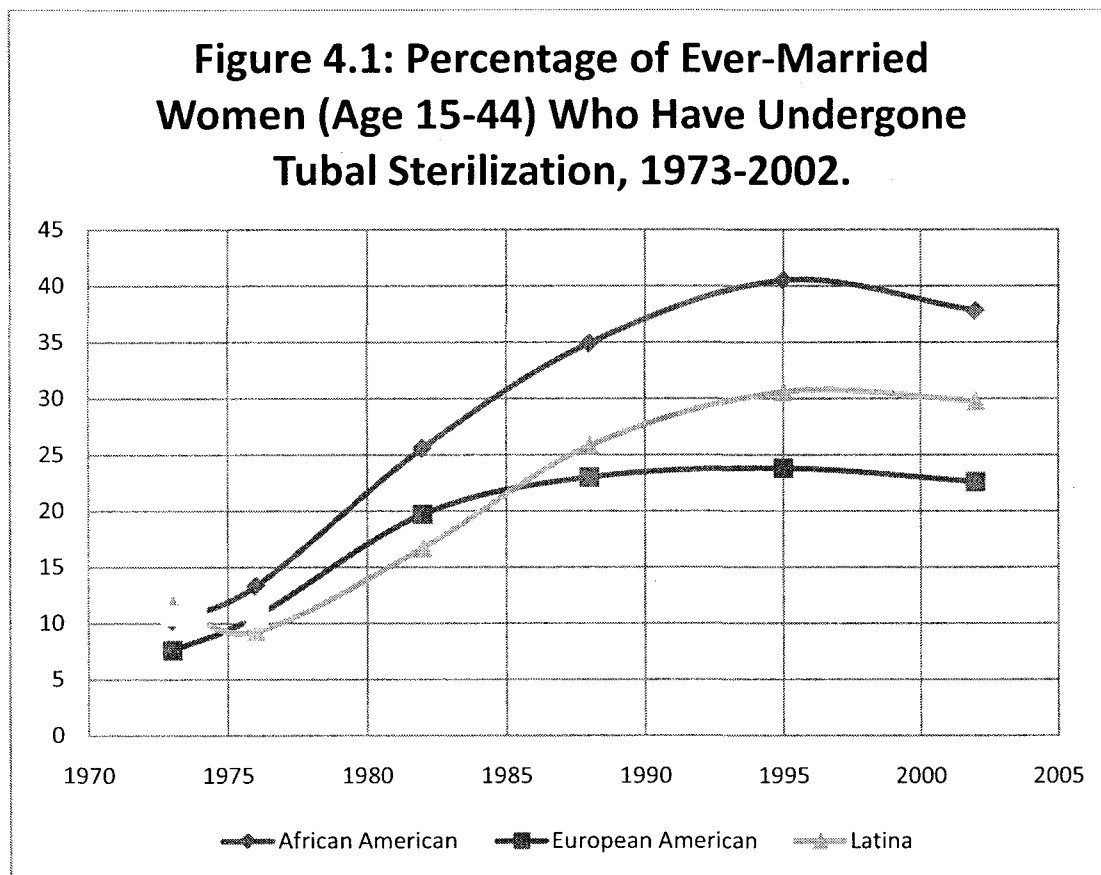
RESULTS AND FINDINGS OF THE STUDY

In this chapter, I report the results of the tests of Hypotheses 1, 2, and 3. This chapter proceeds as I partition the sample into three different groups: the full sample of all women, the sample of sterilized women, and the sample of non-sterile women. First, I report the results of the analysis of pan-ethnic and other ethnic disparities in tubal sterilization to test Hypothesis 1 (using the full sample). Next, I present the results of Hypothesis 2 where I test for pan-ethnic and other ethnic disparities in sterilization regret (using sample respondents who have been sterilized). Finally, I report the results of Hypothesis 3 where I test for pan-ethnic and other ethnic disparities in the likelihood of Norplant and/or Depo-Provera usage (among those who have not been sterilized).

Testing Hypothesis 1: Pan-Ethnic and Other Ethnic Disparities in Sterilization

To reiterate, Hypothesis 1 states that women of color are more likely to undergo tubal sterilization than European American women. Figure 4.1 is a time-series plot of the percentage of ever-married women age 15 through 44 who have undergone tubal ligation surgery between 1973 and 2002. The data used in Figure 4.1 were derived from a Centers for Disease Control (CDC) report (Chandra 1998) and my own weighted tabulations of the 1976 and 2002 National Surveys of Family Growth (NSFG). The first two waves of the NSFG (1973 and 1976) only interviewed ever-married women while the 1982 and subsequent NSFGs interviewed all women. According to Figure 4.1, in the early and mid-1970s, there is very little evidence of pan-ethnic and other ethnic disparities in sterilization among ever-married women. By the 1982 wave, we begin to see growth in disparities between African American and European American women continuing until it peaks in 1995 and leveling-off somewhat by 2002. For Latinas there is also

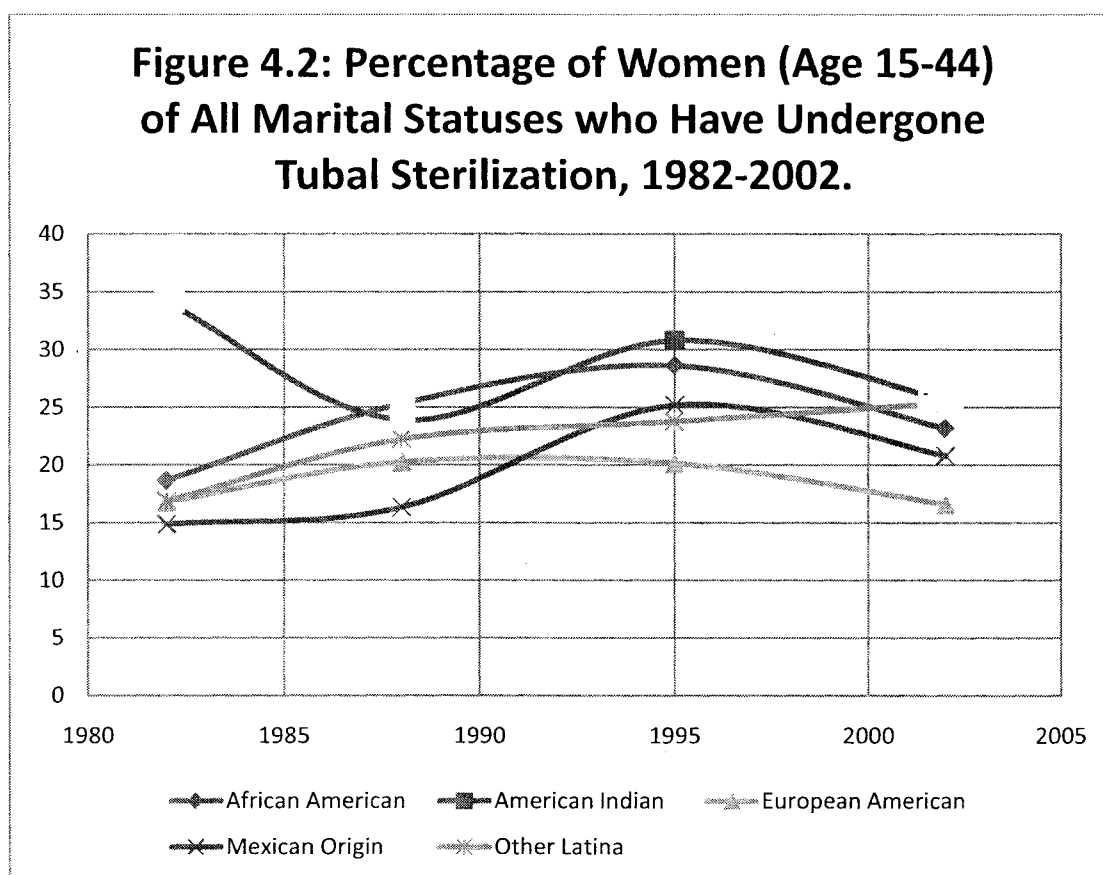
substantial growth in tubal sterilization such that they surpass the levels for European American women by the late 1980s. By 2002, 37.8 percent of ever-married African American women and 29.8 percent of Latinas were sterilized compared to 22.6 percent of European American women. These preliminary (and cursory) analyses support Hypothesis 1.



In this study, I focus on women of all marital statuses and henceforth use the 1982, 1988, 1995, and 2002 NSFG datasets. Furthermore, “racial” category questions on the NSFG were asked differently in the 1973 and 1976 surveys and are not directly comparable with later years.

In Figure 4.2, the percentages of women (of all marital statuses) who have undergone tubal sterilization (1982-2002) are plotted against survey year using a more refined set of pan-ethnic and other ethnic categories than the data reported in Figure 4.1. The percentages are

plotted for African American, American Indian, European American, Mexican-origin, and Puerto Rican and Other Latinas. American Indian women have the highest rates of tubal sterilization followed very closely by African American women (the only statistically significant difference between American Indian women and African American women is in 1982, $t=2.92$, $p=.004$). Interestingly, in early years, Mexican-origin women had the lowest rates of sterilization, but by the mid-1990s they had surpassed European American women



The growing gap in sterilization between African American and European American women is as pronounced in the 1982-2002 data series as it was in the 1973-2002 series (limited to ever-married women). Likewise, Figure 4.2 reveals that the growth trajectories in sterilization for American Indian and African American women compared to European American women were very similar over the 1988 through 2002 time periods. Puerto Rican and Other Latinas also

show a steady growth in sterilizations. This may be driven by high (or increasing) sterilization of Puerto Rican and Cuban origin women (the majority of “Other” Latinas). While women of color, as a whole, were no more likely to be sterilized than European American women in the early 1980s, in 1988 and each subsequent year after, the relative odds of tubal sterilization increased.⁴²

As noted above, Hypothesis 1 predicts that women of color will have a higher rate of tubal sterilization than European American women. Table 4.1 presents the results of a logistic regression, with control variables, that tests this hypothesis. The dependent variable is whether or not the respondent has undergone tubal sterilization (1=yes, 0=no). As noted in Chapter Three, women who were currently pregnant, currently seeking pregnancy, or who had a hysterectomy were removed from the samples because they would not be “at risk” of having a tubal ligation.

The numbers in the first column of Table 4.1 are odds ratios (henceforth OR) and they tell us the net difference in the *odds* of sterilization for a woman in the focal category versus the reference category (e.g., African American women vs. European American women). The second and third columns report the 95 percent confidence intervals and p-values, respectively. The 95 percent confidence intervals specify the range of possible estimates within which the true population value of the estimate lies. The p-value indicates at what level of statistical significance we can reject the null hypothesis for the point estimate of the OR.

