The Pennsylvania State University

The Graduate School

Department of Agricultural Economics and Rural Sociology

OUT-GROUP MARRIAGES AND COHABITATIONS: A LOGISTIC REGRESSION APPROACH TO STUDYING BLACK, WHITE, AND HISPANIC UNIONS

A Thesis in

Rural Sociology

by

Alisha J. Curry

Submitted in Partial Fulfillment
of the Requirements
for the Degree of

Masters of Science

May 2008

The thesis of Alisha J. Curry was reviewed and approved* by the following:

Anastasia Snyder
Associate Professor, Human Development and Family Science at Ohio State University
Thesis Advisor

Diane McLaughlin
Associate Professor of Rural Sociology and Demography

Leland Glenna
Assistant Professor of Rural Sociology and Science, Technology, and Society

Stephen Smith
Professor of Agricultural Economics
Head of the Department of Agricultural Economics and Rural Sociology

*Signatures are on file in the Graduate School

ABSTRACT

The study of interracial and interethnic unions has a long and extensive history in the United States. However, these out-group racial and ethnic unions must be analyzed in both the contexts of cohabitations and marriages due to our changing society. This study examines the factors associated with out-group union formations, specifically race/ethnicity, educational attainment, educational homogamy, and residence as discussed and emphasized in prior interracial literature. The measurement of out-group unions and the conceptualization of what is interracial or interethnic is a theme entwined throughout the objectives of the study. Although bi-variate analyses find significant differences between women who form out-group unions, especially for married women, the logistic regression reveals that the formation of unions outside of one's racial or ethnic group is an individual decision and the characteristics emphasized to factor into out-group union formation do not play a strong role in the decision.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

Chapter One

Statement of the Problem

The Research Problem

Today, more than ever, the decreased stigmas of non-traditional union[1] formation, and increased multi-racial and ethnic relationships, have engendered a shift in family structure. Cohabitation is now a necessary category in which to study family formation because it is a common part of the life course in today's society (Smock 2000; Snyder et al. 2004). Furthermore, according to the 2000 Census, 7.4% of the 54.5 million married households were in a racial or ethnic out-group[2] relationship, while 15% of the 4.9 million heterosexual cohabiting households were between interracial and interethnic partners (Simmons & O'Connell 2003: 12). The 2000 Census was the first time that multi-racial people were able to report mixed ancestry, and 2.4% of Americans did. With changing patterns in union formation behavior, it is important to examine cohabitations as part of the life course since more than 50% of white women's and 66% of Black women's first co-residential unions occur outside of marriage (Raley 2000: 36).

Furthermore, there has always been an interest in the couplings of different races in the American historical narrative. Analyzing Black-White relationships has been a key component to the interracial union literature because of the history of slavery, racism, and discrimination in the United States. Additionally, the illegality of past anti-miscegenation laws, coupled with changing viewpoints on interracial unions and an individualistic stance in our society, have cultivated a movement towards increases in interracial union formation.

---

[1] Union is used for both cohabitations and marriages throughout the paper.
[2] Out-group relationship/union is a term used to conceptualize a married or cohabiting person who does not share the same race and ethnicity as her/his partner.

Some actions that occur within cohabitation – love, trust, co-residence, and sexual relations – are the same as those found in marriages, and at the same time the institution of marriage is changing. Increased divorce and non-marital childbearing rates, decreased importance of marriage as a transitional marker into adulthood, improvements in females' labor force participation rates, and stronger attitudes about egalitarian relationships have shifted marriage from a certainty for people from past generations to a mere possibility for Americans today.

In today's society cohabitation is used in various efficacious manners, which depend on the people involved. There are five types of cohabitation according to Heuveline & Timberlake (2004): prelude to marriage, stage in marriage process, alternative to singlehood, alternative to marriage, or indistinguishable from marriage. More importantly, about one-third of births are to unmarried women, while 20% of these births are to women in cohabitations (Wu et al. 2001). What's more, from the National Marriage Project annual report the idea of marriage "no longer looms like Mount Everest in the landscape of the adult life. It is more like a hill that people climb, up and down, once or twice, or bypass altogether" (Popenoe & Whitehead 1999: 7).

We live in a multiracial society, thus studying family formation in multiracial contexts is necessary to capture reality. Maxine Baca Zinn (1998) suggests that structured inequalities could be better understood if "racialized patterns of family formation" were analyzed (pg. 49). However, family formation is usually studied by controlling key variables such as residence, age, socio-economic status (SES), and race. But we know that many socio-economic variables like education, residence, and union formation patterns are correlated with race and the complete story is overshadowed by the statistical tool of adjusting for these factors. Additionally, when there are not enough cases to run proper analyses on a wide range of races and ethnicities, the common practice by researchers is to remove categories with small values or group them together, which alters the information we can infer from the studied variable. Unfortunately, multi-racial partnership is very rarely discussed in the family formation literature unless the explicit focus is interracial marriages.

Objectives

There are two objectives for this study. The first objective is to describe the characteristics of women in out-group marriages and cohabitation. The term out-group union is used throughout the paper to describe unions that involve people of different Hispanic origin and race. This is an important addition to the cohabitation literature given that few studies include the prevalence of this specific situation. The second objective is to identify the predictors of being in an out-group union – race, residence, education, and educational homogamy – as discussed and emphasized in prior interracial literature. In order to utilize the complete racial and Hispanic origin groupings of the females and their partners, in this study only individuals who are racially categorized as Black or white and report their Hispanic origin are analyzed: detailed reasons for this sample are discussed later.