One or more of the ORs for pan-ethnic and other ethnic group, survey year, age at first birth, current age, marital status, and educational attainment achieve statistical significance (i.e., a p-value less than 0.05). Starting with the age and parity variables, I find, as expected, that

⁴² In 1982, the unadjusted odds equal 1.104 ($t=1.09$, $p=.275$) while in 1988 the odds are 1.166 ($t=2.18$, $p=.029$), 1.468 ($t=6.76$, $p<.001$) in 1995, and 1.495 ($t=4.46$, $p<.001$) in 2002.

older women and/or multiparous women are more likely to have been sterilized than younger and/or nulliparous women. Thus, being older and/or having more children increase the likelihood of sterilization. For example, in 2002 a divorced, widowed, or separated Catholic African American woman, age 25 to 29, with one child, whose first birth was at age twenty or older, who had a high school degree, and an income of 150 to 249 percent of the poverty line has a predicted probability of sterilization of 0.046. The same woman with two children has a 0.171 probability of sterilization; with three or more children a 0.249 probability of sterilization. To use this same example, if the woman was instead in the age range of 35 to 39, then the predicted probabilities of tubal sterilization are: 0.138 (one child), 0.40 (two children), 0.52 (three or more children).

With another example, we can illustrate age effects. A married, non-religious, European American woman age 20 to 24 with two children, a high school degree, an income less than 150 percent of the poverty line, and whose first birth was age twenty or older, has a probability of tubal sterilization of 0.152. The same woman, at other ages has a predicted probability of sterilization of 0.335 (age 25 to 29), 0.495 (age 30 to 34), 0.622 (age 35 to 39), and 0.679 (age 40 to 44).

Table 4.1: Logistic Regression of Pan-Ethnic and Other Ethnic Disparities in Tubal Sterilization, National Surveys of Family Growth: 1982-2002.

	Odds Ratio	95% CI	p-value

Pan-Ethnic and other Ethnic Disparities			
African American	1.14	(1.01-1.28)	.029
American Indian	1.66	(1.16-2.34)	.006
European American	1.00		
Mexican-origin	0.83	(0.68-1.02)	.073
Puerto Rican/Other Latina	1.19	(0.96-1.51)	.112
Survey Year			
1982	1.00		
1988	1.46	(1.26-1.70)	<.001
1995	1.37	(1.19-1.56)	<.001
2002	1.05	(0.88-1.25)	.589
Age at First Birth			
Age twenty or older	1.00		
Teenager	1.54	(1.36-1.73)	<.001
Parity			
No children	1.00		
One Child	3.25	(2.54-4.14)	<.001
Two Children	13.67	(10.83-17.25)	<.001
Three+ Children	22.02	(17.19-28.20)	<.001
Age Groups			
Age 15-19	1.00		
Age 20-24	32.82	(6.19-173.92)	<.001
Age 25-29	92.02	(17.44-485.59)	.032
Age 30-34	179.28	(33.98-945.98)	<.001
Age 35-39	300.60	(56.92-1587.55)	<.001
Age 40-44	386.67	(73.23-2041.78)	<.001
Marital Status			
Never Married	1.00		
Currently Married	1.62	(1.38-1.90)	<.001
Divorce/Widow/Separated	1.56	(1.32-1.85)	<.001
Income as Percent Poverty Line			
0 to 149%	1.00		
150 to 249%	0.86	(0.75-1.01)	.052
250 to 349%	0.90	(0.77-1.04)	.161
350% to highest	0.93	(0.80-1.08)	.340
Educational Attainment			
Less than High School	1.00		
High School Degree	1.03	(0.89-1.18)	.698
Some College	0.76	(0.65-0.89)	.001
College Graduate	0.38	(0.31-0.46)	<.001
Religious Preference			
No Religion	1.00		
Protestant	1.04	(0.88-1.23)	.661
Catholic	0.57	(0.46-0.69)	<.001
Other Religion	0.45	(0.33-0.62)	<.001

Note: Odds ratios, 95% confidence intervals, and p-values from logistic regression of data from the National Surveys of Family Growth 1982-2002. Dependent variable is whether or not respondent has undergone tubal sterilization.

N=27,274

Compared to women who have never been married, women who are married or divorced, widowed, or separated have a higher likelihood of tubal sterilization. A currently married woman has an odds ratio that is 62 percent higher than a never married woman and a divorced, widowed, or separated woman has an odds ratio that is about 56 percent higher. Interestingly, income effects are not very significant. That is, there is little evidence that a woman's current household income bears a relationship with her having been sterilized. On the other hand, educational attainment effects are significant. Having some level of college education (having graduated or not) reduces the likelihood of sterilization. A woman with some college has about a 24 percent lower likelihood of sterilization than a woman who did not finish high school. A woman with a bachelor's degree or higher has an odds of sterilization that is about 62 percent lower than a woman without a high school diploma. Religious differences also prove significant. On average, Catholics and people from other religious denominations are less likely to get sterilized than people who are non-religious. Catholics have an odds of sterilization that is about 43 percent lower than the non-religious while people from other religions have an odds that is about 55 percent lower than people with no religion. One possible reason is the Catholic Church's opposition to contraception (Stycos et al. 1956). Despite taking into consideration all of the aforementioned control variables, there remain significant pan-ethnic and other ethnic disparities in sterilization.

African American women and American Indian women are more likely to undergo tubal sterilization than European American women. For African American women the point estimate of the OR (1.14) is statistically significant at $p=.029$ and for American Indian women the point estimate of 1.66 is statistically significant at $p=.006$. African American women have an odds of tubal sterilization that is roughly 14 percent higher than European American women. American

Indian women have an odds that is about 66 percent higher than European American women. The differences between American Indian women and African Americans are significantly different from each other at the .05 level because the point estimate for African Americans does not fall within the 95 percent confidence interval for American Indians, and vice versa. Interestingly, Mexican-origin women are less likely than European American women to have been sterilized—a roughly 17 percent *lower* odds of sterilization than European American women. Since the dataset is pooled from several years of data, it follows that this dataset allows us to test for changes over time.

Testing for Changes in Pan-Ethnic and Other Ethnic Disparities over Time

Figures 4.1 and 4.2 (above) suggest that the percentage of women sterilized has grown over time. One might aver that the growth for women of color may be due to growth in other factors such as fertility or differences in other control variables. Table 4.2 presents the results of testing for change over time in pan-ethnic and other ethnic disparities, net of control variables. The most striking pattern is for African American women. In 1982, and after adjustment with control variables, African American women are slightly less likely to have been sterilized than European American women, but in every other year are *more likely* to have been sterilized. For American Indian women, the main effect in 1982 is statistically significant with no evidence of change over time, indicating that there is a consistently higher likelihood of sterilization for them relative to European American women over the entire time period.

We can take an example to assess change across time by computing the predicted probability of tubal sterilization for women by pan-ethnic and other ethnic group. For the first example, consider a woman who is married, non-religious, age 25 to 29, has given birth to two children, had her first birth as a teenager, has completed high school, and has a household

income ranging from 0 to 149 percent of the poverty line. An African American woman (circa 1982) with these characteristics has a probability of tubal sterilization of 0.312 compared to 0.384 for a European American woman, 0.638 (American Indian woman), 0.234 (Mexican-origin woman), and 0.365 (Puerto Rican or other Latina). With the exception of American Indian women, European American women in the early 1980s are *more likely* to have undergone tubal sterilization than women of color; however, by 1988 the picture changes.

Using the same example characteristics as above and applying it to 1988, a European American woman has a 0.468 predicted probability of sterilization compared to 0.479 (African American woman), 0.494 (American Indian woman), 0.303 (Mexican-origin woman), and 0.467 (Puerto Rican and Other Latinas). African American and American Indian women have a higher predicted probability of sterilization (circa 1988) while Mexican-origin women have a lower likelihood and Puerto Ricans and Other Latinas have a nearly equal probability compared to European American women. In 1995, a European American woman with these characteristics has a predicted probability of sterilization equal to 0.422. The predicted probability for the comparable African American woman is about 23 percent higher (0.519), about 31 percent higher for an American Indian woman (0.552), roughly 2.1 percent higher for a Mexican-origin woman (0.431), and about 12.7 percent higher for Puerto Ricans and Other Latinas (0.476). By 2002, the overall percentage sterilized decreases, but pan-ethnic and other ethnic disparities remain.

In 2002, with this same set of characteristics (married, non-religious, age 25 to 29, two children, first birth as a teenager, completed high school, and household income equal to from 0 to 149 percent of the poverty line), the European American woman has a predicted sterilization probability of 0.353 compared to 0.422 (African American woman), 0.572 (American Indian

woman), 0.379 (Mexican-origin woman), and 0.470 (Puerto Rican and Other Latinas).

Interestingly, in 2002, a more pronounced disparity between Mexican-origin and European American women begins to emerge (recall that in 1982 and 1988 Mexican-origin women were *less likely* to undergo sterilization compared to European American women).

Table 4.2: Changes in Pan-Ethnic and Other Ethnic Disparities over Time, 1982-2002.

	African American	American Indian	Mexican Origin	Puerto Rican/ Other Latina
1982	-0.316** (0.120)	1.034* (0.505)	-0.710* (0.314)	-0.079 (0.311)
1988	0.043* (0.149)	0.103+ (0.568)	-0.707 (0.386)	-0.003 (0.375)
1995	0.389** (0.143)	0.521 (0.591)	0.036* (0.334)	0.219 (0.342)
2002	0.288** (0.183)	0.893 (0.705)	0.107* (0.351)	0.482 (0.357)

Note: Logits (i.e., logged odds) from logistic regression with standard errors in parentheses. Dependent variable is whether or not respondent has undergone tubal sterilization. Model includes all control variables from Model 4 in Table 4.1 and pan-ethnic and other ethnic identity interacted with survey year.

+ p<.10, * p<.05, ** p<.01 (two-tailed)

N=27,274

Overall, the results are generally consistent with Hypothesis 1 that women of color are more likely to be sterilized than European American women. The pan-ethnic and other ethnic disparities hold despite controls for age, parity, age at initiation of motherhood, marital status, religious affiliation, socio-economic status, and educational attainment. The most interesting finding here are the shifts over time in pan-ethnic and other ethnic disparities. In the early 1980s, with the exception of American Indian women, African Americans and Mexican-origin women are *less likely* to have undergone tubal sterilization than European American women. Puerto Ricans and Other Latinas are no different than European American women in the early

1980s. In the late 1980s and accelerating into the early 2000s, we see a general increase in the sterilization of African American women (with a slight attenuation by the early 2000s). The timing here corresponds with attacks on the welfare state and the use of the racist “welfare queen” controlling image by political elites in the 1980s and through the mid-1990s during the demise of the Aid to Families with Dependent Children program (Neubeck and Cazenave 2001; Quadagno 1994; Thomas 1998). One of the principal themes of “welfare reform” were policies that attempted to regulate women’s sexual and reproductive behaviors (Neubeck and Cazenave 2001; Smith 2007).

Looking at the trends for Mexican-origin women, in the early 1980s, they are statistically significantly less likely to have been sterilized than European American women. However, by the mid-1990s, there is a growing sterilization disparity between Mexican-origin and European American women. During the mid-1990s, the scapegoating of Mexican people reached national public consciousness with the controversy surrounding California’s Proposition 187 (Chavez 2008). Proposition 187 was California a state referendum designed to restrict the access of Mexican migrants to social services and other public services. One specific point made by then California governor Pete Wilson, when he advocated for the passage of this referendum, was that it would deny Mexican women pre-natal care (Gutiérrez 2008: 119; Chavez 2008).

One interpretation of the increasing sterilization of Mexican-origin women is that as immigrants became a racial scapegoat, physicians and other reproductive healthcare providers pushed the women in the scape-goated group to get sterilized. This is an interpretation that cannot be proven with the data analyzed in this dissertation. Another interpretation is that Mexican-origin women are increasingly choosing sterilization as a means of birth control. Once again, this is an interpretation that cannot be tested with the data analyzed in this dissertation. I

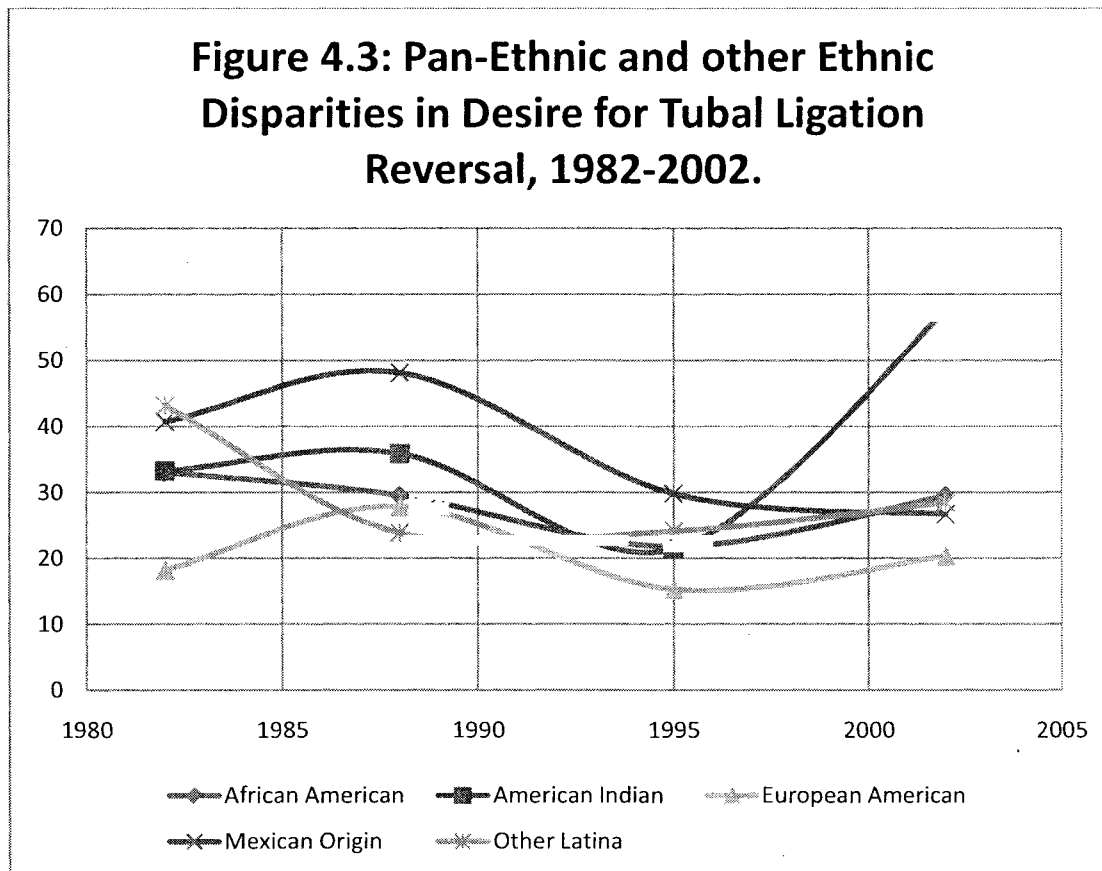
will further explore these interpretations in the concluding chapter and make suggestions for future research. Since disparities in sterilization tell us about a single outcome, we should also explore the related concept of “sterilization regret” among women who have undergone sterilization surgery. The question of who regrets getting sterilized may tell us something about coercion or other pressures placed on women of color compared to European American women.

Testing Hypothesis 2: Pan-Ethnic and Other Ethnic Disparities in Sterilization Regret

In this section I will test Hypothesis 2: Women of color are more likely to regret getting sterilized than European American women. This analysis will be run on the 5,887 respondents who have undergone tubal sterilization (21.6 percent of the original un-weighted sample of 27,274). My sterilization racism concept hypothesizes that since some women of color may be pressured, coerced, or deceived into getting sterilized, we should therefore find a higher rate of sterilization regret among women of color. Previous research has shown only weak evidence of pan-ethnic and other ethnic disparities in sterilization regret (i.e., desire for sterilization reversal) (Borrero et al. 2007a). However, there have been no studies of trends in sterilization regret or pan-ethnic and other ethnic differences in sterilization regret and no studies comparing American Indian, Mexican-origin, Puerto Ricans, African Americans and European Americans to each other.

Figure 4.3 presents pan-ethnic and other ethnic disparities in the percentage of sterilized women who desire reversal of the surgery. This measure is often interpreted as “sterilization regret.” For all time points but one (1988), European American women have the lowest rate of desire for tubal sterilization reversal. Mexican-origin women and Puerto Rican and Other Latinas have the highest rates of desire for tubal sterilization reversal. In 1982, 40.7 percent of Mexican-origin women and 43.2 percent of Puerto Rican and Other Latinas desired to have their

surgeries reversed compared to 33.1 percent of African American women and 33.2 percent of American Indian women and 18.2 percent of European American women. In 1988, the highest rate of desire for reversal was Mexican-origin women at 48.1 percent followed by 35.9 percent for American Indian women, 29.5 percent of African American women, 27.9 percent of European American women and 23.8 percent of Other Latinas.



In 1995, European American women had the lowest rate of desire for reversal at 15.3 percent while Mexican-origin women had the highest rate at 30 percent. In between this range were Other Latinas at 24.1 percent, African Americans at 21.8 percent, and American Indians at 21.4 percent. In 2002, rates of desire for reversal increased above their 1995 levels. The point estimate for American Indians increases to 57.5 percent, but this is not statistically significant

given the extremely small sample of American Indians and the correspondingly wide confidence interval. In fact, none of the women in the various pan-ethnic groups of color are statistically significantly different in their likelihood of expressing regret comparing the 1995 to the 2002 sample.

In the next section, I present a logistic regression of desire for tubal sterilization reversal based on the pooled (1982-2002) NSFG waves (Table 4.3). The model includes the control variables used in previous studies (such as age at time of sterilization) and I also include a control for women who first became moms as teenagers. In the model in Table 4.3, one or more ORs for pan-ethnic and other ethnic group, age at time of sterilization surgery (a continuous variable), marital status, and income are statistically significant. The woman with the highest probability of sterilization regret (applying only statistically significant variables) is a low income divorced, widowed, or separated Mexican-origin woman whose first birth occurred as a teenager and who was sterilized at a young age (as a teenager). The woman with the lowest likelihood of sterilization regret is a never-married European American woman, sterilized at age 44, who has an income greater than 350 percent of the poverty line (circa 1995).

Looking at the variables of interest, one of the strongest predictors of sterilization regret is the age at which the surgery occurred. Women who had the surgery at an older age are less likely to regret getting sterilized than women who were sterilized at a younger age. For instance, a married, college-educated, European American woman, age 40 at time of surgery, who has given birth to two children, who is not Catholic or Protestant and has an income 250 percent to 349 percent of the poverty line has a predicted probability of regret of 0.063. If the woman was age 22 at the time of the surgery, the predicted probability of regret would be 0.281.

Being divorced, widowed, or separated is associated with an increased likelihood of sterilization regret compared to never-married women. Thus, divorced, widowed or separated women have about 43 percent higher odds of sterilization regret than never-married women. One possible explanation is that women in such situations regret getting sterilized if they desire to have children with a future partner and see the sterilization as barrier to forming new relationships. Income is clearly associated with sterilization regret. Low-income women are much more likely to regret getting sterilized than high-income women. Compared to women who are below 150 percent of the poverty line, women with an income between 150 and 249 percent of the poverty line have a 21 percent lower odds of regret, women with an income between 250 percent and 349 percent of the poverty line have a 24 percent lower odds, and women with an income 350 percent or higher than the poverty line have a roughly 37 percent lower odds of regret.

The evidence of pan-ethnic and other ethnic disparities is found between European Americans and Latinas. There is some evidence against the null hypothesis of a difference between American Indians and European Americans. Mexican-origin women have 90 percent higher odds of regret than European American women and Puerto Ricans and Other Latinas have odds that are about 41 percent higher. For a married Catholic Mexican-origin women (circa 2002) with some college education, sterilized at age 30, who has given birth to two children (all when the woman was age 20 or older), and has an income between 150 and 249 percent of the poverty line, the predicted probability of sterilization is 0.257. For a European American woman with these characteristics the predicted probability of sterilization is 0.153. A Puerto Rican or other Latina with these characteristics has a predicted probability of sterilization regret of 0.189, an American Indian woman 0.243, and an African American woman 0.169. Thus, Mexican-

origin women clearly have the highest rate of sterilization regret, even after adjustment for confounders.

Table 4.3: Logistic Regression of Pan-Ethnic and Other Ethnic Disparities in Sterilization Regret, National Surveys of Family Growth: 1982-2002.