An overarching theme in the study is to discuss the measurement of out-group unions, in the conceptualization of what is interracial or interethnic. Many national studies make one-race categories the standard in academic research when examining unions, such as comparing Black marriages to white marriages. For this project, data from Cycle 6 (2002) of the National Survey of Family Growth (NSFG), which is a nationally representative sample and provides information on women who are married and cohabitating at the time of the survey, is used to answer the following research questions:

- Are there racial/ethnic categories that are more likely to form unions outside of their own racial and ethnic groups?

- Are educational attainment levels and educational homogamy still as relevant and significant in out-group union formation as they were in previous historical literature?

- Does living in a metropolitan area compared to a non-metropolitan area play a significant role in determining which females form out-group unions in a multivariate model?

This thesis continues with a more detailed description of the material covered in this introduction. First, the pertinent historical context and background for interracial and interethnic union formation research is described in chapter two, including the conceptual framework. Next, the concept measurements are described in chapter three. The results are given in chapter four. Finally, chapter five discusses the findings and implications of the study.

Chapter Two

Literature Review and Theory

This section gives an overview of the history and current situation of out-group unions and provides a context for the results. A discussion on racial measures, including the difficulties of studying the concept, is also included. This chapter ends with the theoretical framework and research questions.

History of Black-White Interracial Unions in the United States

Since the onset of slavery, interracial unions and sexuality occurred on plantations between white men and Black women. Although these narratives are critical to the development of the stigma of interracial relationships, before the times of anti-miscegenation laws there was also sexual contact between free, slaved, and indentured Black men and white women. (See Gullickson 2006 for specific trends throughout American history.) The word "miscegenation" is rooted in the Latin words *miscere*, to mix, and *genus*, race (Sollors 1997: 287). The idea of a sexual relationship between Black men and "pure" white women was vehemently argued against and legal ramifications were instituted to prohibit the behavior. In the eyes of white men, in order to protect the white female from the Black "savage", anti-miscegenation laws were enacted (Staples 2006; Frazier 1939). At the same time white men had more leeway in their sexual relations and exploitation of Black women (Johnston 1970: 183).

In antebellum America, interracial relationships occurred partly due to the sex ratio. The sex ratio is the number of men to every one hundred women. In the bustling city of New Orleans, for example, free Black women of color outnumbered their male counterparts by a two to one ratio, while there was twice the number of white men compared to white women (Gehman 1994: 35). Furthermore, it is important to note that interracial cohabitation did exist during this time period. A specific type of cohabitation, called *plaçage,* was a practice where white men would have concubine-like relationships

with free women of color or slaves who served as their mistresses. In return, the white male would consent, either formally via written contract or informally via verbal agreement, to provide the Black female with a house and monetary support necessary to care for her and their racially mixed children. If she was a slave, he usually granted her freedom along with the freedom of her children since the status of progeny reflected the status of the mother (Mills 1977; Martin 2000; Hanger 1997).

After the Civil War, Jim Crow laws pervaded the land and court cases up-held previous anti-miscegenation laws[3]. Even in the same year that the Civil Rights Act of 1964 was passed by Congress, a Florida law that prohibited interracial cohabitation was upheld by the Supreme Court (Farley 1999: 107). However, anti-miscegenation laws finally become illegal towards the end of the Civil Rights Movement. The 1967 *Loving v. Virginia* Supreme Court case finally deemed it unconstitutional to criminalize interracial marriages. At the time, sixteen states still had laws prohibiting interracial unions on their books.

Current Trends in Interracial and Interhispanic Unions

In today's society, when we hear interracial sexuality, it still evokes the image of Black men and white women, even though Black-white unions are the least likely out-group relationships to occur. "The taboo on race mixing was applied to white men and Black women only if they attempted to marry" (Staples 2006: 122). However, before 1960 it was more common for white men and Black women to be in unions than white women and Black men (Gullickson 2006: 299).

Currently the sex ratio for the total US population according to the World Fact Book is .97 (World Fact Book 2007). Yet, when race is also examined, African Americans have the lowest sex ratio of the six major one race identity groups: nine Black males to every ten Black females (Spraggins 2000: 3). Furthermore, McCaa (1993) found that imbalanced sex ratios do influence the tendency to marry

---

[3] For a chronological list of bans on interracial marriage and cohabitation see Werner Sollors' *Neither Black nor White yet Both* (1997).

outside one's racial group. It has also been found that a Black spouse is more likely to be the husband (Monahan 1976; Tucker & Mitchell-Kernan 1991); raising the question, if there is a higher number of Black females compared to Black males, as seen through sex ratios, why is it more probable for a Black man to have an interracial union than a Black woman?

According to a report by the United States Bureau of the Census, the number of Black/White couples nearly doubled between the years of 1980 and 1988; Black husbands with white wives increased by 122% (United States Bureau of the Census 1999). Black men are more likely than Black women to experience an out-group marriage to whites, despite sex ratios that would suggest an opposite trend (Batson et al. 2006; Jacobs & Labov 2002). In 1992, according to the Current Population Survey, 21.2% of interracial couples were categorized as Black/white unions with two-thirds involving Black men and white women. A decade later, 23.6% of interracial couples were Black/white marriages with 68.6% between Black men and white women (U.S. Bureau of the Census 2003). However, this percentage does not take into account Hispanics.