	Odds Ratio	95% CI	p-value

Pan-Ethnic and other Ethnic Disparities			
African American	1.12	(0.91-1.37)	.273
American Indian	1.77	(0.93-3.38)	.083
European American	1.00		
Mexican-origin	1.90	(1.34-2.69)	<.001
Puerto Rican/Other Latina	1.41	(1.01-1.97)	.044
Survey Year			
1982	1.00		
1988	1.42	(1.11-1.80)	.004
1995	0.67	(0.53-0.85)	<.001
2002	0.95	(0.71-1.27)	.737
Age at Sterilization	0.91	(0.89-0.93)	<.001
Age at First Birth			
Age twenty or older	1.00		
Teenager	1.08	(0.89-1.32)	.417
Parity			
No children	1.00		
One Child	0.99	(0.53-1.83)	.976
Two Children	0.71	(0.40-1.26)	.246
Three+ Children	0.79	(0.44-1.41)	.420
Marital Status			
Never Married	1.00		
Currently Married	0.95	(0.71-1.27)	.717
Divorce/Widow/Separated	1.43	(1.07-1.91)	.015
Income as Percent Poverty Line			
0 to 149%	1.00		
150 to 249%	0.79	(0.63-0.99)	.041
250 to 349%	0.76	(0.58-1.00)	.049
350% to highest	0.63	(0.49-0.83)	.001
Educational Attainment			
Less than High School	1.00		
High School Degree	0.97	(0.79-1.21)	.698
Some College	1.01	(0.77-1.33)	.921
College Graduate	1.13	(0.78-1.64)	.525
Religious Preference			
No Religion	1.00		
Protestant	1.09	(0.81-1.46)	.578
Catholic	1.07	(0.77-1.51)	.678
Other Religion	0.99	(0.54-1.82)	.973

Note: Odds ratios, 95% confidence intervals, and p-values from logistic regression of data from the National Surveys of Family Growth 1982-2002. Dependent variable is whether or not respondent regrets tubal sterilization.

N=5,304

In testing for interaction effects, I found a significant interaction between age at first birth and pan-ethnic and other ethnic group. Table 4.4 reports the odds ratios for pan-ethnic and other ethnic group by age at first birth. Among women who first gave birth as teenagers, compared to European American women, African American women are slightly less likely (8 percent lower odds) to regret getting sterilized. However, Mexican-origin women (who first gave birth as a teenager) are more likely to regret sterilization (32 percent higher odds).

Among women whose first birth was age twenty or older, African American, American Indian, and Mexican-origin women are all substantially more likely to regret sterilization compared to European American women. Puerto Ricans and Other Latinas (regardless of age at first birth) are no different than European American women in regretting sterilization. The odds are 40 percent higher for African Americans, 160 percent higher for American Indians, and 172 percent higher for Mexican-origin women.

Table 4.4: Pan-Ethnic and Other Ethnic Disparities in Sterilization Regret Interacted with Age at First Birth, 1982-2002.

	African American	American Indian	Mexican Origin	Puerto Rican/ Other Latina
Teen at First Birth	0.92 (p=.02)	1.17 (p=.19)	1.32 (p=.02)	1.41 (p=.953)
Age Twenty+ First Birth	1.40 (p=.02)	2.60 (p=.05)	2.72 (p<.001)	1.38 (p=.147)

Note: Odds ratios from interactive logistic regression with p-value in parentheses. Dependent variable is whether or not respondent regrets tubal sterilization. The model includes all variables in Table 4.3 plus interaction terms between pan-ethnic or ethnic group and age at first birth.

N=5,304

We can assess the pan-ethnic and other ethnic disparities by taking an example. Consider a European American woman in 2002 who was age 30 at the time of sterilization, has given birth to two children (all at age twenty or older), currently divorced, widowed, or separated,

Protestant, with a high school degree and an income between 150 and 249 percent of the poverty line. Her predicted probability of sterilization regret is 0.195. A similarly situated African American woman has a predicted probability of regret of 0.253, an American Indian woman 0.387, and a Mexican-origin woman 0.398. The disparities among women who first gave birth at age twenty or older may be the result of reproductive healthcare providers targeting women of color on the basis of racist stereotypes and assumptions about how many children they have and how long they have been having children.

The absence of pan-ethnic and other ethnic disparities in sterilization regret among women who began motherhood as teenagers suggests some women of color may not be experiencing discrimination (in terms of sterilization) or stigmatization (for being teen mothers) compared to similarly situated European American women. However, for women of color who initiate motherhood at age twenty or older, there are notable pan-ethnic and other ethnic disparities in sterilization regret. Mexican-origin and American Indian women have much higher odds of regret than European American women--190 and 140 percent higher odds respectively. If sterilization regret measures the extent to which women have been stereotyped by racist controlling images and consequently coerced into accepting the surgery, then the results for women who started having children age twenty or older, support such a conclusion. One possible reason for disparities between women of color and European American women who first gave birth at age twenty or older is that they are targeted for coercion under the stereotype that they were teen mothers who have already had too many babies (Kaplan 1997).

However, it does not automatically follow that because women regret getting sterilized, that they were discriminated against. Other reasons may cause a woman to regret getting sterilized: desire for more children, remorse due to changing of one's mind, dissatisfaction with

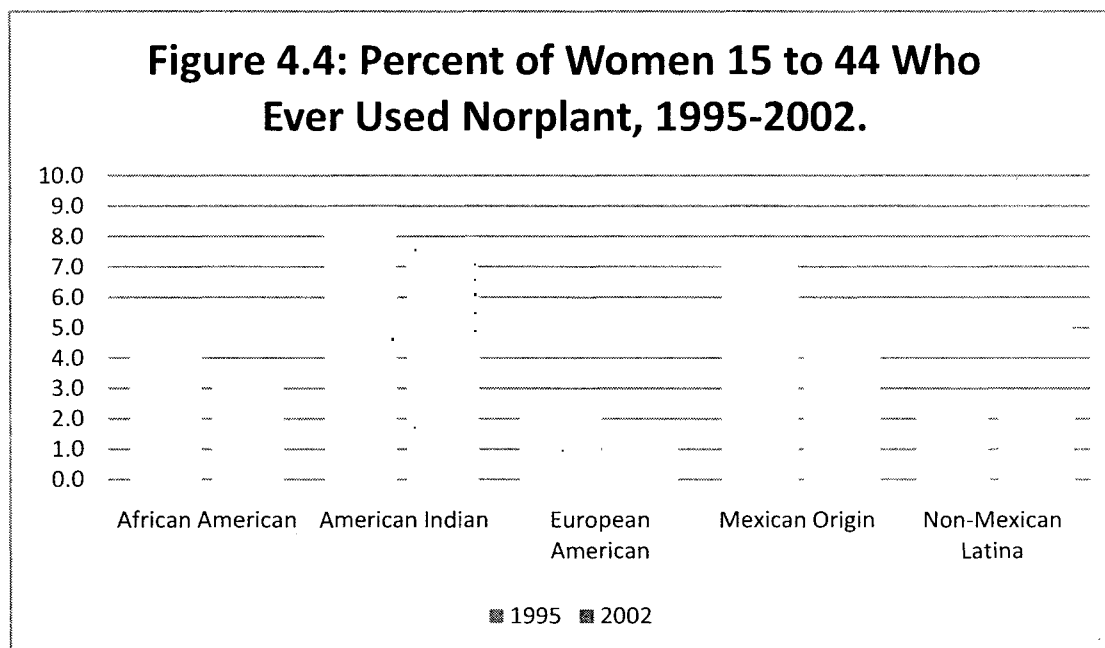
side effects (Jamieson et al. 2002). Whether or not these factors specifically affect women of color who first gave birth at age twenty or older is a question left unanswered by current research. While this analysis considers sterilized women, less is known about pan-ethnic and other ethnic disparities among non-sterile women concerning the extent to which they use temporary sterilization: long-acting hormonal contraception such as Norplant and Depo-Provera. In the next section, I examine non-sterile women to test the hypothesis that non-sterile women of color are most likely to use types of contraception that are close to sterilization but not permanent.

Testing Hypothesis 3: Pan-Ethnic and Other Ethnic Disparities in Norplant and Depo-Provera Usage, 1995-2002

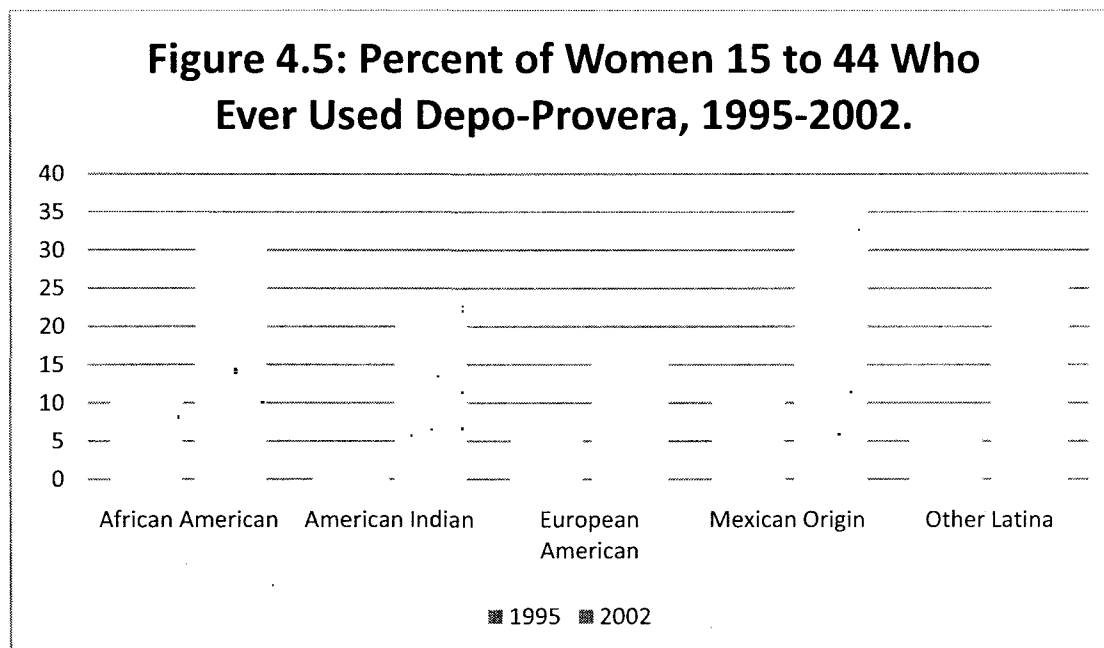
In the previous section, I analyzed patterns of sterilization regret among women who had undergone tubal ligation surgery. This section focuses on the portion of the sample from the test of Hypothesis 1 that was not surgically sterile. By focusing on non-sterile women, we may study pan-ethnic and other ethnic disparities in the use of long-acting hormonal contraceptive methods: the closest methods to sterilization with the distinction that they are not permanent. Norplant and Depo-Provera are both long-acting hormonal contraceptives. Norplant is a subdermal implant of six-silicone rods that can sterilize a woman for up to five years. Depo-Provera is an injection that prevents conception for up to three months. The outcome variables used in this study are three-fold: if the respondent (1) ever used Norplant, (2) ever used Depo-Provera, and whether the respondent is (3) currently using Norplant, Depo-Provera, or some other method.