According to the 2000 Census using only people who designated themselves as having one race, either white or Black, a substantial majority of married couples are made up from non-Hispanic white husbands and wives; however, it is interesting to note that 28.6% of Black Hispanic men out-married, while 43.3% of their female counterparts were married to men who were not Black Hispanic. On the other hand, Black non-Hispanic men out-married more than Black non-Hispanic women; 6.6% compared to 2.5%, respectively (U.S. Bureau of the Census 2000a). When analyzing cohabiting unions, it is clear interracial and interethnic unions are more pervasive. As with marriages, Hispanics are more likely to have cohabiting partners that do not share their same racial or ethnic background. For example, nearly a quarter of white Hispanics had out-group cohabitations. On the other hand, 97.4% and 94.6% of white non-Hispanic males and females, respectively, cohabited within their race and ethnicity (U.S. Bureau of the Census 2000b). These statistics highlight the need to include Hispanic origin along with the racial category of a person.

Although empirical studies on cohabitation have not found any significant racial differences on the characteristics of people who cohabitate (Bumpass & Lu 1999), there is no research to date on cohabitations where the partners are from different races or Hispanic origins. It is critical to research women in cohabiting unions who do not share the same racial or ethnic background as their partner, to determine if certain race or ethnic groups are more likely to cohabit interracially.

Factors Associated with Out-Group Union Formation

Throughout the literature on interracial couples, there are four major premises that predict this type of union: race, educational attainment, educational homogamy between the partners, and residence. Race is a predictor because minorities are more likely to be in out-group unions because they have more exposure to the majority (whites), while the majority has less contact with minorities based on the number of people in each group. Additionally, educational variables are analyzed as a means to measure socio-economic status of an individual. Finally, residence in this study pertains to the metropolitan categorization of population and cities as defined by the US Office of Management and Budget. In previous literature, residence also has meant the geographic region in which a person lives. However, the effects of these four key variables on out-group union formation have not been examined while other factors are controlled in a logistic regression model.

Homogenous relationships permeate marriages; people tend to marry those who are like themselves. As a percent of all married couples, from 1970 to 2000, interracial couples have increased from .7% to 5.4% (Lee & Edmonston 2005, 11). In Kalmijn's 1998 overview on intermarriage, he proposes three arguments for the lack of out-group union formations within marriages: individual preferences, third party interference, and constraints of marriage markets. Although preferences and outside interference are beyond the scope of the study, marriage markets have been argued to include the work place and where a person lives (Lichter et al 1991, 844). In order to examine this premise, residence

– using a metropolitan central city/metropolitan suburban/non-metropolitan variable – is included in the analysis.

Urbanization and out-migration of youth from non-metropolitan areas are trends that have an effect on the availability of quality men for women to marry living in non-metro areas. Blacks in the United States are disproportionately concentrated in urban areas and Black urbanization continues at a much faster rate than that of whites (Lichter et al. 1986); the exception to this is that over three-quarters of nonmetropolitan African Americans live in the South (Harris and Worthen 2003, 36). Since African Americans are more likely to live in metropolitan areas, blacks along with whites are more likely to have contact with each other. More contact with a diverse population will allow for more interracial union formation.

Empirical studies that examine residence by metropolitan area have found differences in union formation. Non-metro women are more likely to marry in any given year than women living in metro areas (McLaughlin et al. 1993). Additionally most interracial-interethnic union literature is limited to metropolitan areas. We do not know much at all about how residence affects out-group cohabitation prevalence. The studies that do examine residence differences in cohabitation deal with union transitions (Brown & Snyder 2006), first union and first birth (Snyder et al. 2004), and non-marital conception outcomes (Snyder 2006).

Moreover, residence is a key component because there are attitudinal differences, especially in terms of family formation, in the views held by people living in these areas. Non-metropolitan areas are considered by some as traditional and more conservative. Although this description does not hold true for all rural areas, cohabitation is not as prevalent in non-metropolitan areas and out-group union formation is more likely to occur in urban areas where there is more acceptance of this type of union (St Jean & Parker 1995; Herring 1997).

In a study analyzing Black metropolitan men in 1990, Crowder and Tolnay found that the males married to non-Black wives had significantly higher socioeconomic scores according to Duncan's SEI

scale (2000: 799). This particular study on the interracial marriages of Black men brought to light how the practice decreases the pool of quality Black men for Black women to marry. The metropolitan men had significantly higher socio-economic indicators, employment rates, and education than men married to Black women, or who were single. The researchers could not examine, due to data constraints, if the men in interracial relationships selected into this situation or if the situation afforded them better economic opportunities.

In contrast to out-group union formation as it relates to residence, reports exist that examine educational attainment and homogamy between the partners as they relate to out-group union formation. As indicated by the 2000 Census, better-educated people are more likely to marry interracially than less educated Americans (Lee & Edmonston 2005, 7). Education is a determinant of socio-economic status since it relates to wage earning potential. Research also shows that Black men with higher education are more likely to be in interracial relationships than men with lesser education (Kalmijn 1993; Schoen & Wooldredge 1989). Of Black males aged 25-34 with at least a bachelor's degree, twenty-three percent married non-Black women ("The Effect of Higher Education on Interracial Marriage" 1997: 55). Higher educational institutions can provide an opportunity to interact with people from various racial and ethnic backgrounds; an exposure that would be less likely to occur in areas with racial or ethnic residential segregation and geographical isolation (Qian 1999: 580).