Figure 4.4 presents the percentage of currently non-sterile women age 15 through 44 who have ever used Norplant in 1995 and 2002. American Indian women have the highest usage

rates followed by Mexican-origin, African American, Puerto Rican and Other Latinas, and the lowest ever-usage rates are for European American women. With the exception of Puerto Rican and Other Latinas, all differences are statistically significant. Only for European American women is the drop in the percentage having ever used Norplant statistically significant ($p=.028$).



Likewise, Figure 4.5 presents the percentage of currently non-sterile women age 15 through 44 who have ever used Depo-Provera in 1995 and 2002. All pan-ethnic and other ethnic groups, except for American Indian women, are statistically significantly more likely to have ever used Depo-Provera than European American women.



For all pan-ethnic and other ethnic groups, the percentage increase in having ever used Depo-Provera between 1995 and 2002 is statistically significant. Thus, women as a whole are more likely in 2002 than in 1995 to have ever used Depo-Provera.

Tables 4.5 and 4.6 present the results of a model of who has ever used Norplant (Table 4.5) and Depo-Provera (Table 4.6). For Norplant (Table 4.5), one or more of the ORs for pan-ethnic and other ethnic group, survey year, age at first birth, parity, age of respondent, and educational attainment are significant predictors of having ever used Norplant. Owing to its declining popularity, the odds of having ever used Norplant are 36 percent lower among women interviewed in 2002 compared to those interviewed in 1995. Higher parity (number of child-births) is a strong predictor of having ever used Norplant. Compared to a woman who has never given birth, a woman with three or more live births has about 245 percent higher odds of ever-use. For example, a divorced, widowed, or separated Catholic American Indian woman, age 25 to 29, with a college degree, and an income 250 to 349 percent of the poverty line has a probability of 0.013 of ever using Norplant. A woman who is the same, except has had three or

more children has a predicted probability of ever-use 0.042. If this same woman had not completed high school, (and had three or more children) then the predicted probability would be 0.116 (a probability 178 percent higher than the otherwise same European American woman with a predicted probability of 0.042). Interestingly, African Americans and Latinas are no more likely than European Americans (after adjustment with control variables) to have ever used Norplant. The higher usage rates among American Indian women are consistent with Malat's (2000) findings in her study of Norplant use.

Table 4.5: Logistic Regression of Pan-Ethnic and Other Ethnic Disparities in Having Ever Used Norplant, National Surveys of Family Growth: 1995-2002.

	Odds Ratio	95% CI	p-value

Pan-Ethnic and other Ethnic Disparities			
African American	1.27	(0.80-1.99)	.306
American Indian	3.01	(1.13-8.04)	.028
European American	1.00		
Mexican-origin	1.50	(0.86-2.61)	.149
Puerto Rican/Other Latina	0.73	(0.38-1.42)	.356
Survey Year			
1995	1.00		
2002	0.64	(0.45-0.91)	.013
Age at First Birth			
Age twenty or older	1.00		
Teenager	1.71	(1.12-2.60)	<.012
Parity			
No children	1.00		
One Child	2.79	(1.71-4.55)	<.001
Two Children	2.57	(1.51-4.35)	.001
Three+ Children	3.45	(1.74-6.83)	<.001
Age Groups			
Age 15-19	1.00		
Age 20-24	2.17	(1.10-4.30)	.026
Age 25-29	2.56	(1.26-5.21)	.010
Age 30-34	1.94	(0.89-4.25)	.096
Age 35-39	1.07	(0.42-2.72)	.883
Age 40-44	0.86	(0.32-2.33)	.770
Marital Status			
Never Married	1.00		
Currently Married	0.64	(0.39-1.04)	.070
Divorce/Widow/Separated	0.82	(0.45-1.50)	.516
Income as Percent Poverty Line			
0 to 149%	1.00		
150 to 249%	1.03	(0.67-1.58)	.890
250 to 349%	0.57	(0.32-1.02)	.058
350% to highest	0.72	(0.46-1.13)	.149
Educational Attainment			
Less than High School	1.00		
High School Degree	0.65	(0.42-0.99)	.047
Some College	0.69	(0.42-1.15)	.151
College Graduate	0.34	(0.18-0.63)	.001
Religious Preference			
No Religion	1.00		
Protestant	1.06	(0.64-1.77)	.808
Catholic	1.03	(0.57-1.89)	.912
Other Religion	1.32	(0.61-2.88)	.481

Note: Odds ratios, 95% confidence intervals, and p-values from logistic regression of data from the National Surveys of Family Growth 1982-2002. Dependent variable is whether or not respondent has ever used Norplant. N=8,042

Table 4.6 presents the results of the analysis of having ever-used Depo-Provera. One or more ORs for pan-ethnic and other ethnic group, survey year, parity, age, marital status, educational attainment and religion are statistically significant. Women interviewed in 2002 are more likely than women interviewed in 1995 to have ever used Depo (282 percent higher odds). Women with one, two, or three or more births are much more likely than women with no children to have ever used Depo-Provera. Women over age 30 are much less likely than younger women (age 15 to 19) to have ever used Depo while women in the 20 to 24 and 25 to 29 age groups are no different than 15 to 19 year olds in their likelihood of having ever used Depo. Married women are less likely to have ever used Depo compared to never-married women.

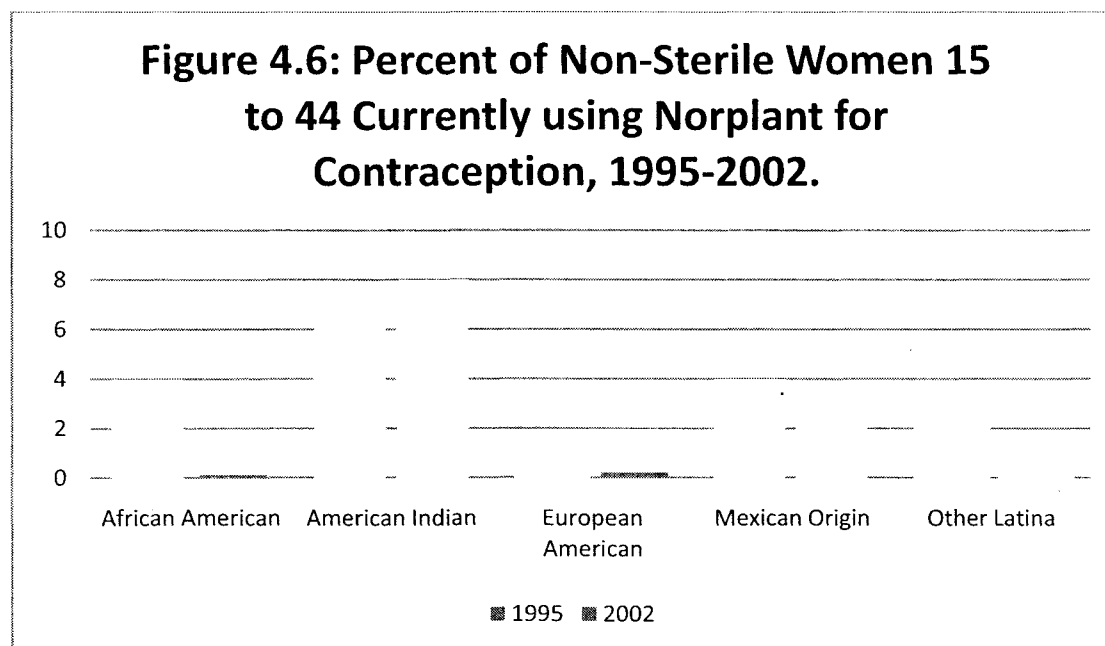
Table 4.6: Logistic Regression of Pan-Ethnic and Other Ethnic Disparities in Having Ever Used Depo-Provera, National Surveys of Family Growth: 1995-2002.

	Odds Ratio	95% CI	p-value

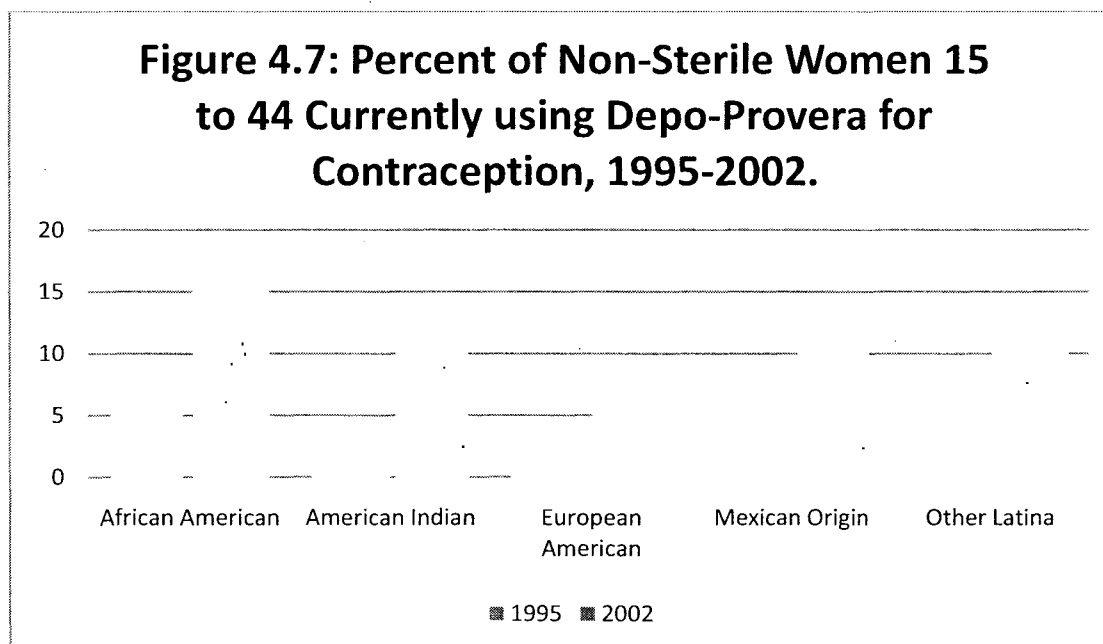
Pan-Ethnic and other Ethnic Disparities			
African American	1.51	(1.16-1.97)	.002
American Indian	0.88	(0.45-1.73)	.713
European American	1.00		
Mexican-origin	1.79	(1.32-2.44)	<.001
Puerto Rican/Other Latina	1.24	(0.90-1.70)	.188
Survey Year			
1995	1.00		
2002	3.82	(3.18-4.58)	<.001
Age at First Birth			
Age twenty or older	1.00		
Teenager	1.13	(0.89-1.43)	<.312
Parity			
No children	1.00		
One Child	3.24	(2.43-4.30)	<.001
Two Children	3.26	(2.29-4.64)	<.001
Three+ Children	3.67	(2.39-5.62)	<.001
Age Groups			
Age 15-19	1.00		
Age 20-24	0.93	(0.67-1.29)	.657
Age 25-29	0.89	(0.62-1.28)	.539
Age 30-34	0.62	(0.41-0.94)	.025
Age 35-39	0.30	(0.20-0.45)	<.001
Age 40-44	0.20	(0.12-0.35)	<.001
Marital Status			
Never Married	1.00		
Currently Married	0.66	(0.52-0.85)	.001
Divorce/Widow/Separated	1.01	(0.74-1.39)	.936
Income as Percent Poverty Line			
0 to 149%	1.00		
150 to 249%	0.99	(0.79-1.25)	.965
250 to 349%	0.69	(0.50-0.96)	.027
350% to highest	0.82	(0.63-1.07)	.144
Educational Attainment			
Less than High School	1.00		
High School Degree	0.83	(0.64-1.09)	.175
Some College	0.62	(0.48-0.80)	<.001
College Graduate	0.43	(0.30-0.62)	<.001
Religious Preference			
No Religion	1.00		
Protestant	0.71	(0.55-0.90)	.005
Catholic	0.56	(0.43-0.73)	<.001
Other Religion	0.44	(0.26-0.75)	.003