Additionally, educational homogamy, which measures the similarity in educational attainment for the couple, is an important variable to utilize in interracial studies. It is the basis for the exchange theory that hypothesizes that higher educational status is exchanged for higher racial status. In marriages, educational homogamy highlights how women usually marry men with more education than themselves. Although there are very few studies on interracial partners in cohabitations, Blackwell and Lichter's 2004 study on racial, educational, and religious endogamy in the type of union formed, found that among cohabiting couples, women "are less likely to exhibit the kind of upward mobility experienced by married women (pg. 725)".

Finally, previous literature emphasizes Black and white interracial unions, but demographic shifts in recent decades and the additional measurement of Hispanics in national surveys and Census data necessitates the inclusion of both race and ethnicity in out-group union studies. In 2000, Hispanics made up 12.5% of the population, which is a 57.9% increase from the 22.4 million Hispanics living in the United States in 1990 (Guzman 2001: 2).

Figure 2-1 illustrates that over half of the interracial and interethnic marriages in 1998 are between non-Hispanic whites and Hispanics. Although intergroup marriages only made up 5% of all married couples in 1998, it is an increasing occurrence that affects more than the amount of multi-racial marriages but also the family into which children are born and raised.

Figure 2-1

Intergroup Married Couples: 1998
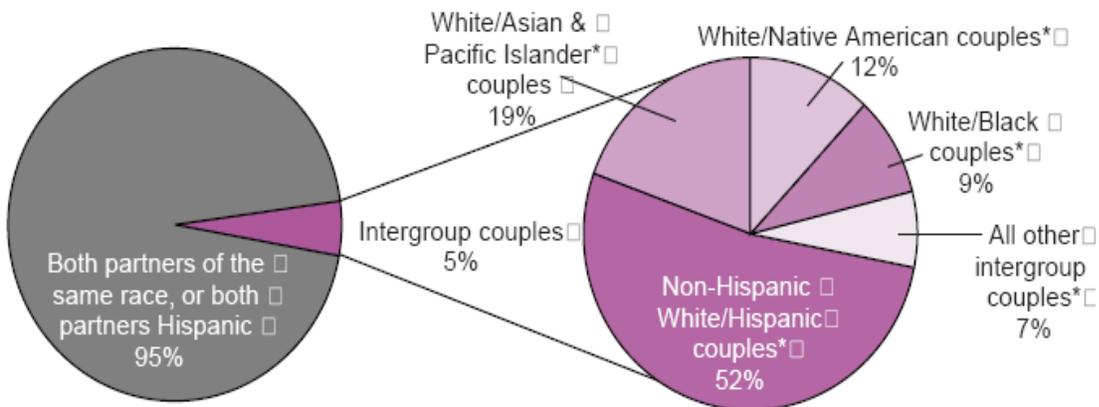
Source: Population Reference Bureau

Due to the growing Hispanic population in the United States it is pertinent that they are studied; however, grouping all Hispanics together while disregarding their race creates problems for social researchers that hope to better understand mixed-race unions.

Race and How is it Measured

Race and ethnicity are social constructions that are used by the majority, the white population, to make claims to social status, economic advantages, and privileges not afforded to minorities (Williams 2003: 10). The social construct uses phenotypical or socio-cultural characteristics to classify people (Lee & Edmonston 2005: 8). It is important to recognize that this constructed order is a reality to most Americans. Due to this idea, some people do not know their complete racial and ethnic make-up, while others may choose to not report multiple backgrounds since it has been so deeply engrained in the social fabric of America to be just one race or ethnicity. It has also been documented that there is a tendency for Blacks to not report their multiracial background – a legacy of slavery, the "one-drop rule", and the concept of "passing" (Lee et al. 2003: 60). The one-drop rule designated any person with a drop of African blood to be considered Black in order to maintain a strict color line, while passing is when an African American has enough European features (white skin, light eyes, straight hair) to pass into white society. Although the social construct of race is acknowledged in academia, "race remains a widely used term for socially defined groups in popular discourse" (Hirschman 2004: 385).

Race is a contested topic that has shifted meanings throughout time yet has consistently affected social reality (Omi & Winant 1994). Kenneth Prewitt, the former director of the Census Bureau discusses the frustrating consequences of studying and measuring race in today's society. He states that

> "the racial measurement system is now vastly more complicated and multidimensional than anything preceding it, and there is currently no prospect of returning to something simpler. The number of categories is too few to accommodate identity politics but too many to fit with law and legislation as currently designed" (Prewitt 2002: 360).

Although the Census has the information to report multi-racial unions, 2000 was the first time that people were able to report themselves as multi-racial. Fortunately, racial measurements are changing. The 2000 Census allowed people to report multiple races. Interestingly, 42% of those reporting multiple races were under the age of 18, while only 25% of those reporting a single race were

under 18 (Jones & Smith 2001: 8). This demonstrates the importance and prevalence of multiracial unions involving children and the greater acceptance of multiracial identity.

Many difficulties exist when studying interracial/ethnic relationships, especially if the measures are pre-determined and the combination of socially constructed races. For example, should one just use Black and white people because previous research and historical studies have a propensity for doing so? Should Hispanics be included as a race, when in actuality Hispanic is an ethnicity? But if Hispanics are used can they all be lumped together as one group? More importantly, there is not much literature that delves into interethnic marriage and cohabiting practices between Hispanics and non-Hispanic Blacks.

The Hispanic Question

W.E.B Dubois predicted that "the problem of the twentieth-century is the problem of the color line" (1903: 45). Today in the twenty-first century this line still exists, albeit a little faded and with added shades of brown. With the increase in the Hispanic population in the United States, studies on union formation necessitate interethnic analyses along with interracial. More importantly, Hispanic is a term that encompasses nationalities ranging from Spaniards from Europe, Mexicans from Central America, Cubans from the Caribbean, Venezuelans from South America, and people who claim Hispanic heritage living in the United States; however, Hispanics do not have a unifying racial identity (Baca Zinn 1995: 184). The only common thread of all these locations is that their native tongue is Spanish.

Furthermore, recent studies have been separating specific Latino groups out and analyzing each group separately. There are differences in educational attainment, labor force participation rates, median income levels, and percentage of female headed households for Mexicans, Puerto Ricans, and Cubans (Ortiz 1995; Ramirez 2004). Differences in wages even exist between Black and non-Black Hispanics from various countries of origin (Darity et al. 2002: 850). Even more telling to the fact that all people of Hispanic background should not be analyzed together is that out-group marriage rates vary by group and gender; in one analysis of the 1990 Census the percentage of out-group marriage ranged from 15% to

13

65% for Hispanic males depending on their country of origin (Farley 1999: 125). Another study found that male Hispanics who report Black or other as their race compose the majority of intermarriages between Hispanics and non-Hispanic whites (Jacobs & Labov 2002: 633). Additionally, Hispanics have the highest out-group marriage rates out of whites, Asians, and Blacks for those with at least some college experience; two-thirds of Hispanics out-marry (Suro 1999: 58). A burgeoning body of literature has studied Hispanic intermarriages and the growing role Hispanics will play in US society; for these reasons, Hispanic origin is a necessary variable to include in this study.

The Measurement of Race in the NSFG

The main reasons for following federal patterns of race measurement are that the government aims to measure the concept based on the social reality of the general public and it also serves as a benchmark (Snipp 2003: 564). Although the terms have changed throughout the decades – Negro, slave, mulatto, octoroon, colored – there has also been a way to determine those who are white compared to those who are non-white. The NSFG, for example, does not deviate far from this process. The female is asked her racial background with the following question, which the surveyor reads out-loud: "Which of the groups on Card 2 describe your racial background? Please select one or more groups". Card 2 has five racial groups: Asian, Hawaiian, Native American, Black, and White.

The surveyor is then directed to:

> *ENTER all that apply*
> *NOTE: If R reports a mixture of several races (biracial, mixed, mulatto,*
> *etc.), ENTER all groups that are part of the mixture.*

The wording and process is the same for gaining the racial background of her cohabiting partner or husband. If the respondent listed more than one race she was then asked which race best described herself, cohabiting partner, or husband. Soliciting the female to categorize herself or partner into a single race is one of the problems facing accurate racial measurement and perpetuates the notion that it is necessary to classify people into one race. Unfortunately, the public use data file of the NSFG comes

with pre-selected racial categories for the females. Her race is reported using only three categories: Black, white, and other. The other category combines women who classify themselves as Asian, Hawaiian, or Native American. Due to these predetermined categories only Black and white races are analyzed in the study.

Interracial or Interethnic or Both

Most studies that analyze race or ethnicity reason that out-group union formation is a classic measure of social distance and assimilation into the dominant (white) culture (Merton 1941; Davis 1941; Goldstein & Harknett 2006). Nevertheless, there are some researches that recognize the "hierarchical structure that privileges whites as the main group with whom mixing occurs" and accordingly use terms such as mixed-race partnering and multiracial to convey the notion of inclusion to all races that mix, not just Black-white unions (Wright et al 2003: 458; Baca Zinn & Thornton Dill 1996: 324). Furthermore, some scholars argue that interracial unions are more than a race relations issue but also a gender issue (Pascoe 1991: 6).

To complicate matters even further, many studies dealing with interracial unions make use of old data sources and even older theories to guide the research questions and then make conclusions about today (Qian 1999; Kalmijn 1993). The last few generations have seen shifts in attitudes, beliefs, and actions concerning union formation. Continuing to use dated empirical studies seems to only provide information on the past and points us in the right direction to studying the present but it does not help to predict current out-group unions since the conceptual framework, theories, and measurements of the past do not align with those of today. Recently, scholars have emphasized the lack of new theories regarding interracial unions and how the stereotypes of the time potentially influenced these conjectures and have yet to be re-tested and re-reasoned in current times (Foreman & Nance 1999).

In this study, three paradigms that reflect various techniques for distinguishing race and Hispanic origin are constructed. This was done because the data set only allows for analysis on females' race as

measured by Black, white, or other. If the other category were to be used in the analysis, it would be difficult to explain out-group unions with the 'other' racial category. Using combined racial information perpetuates the practice as sound and reliable research; however, by bringing together Hispanic origin with race, Hispanics can be examined with more precision than simply separating them from non-Hispanics.