Note: Odds ratios, 95% confidence intervals, and p-values from logistic regression of data from the National Surveys of Family Growth 1982-2002. Dependent variable is whether or not respondent has ever used Norplant. N=8,042

Women with a college education (some college or a college graduate) are much less likely than women who have not completed high school to have ever used Depo. A 20 to 24 year old never-married African American woman with one child born when the woman was a teenager, who did not complete high school, is not religious, has an income less than 150 percent of the poverty line (circa 2002) has a predicted probability of 0.900 of ever using Depo compared to 0.790 for her college-educated counterpart. The college-educated European American woman with these characteristics has a predicted probability of 0.713 of having ever used Depo-Provera (a roughly 10 percent lower expected probability). If the same woman was Mexican-origin, her predicted probability would be 0.817 of having ever used Depo. If reproductive healthcare providers are discriminating against patients by using racist controlling images and stereotypes to promote contraceptive use, then this may explain why African American and Mexican-origin women are more likely to have ever used Depo-Provera.



Looking at currently contracepting non-sterile women (Figure 4.6), we see, once again, clear pan-ethnic and other ethnic disparities in who is currently using Norplant. The pan-ethnic and other ethnic disparities are all statistically significant in that women of color have a higher likelihood of currently using Norplant than European American women. For African Americans, the raw odds ratios (with reference to European American women) are 2.6, 8.3 for American Indian women, 5.5 for Mexican-origin women, and 2.1 for Puerto Rican and Other Latinas. The percentage decreases in the current use of Norplant are statistically significant only for African American and European American women. For American Indians and Latinas, the changes in current Norplant usage are not statistically significant. Thus, only for African American and European American women were there significant usage drops in Norplant between 1995 and 2002.



In Figure 4.7, we can see the patterns in who is currently using Depo-Provera for contraception among non-sterile and currently contracepting women. The highest usage rates are for African

American, Mexican-origin, American Indian, and Puerto Rican and Other Latinas. In 2002, women of color are much more likely to be currently using Depo-Provera than European American women. Within each pan-ethnic and other ethnic group, the increase in Depo-Provera usage from 1995 to 2002 is statistically significant, except for Latinas.

In Table 4.7, I present the results of a multinomial logistic regression for the outcome variable of current usage of Norplant or Depo-Provera as opposed to another form of contraception (condoms, birth control pills, foam/jelly/creams, rhythm, etc.). The first column of the regression in Table 4.7 indicates that after including all potential control variables, American Indian women have a statistically significant unexplained disparity in current Norplant usage for the two survey years. Thus, American Indian women are most likely to have been currently using Norplant when these surveys were administered. Looking at column 2 in Table 4.7, we see that there is an unexplained disparity for current Depo-Provera usage for African American women. African American women have odds about 72% higher than European American women of using Depo-Provera.

Other variables for current Norplant use that are significant are survey year, parity, and educational attainment. Women in 2002 have 70 percent lower odds of reporting current Norplant use compared to women interviewed in 1995. Women with higher parity (more children) are more likely to be current users. An unmarried European American woman, age 20 to 24, with two children (born when the woman was age twenty or older), with an income less than 150 percent of the poverty line, who has not completed high school, and who is not religious has a predicted probability of current use of 0.057 compared to a similarly situated American Indian woman whose predicted probability of current Norplant use of 0.254.

Pan-ethnic and other ethnic group, survey year, age, parity, religion, education, and income all impact the likelihood of current Depo-use. The woman least likely to be using Depo is a married European American woman, age 40 to 44, with an income over 350 percent of the poverty line, a college degree, in a denomination besides Protestant or Catholic (i.e., other religion) who has no children (circa 1995). Her predicted likelihood of usage is 0.002 or about 2 in 1,000. The woman most likely to be currently using Depo is a never-married, non-religious, African American woman, age 15 to 19, with one child (born when the woman was a teenager), who has not completed high school, and has a household income less than 150 percent of the poverty line (circa 2002). Her predicted probability of current Depo-use is 0.606 compared to her European American counterpart with a predicted probability of 0.472.

Table 4.7: Multinomial Logistic Regressions for Current Use of Norplant and Depo-Provera among Non-Sterile Women, 1995-2002.

	(1) Norplant Vs. other	(2) Depo-Provera Vs. other
African American	1.307 (0.367)	1.716** (0.302)
American Indian	5.685** (3.443)	1.256 (0.756)
Mexican-origin	2.014 (0.829)	1.309 (0.267)
Puerto Rican/Other Latina	1.150 (0.514)	1.085 (0.251)
Year 2002	0.299*** (0.081)	1.841*** (0.228)
Age 20 to 24	1.567 (0.642)	0.814 (0.159)
Age 25 to 29	1.446 (0.635)	0.627* (0.128)
Age 30 to 34	0.638 (0.309)	0.445** (0.125)
Age 35 to 39	0.354 (0.189)	0.304*** (0.100)
Age 40 to 44	0.286 (0.242)	0.231** (0.111)
One Child	4.488*** (1.618)	3.185*** (0.634)
Two Children	4.839*** (1.959)	2.686*** (0.696)
Three or More Children	5.875*** (2.763)	2.549*** (0.722)
Firth Birth as Teenager	0.984 (0.272)	1.171 (0.167)
Married	0.651 (0.199)	0.558** (0.104)
Divorced/Widowed/Separated	0.795 (0.279)	0.698 (0.167)
Catholic	0.890 (0.462)	0.615* (0.116)
Protestant	0.931 (0.368)	0.675* (0.103)
Other Religion	1.218 (0.704)	0.517* (0.172)
High School	0.429*** (0.108)	0.684** (0.096)
Some College	0.393*** (0.122)	0.479*** (0.077)
College Graduate	0.209*** (0.900)	0.306*** (0.070)
150% to 249% Poverty Line	0.616 (0.177)	0.967 (0.141)
250% to 349% Poverty Line	0.475	0.560**

(Table 4.7 continued)

	(0.195)	(0.118)
350% or More Poverty Line	0.603	0.835
	(0.174)	(0.137)
<hr/>		
N	8042	8041
<hr/>		

Exponentiated coefficients; Standard errors in parentheses. Estimates use complex survey sampling weights.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The pan-ethnic and other ethnic disparities in Norplant and Depo-Provera usage are interesting because of what they may tell us about racial discrimination in reproductive healthcare. I find, like Malat (2000), that American Indian women are more likely to have ever used or to be current users of Norplant. Current use of Norplant by American Indian women was slightly higher in 2002 than 1995. This is alarming because Norplant was taken off the market by 2002 amid litigation targeted at its many side effects. The Native American Women's Health Education Resource Center conducted a study of the federal Indian Health Service and found that they were "aggressively" promoting Norplant to American Indian women (Smith 2005:94).

The growth in Depo-Provera usage between 1995 and 2002 shows rapidly increasing use by women of color. European American women are the least likely to use Depo. What accounts for this lack of demand for Norplant and Depo-Provera among European American women? Why don't European American women "choose" these methods at the same rate as women of color? African American and Mexican-origin women are most likely to have *ever* used Depo-Provera while African American women are most likely to be *current* users of Depo. This analysis suggests that long-acting hormonal methods may be targeted at women of color. The result of this targeting is the minimization of control women of color have over their reproductive lives. Further implications and limitations of these findings will be discussed in the

next and final chapter. I will discuss issues of interpretation and methodological challenges that arose in this study and what directions future studies should take.

CHAPTER FIVE

CONCLUSIONS AND IMPLICATIONS

In this dissertation I linked historical and case study literature on racist sterilization abuse to quantitative pan-ethnic and other ethnic disparities in sterilization. To forge this link, I developed the concept of sterilization racism: the organization of racist controlling images, policies, and practices of delivering reproductive healthcare that operate to constrain the reproductive activities and choices of women of color. As I noted earlier, however, I did not have access to direct measures of coercion to explicitly study sterilization racism. It was necessary, therefore, for me to study sterilization racism indirectly. I did so by testing for racialized pan-ethnic and other ethnic disparities in three sterilization outcomes: tubal sterilization (using a full sample of currently contracepting women), sterilization regret (using the portion of the sample who had been sterilized), and the use of long-acting hormonal contraception (Norplant and Depo-Provera) among non-sterile women. In acknowledging these weaknesses of my analysis, I characterized this study as a strong-conceptual but weak-data case for sterilization racism. My study contributes the following findings to the historical literature on sterilization abuse and quantitative studies of sterilization.

Conclusions Based on the Findings

First, while tubal sterilization is an increasingly popular method of contraception for all pan-ethnic and other ethnic groups (Chandra 1998), I found that there has been a marked increase in the tubal sterilization gap between African American women and European American women, net of age, parity, age at first child-birth, marital status, denominational affiliation, educational attainment, and income starting in the late 1980s and continuing into the early 2000s. Compared to European American women, American Indian women have consistently had a higher rate of

tubal sterilization.⁴³ For Mexican-origin women, there is evidence of a growing disparity in tubal sterilization between them and European American women starting in the mid 1990s and continuing into the early 2000s. Among Puerto Ricans and Other Latinas, I find little difference in the likelihood of sterilization compared to European American women.