Table 3-1 describes the three different paradigms developed to measure race/ethnicity of the females and their partners in the NSFG sample and also the percentage of marriages and cohabitations that are out-group unions for the three paradigms. The first paradigm makes use of both the racial and Hispanic origin information available in the survey. There are four categories: non-Hispanic white, non-Hispanic Black, Hispanic white and Hispanic non-white. The non-white category consists of Hispanics who report their race as Black, Asian, Hawaiian, or Native American. Using the 'other' racial category in the non-white Hispanic category is done because people who report being white have union formation differences to people choosing Hispanic non-white or Hispanic Black. The sample size for marriages is 2844, while there are 608 cohabiting females. Paradigm 2 has three categories that examine all Hispanics as one group, non-Hispanic whites, and non-Hispanic Blacks. The N values are 2860 and 608 for marriages and cohabitations, respectively. Finally, paradigm 3 compares inter-Hispanic unions by only using Hispanic origin to identify out-group unions. There are 3074 married females and 616 cohabiting females in this paradigm.

Table 2-1 Description of Paradigms			
Race/Ethnic Categories	**Paradigm 1** • Non-Hispanic White • Non-Hispanic Black • Hispanic White • Hispanic Non-white	**Paradigm 2** • White Non-Hispanic • Black Non-Hispanic • Hispanic (any race)	**Paradigm 3** • Hispanic • Non-Hispanic
Out-Group Marriages in Sample	9.1%	7.9%	6.6%
Out-Group Cohabitations in Sample	16.3%	14.8%	10.7%

The cross-tabular analysis of the female's race and that of her partner's was examined to determine which paradigm to use in the regression analysis. Figure 3-1 illustrates the percentages for the various combinations of interracial/ethnic marriages and cohabitations for paradigm 1. Due to rounding there were no cohabitations between non-Hispanic Black females and Hispanic white men. The most likely race and ethnic combination for both married and cohabiting women in out-group unions was between non-Hispanic white females and Hispanic white partners (29.4% and 26.4%, respectively).

Figure 2-2
Paradigm 1: Percentage Breakdown of the Various Combinatios in Out-Group Unions
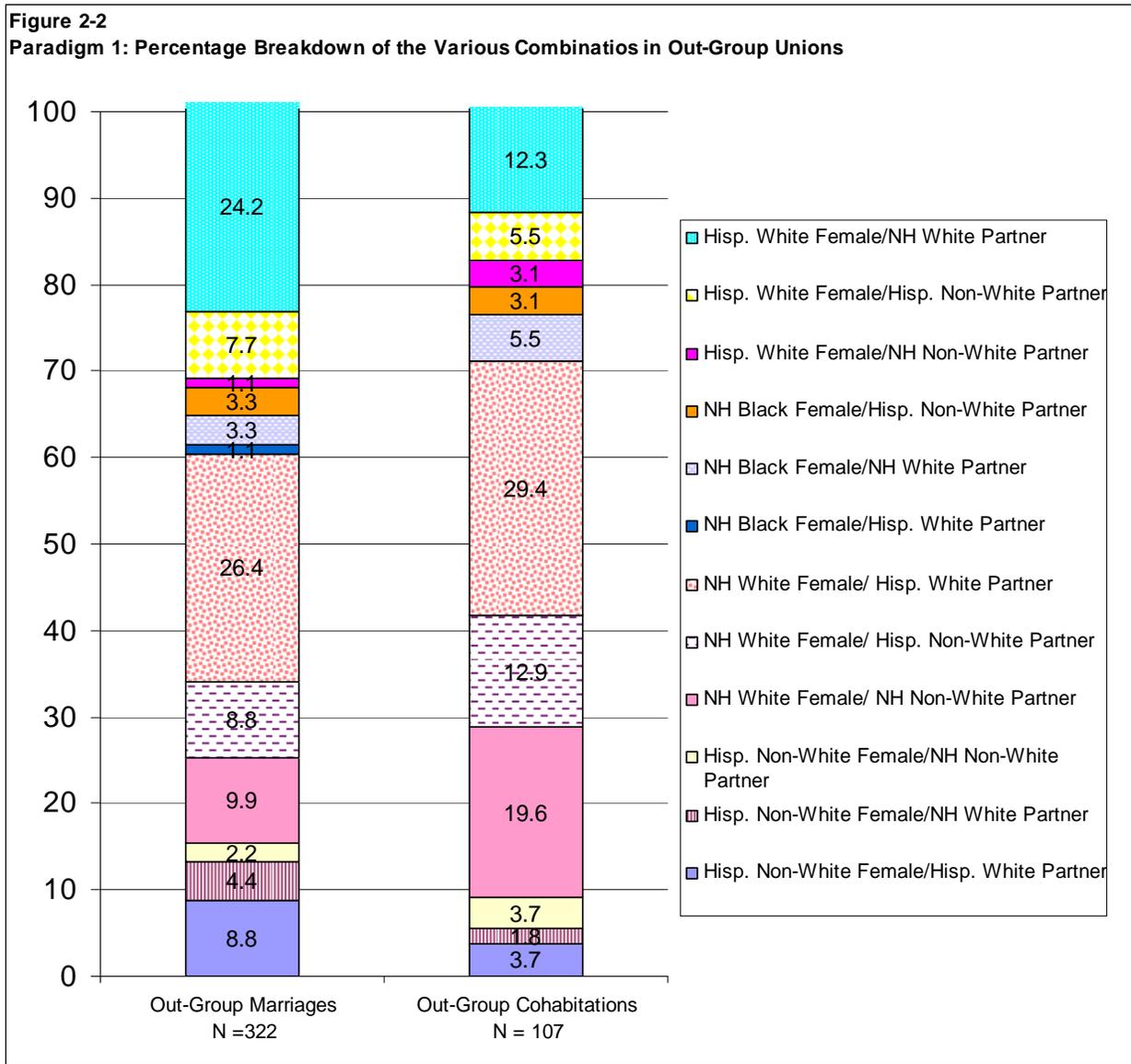
The second paradigm classifies females and their partners into three categories: Hispanic, Black, or white. About eight percent of marriages and fifteen percent of cohabitations were out-group unions. In these out-group unions, white females have a higher likelihood of having a Black husband than to cohabitate with a Black male, 21.6% compared to 11.4%, respectively. On the other hand, 31.4% of Hispanic females had white cohabiting partners, while 14.9% of Hispanic married women had white husbands. The other combinations did not have as much disparity by union type as the two previously mentioned arrangements.

Figure 2-3
Paradigm 2: Percentage Breakdown of the Various Combinations in Out-Group Unions
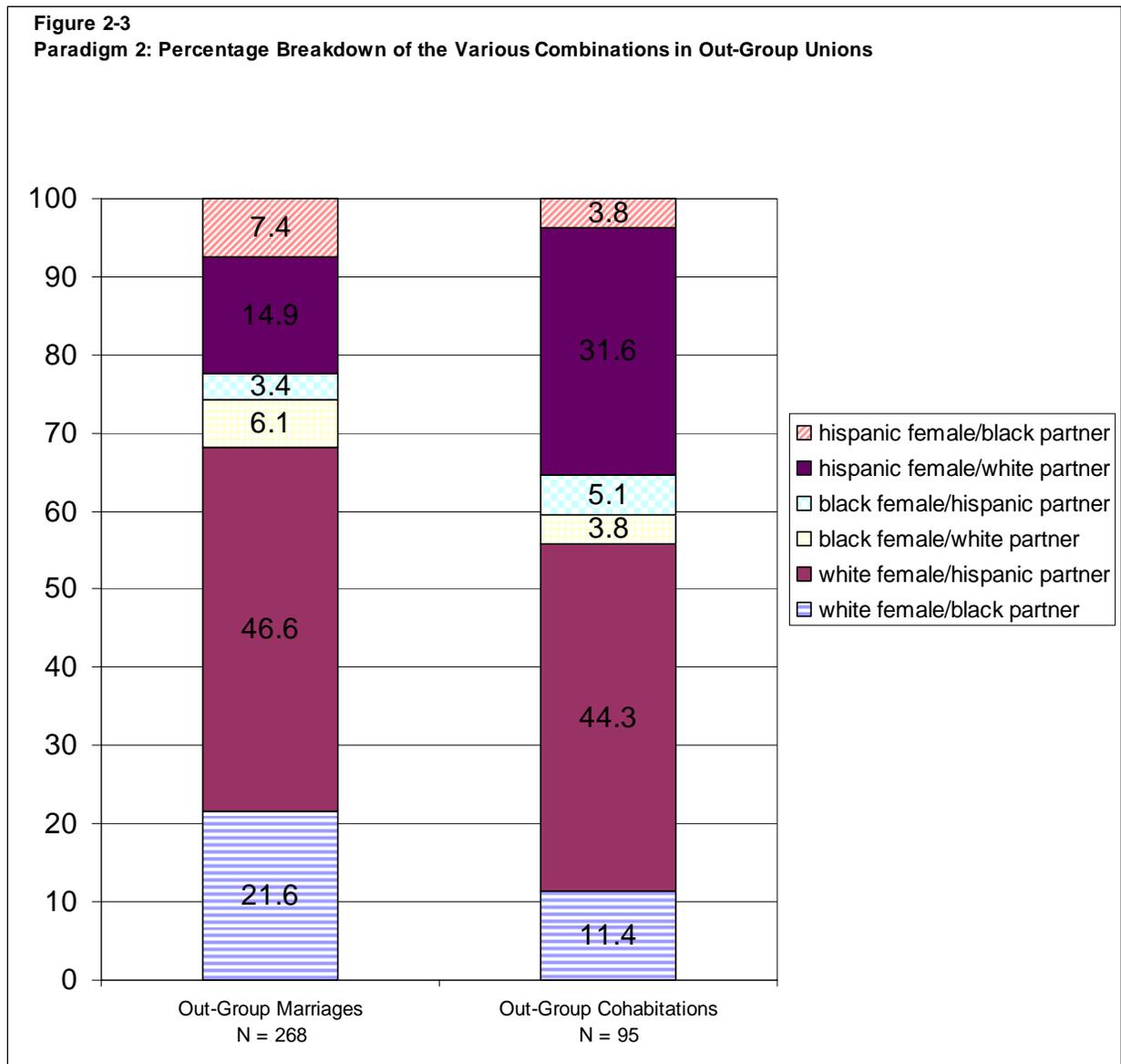
The final paradigm examines if the female is in an inter-Hispanic relationship. This occurred in 6.6% of the marriages and 10.7% of the cohabiting unions. Although a majority of the inter-Hispanic unions involved a non-Hispanic female and a Hispanic partner, cohabitations were slightly more likely to comprise this combination, 68.2% compared to 56.8%, respectively.