One interpretation of these findings is that the increased sterilization of African American women in the 1980s (that peaked by 1995 and leveled off somewhat by 2002) was fostered by the prevalence of racist controlling images (Neubeck and Cazenave 2001) used by the Reagan administration and other political elites to attack welfare state social programs. That is, as African American women were increasingly demonized as “welfare queens” as part of the 1980s backlash against the gains of the modern civil rights movement, physicians and other reproductive healthcare providers compelled, coerced, or deceived them into getting sterilized. Similarly, as anti-immigration (read Mexican) sentiment became increasingly public in the 1990s (e.g., Proposition 187 in California) physicians and other healthcare workers began to push sterilization on Mexican women. Because the pan-ethnic and other ethnic disparities in and of themselves are not strong evidence of racism--they may be the result of pan-ethnic and other ethnic disparities in preferences for sterilization--I also investigated sterilization regret.

In studying sterilization regret, I found that pan-ethnic and other ethnic disparities depend on the age at first child-birth. When the sample is restricted to women whose first birth occurred as a teenager, then disparities in sterilization regret are found only for Mexican-origin and Puerto Ricans and Other Latinas (with a slightly lower likelihood for African American women). In this sub-population, there are no disparities for African American and American Indians. However, when the sample is restricted to women who first gave birth at age twenty or older, there is evidence of pan-ethnic and other ethnic disparities for nearly all women of color. I found no

⁴³ Since the samples are weighted, they are representative and therefore valid.

statistically significant patterns for trends over time. Thus, for some women of color (Latinas), there is a very high incidence of sterilization regret. For other women of color (African Americans and American Indians) a higher rate of regret, relative to European American women, is found only for women whose first birth was at age twenty or older. Since there are many documented cases of sterilization abuse against women of color, it follows that the higher rates of sterilization regret among women of color may be evidence that some women were coerced. However, overall, women who became mothers as teens are more likely to regret getting sterilized. Regardless of the age they began motherhood, Latinas are more likely to regret getting sterilized than European Americans. Among African Americans as well as American Indians, sterilization regret disparities compared to European American women occur only among those who began motherhood age twenty or older.

How do we account for the disparities among African American and American Indian women who gave birth at age twenty or older? First, consider the *lack* of disparities in regret between European American women and African Americans and American Indians (who were teens when they first gave birth). The lack of disparities may indicate that they feel equally satisfied with sterilization. It is possible that women from these pan-ethnic and other ethnic groups have felt fulfilled as mothers and decided to discontinue having children. Or, is it possible that European American women (who first gave birth as teens) are stereotyped as “irresponsible reproducers” who deviate from the “white” norm and are targeted by healthcare providers for sterilization at the same rate as African American and American Indian women? The lack of disparities may mask how sterilization racism can affect European Americans⁴⁴ if it is true that European American mothers (who were teenage mothers) are being stereotyped,

⁴⁴ In their study of welfare racism, Neubeck and Cazenave (2001: 38) found that racially discriminatory public assistance policies (designed with people of color in mind) can adversely impact “whites” when they have to use such social programs.

discriminated against, and sterilized as a result of these stereotypes. Consequently, they would not regret sterilization any more or less than African American and American Indian women.

When healthcare providers suggest sterilization to African American and American Indian women (whose first birth was at age twenty or older), it is possible they are making assumptions about their sexual and reproductive behavior—assumptions they may not make about “white” women. Reproductive healthcare providers may therefore put more pressure on African American and American Indian women to limit their childbearing behavior than European American women. Such women of color may have been pressured to accept sterilization (due to racist controlling images of the *welfare queen* or *hoochie mama* for African American women and the *squaw* for American Indian women) even when they are not satisfied with having all the children they had wanted. The absence of disparities for African American and American Indian women who first gave birth as a teenager suggests that such women may be satisfied with having had all the children they wanted, since they started motherhood at an earlier age. Among Latinas, on the other hand, the higher rates of regret suggest that the “hyper-fertile” *marianismo* stereotype (Chavez 2008; Gutiérrez 2008) is applied regardless of when the women began biological motherhood. Sterilization and sterilization regret only concern, however, the surgical form of sterilization. As such, I also examined long-acting hormonal contraception (Norplant and Depo-Provera) because these drugs and implants function as temporary sterilization.

I studied the two most prevalent long-acting hormonal contraceptives: Norplant and Depo-Provera. I found that American Indian women are more likely than European American women to have ever or currently use Norplant but not African American women and Latinas.

Mexican-origin and African American women are most likely to have ever used Depo-Provera, net of confounding factors. African Americans were most likely to be current users of Depo.

Norplant is a dangerous provider-controlled form of contraception. It is implanted under the skin by a healthcare provider and can only be safely removed by a medical expert trained to do so. By implanting Norplant--a device that slowly releases contraceptive chemicals--under the skin, healthcare providers literally colonize the womb. The high usage of Norplant by American Indian women is troubling because the device should not be used by patients with diabetes, high blood pressure, liver disease, or women who smoke because these risk factors are disproportionately found in American Indian populations and on reservations (Ralstin-Lewis 2005:87). Although many policy elites targeted African American women for Norplant use (Roberts 1997; Ordoover 2003), the evidence indicates that they were not very successful in getting Norplant into the arms of African Americans (Norplant usage was very low overall, though women of color used it at a much higher rate than European Americans). Among Latinas, I found no evidence of higher Norplant usage.

From my analysis of Depo-Provera use, I found a similar risk-of-use pattern compared to what I found for tubal sterilization: African American and Mexican-origin women were more likely to have ever or currently been using Depo. Historian Nancy Ordoover has noted that “Because the underlying racism and class bias of medical and public policy that propelled involuntary sterilization has not been dismantled, women who previously would have been targeted for tubal ligation are now being singled out for Norplant and Depo-Provera,” (Ordoover, 2003: 183). From 1967 through 1978, the largest test of Depo-Provera on humans ever conducted was carried out on a disproportionate number of African American women while Depo-Provera has been used by the Indian Health Service since the 1970s (Smith 2005). If

African American women and Mexican-origin women are being singled out as reproductive enemies of society, then reproductive healthcare providers who practice sterilization racism may be targeting them for Depo-Provera use. Because Norplant is no longer distributed in the United States, the strong growth I find in Depo-use between 1995 and 2002 may be indicative of a shift in terms of what contraceptives are available. Furthermore, the small decline in tubal sterilization between 1995 and 2002 may be caused by the increased availability of long-acting contraceptive options like Depo-Provera. Whereas my interpretations are based on my concept of sterilization racism, there are alternative explanations for my findings.

Alternative Explanations for the Findings

A plausible alternative explanation for my findings is that pan-ethnic and other ethnic disparities are not caused by the biases of reproductive healthcare providers, but that they are due to pan-ethnic and other ethnic differences in preference for different types of contraception. Why are African American and Mexican-origin women increasingly opting for permanent tubal sterilization? One possibility is that it is due to the lower prevalence of vasectomy operations among their male partners compared to European American women. A recent study of the 2002 NSFG found that 14 percent of European American women's partners had vasectomies compared to 5 percent of Latinas' partners and 4 percent of African American women's partners (Borrero et al. 2009a). Therefore, because European American men are more likely to get sterilized by vasectomy, it follows that fewer European American women would need to rely on sterilization for contraception. However, when the authors adjusted for this difference in a logistic regression analysis, African American women (regardless of partner's vasectomy status) were still more likely to undergo tubal sterilization (Borrero et al. 2009a).

In another study, the same authors found (also using the 2002 NSFG) that while there were no disparities in overall use of family planning programs, there were disparities in the specific types of services received. African Americans and Latinas were more likely than European Americans to receive counseling for birth control while Latinas were more likely to be counseled to get sterilized (Borrero et al. 2009b). Similarly, another recent study found that low income women of color were more likely to be advised by reproductive healthcare workers to limit their childbearing (Downing, LaVeist, and Bullock 2007). These studies suggest that reproductive healthcare provider bias (what I call sterilization racism) may be more important than reliance on “choice” alone as an explanation. Thus, sterilization racism may constrain the choices that women make about their reproductive lives.

Strengths and Limitations of the Study

As I noted earlier, this study makes a strong-conceptual but weak-data case for sterilization racism. In making this case, I have relied on data not collected for studying the role of coercion or racism in reproductive healthcare outcomes. Thus, one of the major limitations of this study is that I cannot directly measure racial coercion. The possibility that the disparities found in this study are the result of preference or choice on the part of women of color that differs from the preferences of European American women cannot be dismissed. However, the pan-ethnic and other ethnic disparities in sterilization regret may be interpreted as weakening the case that differences in preference alone explain disparities in regret.

This study also has other limitations. I used a large social survey dataset with fixed questions. Fixed-questions may not always elicit valid and/or reliable responses that accurately measure the concept under consideration (Circourel 1964). Similarly, the NSFG measures characteristics of the respondent in the present tense rather than (of specific interest to this study)

at the time of sterilization (Chandra 1998). This may bias the estimated results, for instance, of an income effect on the likelihood of undergoing sterilization because a respondent's income at the time of the interview may be different than her income at the time of the sterilization.

Another weakness concerns pan-ethnic and other ethnic identity--how it is interpreted by survey respondents and how people in the survey respondents' social worlds respond to their identities and perceived "racial" characteristics. "Racial," ethnic, and pan-ethnic self-identity are measured in the NSFG, but how others classify the respondents is not measured.⁴⁵ Perceived "race" may vary among people who identify as the same "race" (Saperstein 2006). Moreover, skin color tone (Craig 2002)⁴⁶ may also be an important factor in sterilization racism since "race" classifications are subjective assessments where skin color is the predominant (but not only) characteristic used in "racial" assessment.

This study also has several strengths. First, I do not limit my analysis to a comparison between "black," "Hispanic," and "white" women. I include American Indian women in my study and instead of analyzing data on "Hispanic" women; I analyze data for Mexican-origin and Puerto Rican and Other Latinas separately. Furthermore, I use pan-ethnic and other ethnic terms instead of "racial" terminology when describing difference. In taking this step, I have consciously tried to avoid the confusing, erroneous, and injurious "race" concept (Cazenave 2004). In performing a racism-centered analysis, I have offered a new and stronger conceptualization for understanding disparities among racialized ethnic groups in sterilization outcomes.

⁴⁵ In the Centers for Disease Control's Behavioral Risk Factor Surveillance System survey, for selected years and in selected states, respondents were asked what "race" others typically classify them as.

⁴⁶ The sterilization racism concept predicts, following Craig (2002), that women of color with darker skin tone would be more likely to get sterilized than women of color with lighter skin tone.

A second strength of this study is the use of multiple waves of the National Survey of Family Growth (NSFG). By using multiple years of this dataset, I was able to test for trends across time. To my knowledge, no other study has studied trends in sterilization by using all available waves of the NSFG. The strengths and weaknesses of my research have implications for what social scientists know about sterilization.

Implications for the Scholarly Understanding of Sterilization

First, my findings indicate that when social scientists study sterilization, they must avoid ignoring American Indian women (in part because they have some of the highest rates of sterilization) and avoid collapsing Latinas into “Hispanics” and instead study pan-ethnic, national ethnic (Mexican), and other ethnic variation (e.g., Puerto Rican). This first point is important because many scholars have claimed that sterilization of American Indian women may be genocidal (Churchill 1997; Smith 2005). By routinely ignoring American Indian women in research, they become invisible and this contributes to their “symbolic annihilation” (Kivel 2002:128). In addition, the research that collapses Mexican-origin women and Puerto Rican women into the same pan-ethnic category (Chandra 1998; Borrero et al. 2007a) can miss important differences. For instance, the increased sterilization of Mexican women, and their increased likelihood of Depo-Provera use, would have been missed had I decided to code respondents as “Latina” instead of into multiple ethnic categories. While past research has not found differences between Latinas and European Americans in sterilization regret (Borrero et al. 2007b), I found, using four waves of the NSFG, that Mexican and Puerto Rican origin women have higher rates of sterilization regret. Similarly, I found that Mexican-origin women are more likely than European American women to have ever used Depo-Provera.

Implications for Racism Theory

This dissertation offers support for my conceptualization of “sterilization racism” as the organization of racist controlling images, policies, and practices of delivering reproductive healthcare that operate to constrain and control the reproductive activities and choices of women of color. This concept builds on prior work on welfare racism (Neubeck and Cazenave 2001). The term sterilization racism specifies how racism operates in the delivery of reproductive healthcare through the mobilization of racist controlling images that impact the design of reproductive healthcare policy and the shaping of practices.

Sterilization racism and controlling images. According to the sterilization racism concept, the biases and racist attitudes of healthcare providers are a predictor of the types of reproductive healthcare women will receive. Because women of color are construed by racist controlling images as irresponsible or dangerous reproducers, reproductive healthcare providers may respond to women of color in clinical situations by advising them to get sterilized or to use long-acting hormonal contraception.

To better understand the findings of this dissertation, we can compare racist controlling images to the statistical results. The *welfare queen*, *hoochie mama*, and *jezebel* images portray African American women as hyper-sexual women with bodies designed for painless childbirths (Taylor 1999: 35-36). As a *welfare queen*, women of African descent are depicted as people who have children so they can collect public assistance money. Similarly, American Indian women may be stereotyped as alcoholics who collect public assistance money to buy alcohol (Medicine 2006: 56). Low-income women who are identified as African American or American Indian, have given birth to three or more children, and have had one of their children as teenagers, are the most likely to have been sterilized. Such women (if they appear “black”) may

be seen by reproductive healthcare providers as a mixture of *jezebel*, *hoochie mama*, and *welfare queen*, or as a *squaw* if they appear “Indian.”

Since the 1990s, the mass media in the United States has increasingly perpetuated the idea of a “Latino Threat,”—the idea that Latinos/as (especially people of Mexican descent) are going to overrun the United States and rule the country (Chavez 2008). This corresponds to an increasing prevalence of anti-Latina racist controlling images such as the *hot Latina* and *marianismo*. These images are used to represent not only Mexican-origin women, but Latinas (Puerto Ricans, Cubans, etc.) more generally. Anthropologist Leo Chavez summarizes these images of Latinas as “...either hypersexualized and hot seductresses or pure virginal girls or married women, selfless obedient wives and mothers” (Chavez 2008: 74-75). The statistical results indicate that, beginning in the mid-1990s, married, low-income, Mexican-origin women with three or more live births, whose first birth was as a teenager, were increasingly likely to have been sterilized.

Since Mexican-origin and Puerto Rican and Other Latinas have higher rates of sterilization regret, some doctors may rely on racist controlling images to explain or justify the disparities. Physicians and other reproductive healthcare providers might argue that Latinas regret sterilization because they over-identify as mothers, following the *marianismo* controlling image (Chavez 2008; Gutiérrez 2008). Among long-acting hormonal contraceptive options (e.g., Norplant), the woman most likely to use this contraceptive is an American Indian, age 25 to 29, whose first birth was as a teenager, has three or more children, and who did not complete high school. Reproductive healthcare providers may use the *squaw* image—an image suggesting American Indian women are too dumb to use voluntary forms of contraception (e.g., birth control pills)—to justify giving American Indian women Norplant. The women most likely to

have ever used Depo-Provera are never-married or divorced, widowed or separated, non-religious low-income African American and Mexican-origin women age 29 or younger with a high school degree or lower level of educational attainment, and one or more children. The idea that women of color (as *jezebels*, *welfare queens*, *hot Latinas*, and/or *marianismos*) and/or women with high levels of education and low-incomes are irresponsible reproducers may inform who is targeted for Depo-Provera-use by reproductive healthcare providers.

Research indicates that low income-women of color often get advice from reproductive healthcare providers that they should limit their child-bearing (Downing et al. 2007). Political elites, eugenicists, and others have publicly suggested implementing mandatory Norplant use for women on public assistance (Kimelman 1990; Lynn 2001). Historically, affluent “white” men have sought to control the sexual and reproductive activities of women of color—under slavery (African American women), conquest and colonization (Native American women and Latinas), and during wars (Asian women).

The actions of affluent “white” men in attempting to control the reproduction of mostly low-income women of color span centuries. Thomas Jefferson had a long-term relationship with his female bondwoman Sally Hemings under a system of slavery, as did many other of the day’s wealthiest “white” men. Rich “white” men in the twentieth century such as John D. Rockefeller III worked to influence the population size of Puerto Rico and other non-European countries through sterilization (Connelly 2008). Elite “white” male policy makers attempted to make Norplant mandatory for women who received public assistance--the majority of them women of color (Roberts 1997; Neubeck and Cazenave 2001). The human rights of women of color is subtly dismissed, such as in this ironic quote from a physician on why he “electively” sterilized a

“white” woman, “It was done like in Alabama. You sterilize the black girls, except this is elective. It was something social, you elect to sterilize this person,” (Bogdanich 1991:196).

In addition to offering support for my concept of sterilization racism, this dissertation shows how to carry out racism research with data not designed for studying racism. As such, this study demonstrated disparities, among highly racialized ethnic and pan-ethnic groups in the United States, in an outcome (sterilization) that has historically been associated with abuse and coercion as well as informed by racist ideologies. As a template for future racism studies research, this study indicates that strong conceptual work can be a compensating factor for the lack of racism-specific data. The ideal situation, however, is to have a strong-conceptual and strong-data research design where racism-specific data and measurements match closely to racism-explicit theoretical concepts. In sum, the limitations of this study provide guidance for future racism studies research.

Recommendations for Future Research

As noted in the previous section, future research on sterilization should collect data that directly measures coercion and racist bias. To do so, I argue that survey researchers should create survey questions that directly measure racism and coercion and merge them with questions asked in the National Survey of Family Growth. Surveys of both women and reproductive healthcare providers should be conducted. For surveys of women, questions that ask directly about experiences with discrimination, “racial” and ethnic self-identity, what “race” others often perceive the respondent as, skin-tone, body size, subjective definitions of body shape, “thickness,” hair color, texture, style, language, accent, and other subtle “racial” cues should be measured. These variables could be examined individually or combined into an index to determine which racialized characteristics are important for understanding how women have

been discriminated against in reproductive healthcare. Questions on the “racial” identity and perceived “race” of the respondent’s children should also be asked. One possibility is that European American women who have children with men of color are targeted for sterilization by reproductive healthcare providers. Questions that directly measure coercion should also be asked such as “Do you feel you were talked into or deceived into getting sterilized by your physician, nurse, or other healthcare provider?” Not only should the surveys target the victims of sterilization racism, but the potential perpetrators of sterilization racism.

A separate survey of physicians (i.e., Obstetricians-Gynecologists) and other reproductive healthcare providers with questions designed to measure racist and sexist attitudes should also be conducted. The survey would include a white racial identity scale to measure the extent to which reproductive healthcare providers identify with the “white race.” Such a scale may measure latent white supremacist attitudes. Another racism-specific scale should also be included that is derived from the psychometric research on racism (e.g., Blatz and Ross 2009). A racism scale could prove very useful as a predictor of responses to other questions such as which women are viable candidates for surgical sterilization. Additionally, a series of questions that measure belief in racist controlling images (e.g., for the Squaw image: “Most American Indian women who live on reservations are alcoholics.”) should also be asked.

Furthermore, studies of sterilization racism should include vignettes. More than two decades ago, Harrison and Cooke (1988) conducted a survey of obstetrician-gynecologists in the United States. They used a series of clinical vignettes describing different women to see what factors physicians ranked as most important in determining if the woman was a candidate for sterilization. The authors found that “race”⁴⁷ was the third most important factor after age and parity and more important than marital status, income, and education (Harrison and Cooke

⁴⁷ The article does not explain if a “race” besides “black” and “white” was used in the vignettes.

1988). Their findings suggest that “race”-based bias was important in physicians’ ideas about who should get sterilized. This research should be updated and expanded upon to include vignettes that vary the pan-ethnic and other ethnic group of different women (including Asian, Latinas, and American Indians).

Another study design that should be utilized is a field experiment. Recently sociologists have used field experiments to study discrimination in job hiring, credit, and housing markets (Pager 2007). In these studies, testers who are matched as closely as possible (resumes, dress, etc.) but vary by “race” are sent in to apply for jobs, credit, or to look for housing. Researchers then test for differences in outcomes (e.g., being called back for job, getting access to credit) and find racial disparities. Field experiments should be applied to the area of reproductive healthcare. Women who are matched with respect to everything but “race” should be sent to hospitals, clinics, and other places where reproductive healthcare services are provided to see if there are differences in the quality and type of reproductive healthcare counseling and services women receive. Are women of color referred to sterilization more often than European American women? Are women of color prescribed Depo-Provera more often? Do healthcare providers describe contraceptive methods differently to “white” women compared to “black” women? Does a woman’s “race” determine how the side-effects of different methods are described? In field experiments, the causal claim that “race” is driving the results is more credible than survey research. By using different study designs and collecting racism-specific data, we can build a conceptually and empirically stronger case for racism as an explanation of pan-ethnic and other ethnic disparities in reproductive healthcare.

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