Figure 2-4
Paradigm 3: Percentage Breakdown of the Various Combinations in Out-Group Unions
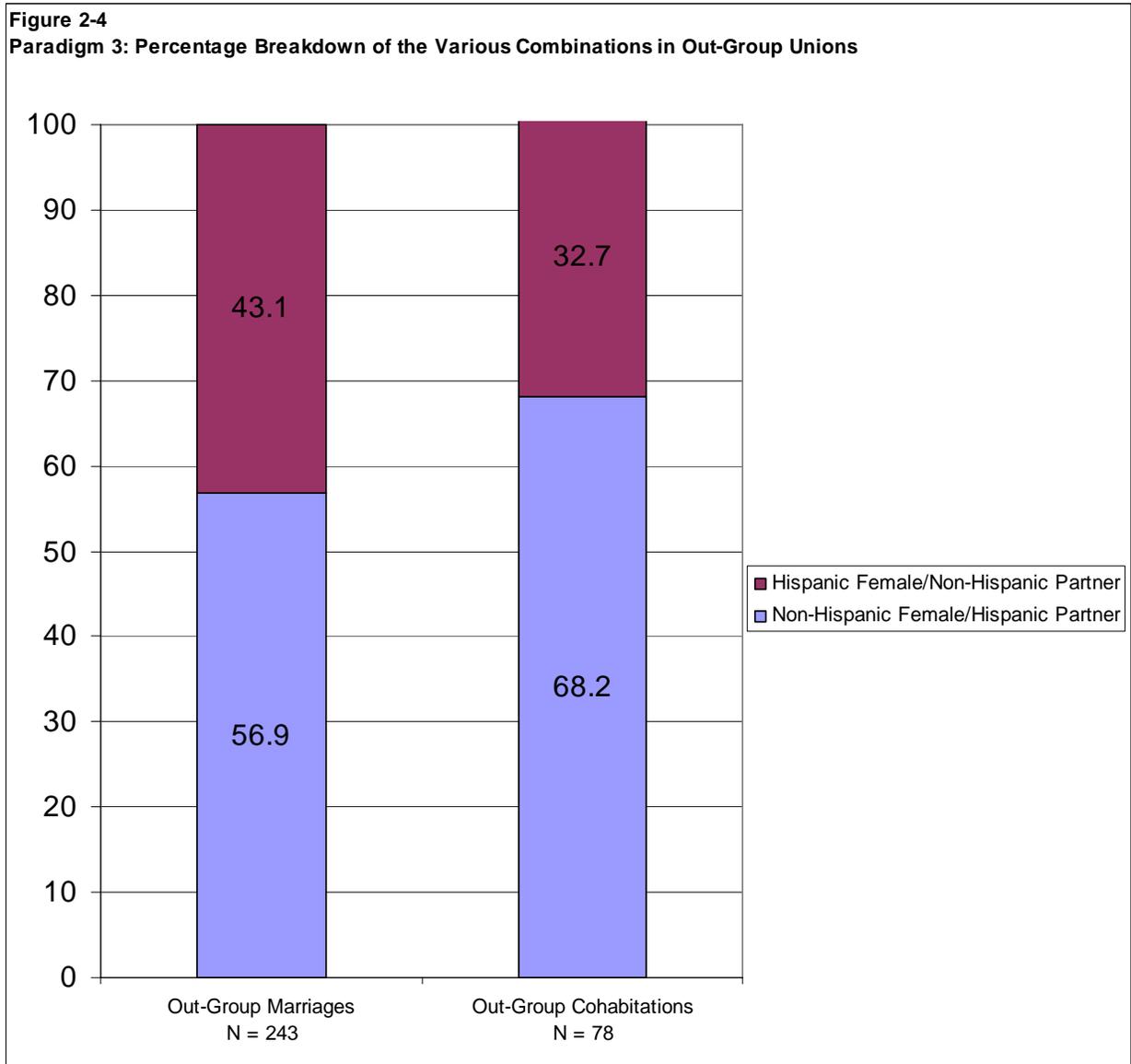
In conclusion, the three paradigms illustrate that cohabitations are more likely than marriages to involve people of different racial and ethnic compositions. There is variation in the percentage of women who had interracial/ethnic unions by paradigm; the T-tests for differences between the proportions are

statistically significant for all combinations of the three paradigms. However, in order to keep the analysis succinct and condensed, paradigm 1 is used for the bi-variate discussion and logistic regression; however, appendices A and B contain the complete chi-square analyses for paradigms 2 and 3, which examine the variables that measure if the female is in an out-group union or not, for the independent variables.

Conceptual Framework

The leading theory in sociology as to the existence of out-group marriages stems from the exchange theory which states that elevated socio-economic status – education and income – is exchanged for higher social status (Merton 1941). Therefore, a higher educated Black male will marry a lower educated white female because of her higher racial status. Furthering Merton's theory, Davis (1941) argued that since better employment opportunities were more available to men, Black women were unlikely to exchange their socio-economic status for a higher racial status; thus, it was rare for Black women to marry white men. This is basically saying that white men's higher gender and racial status is at a much superior level when compared to Black women who have the lowest status when viewed through gender and race. Empirically, these contentions, which argue that higher educated Black men will exchange this accomplishment for a white woman's higher racial status, have been supported and contested (Schoen & Cheng 2006, 2).

These assertions were created in a time prior to the Civil Rights Movement, in a time ripe with discrimination and oppression of Black people. The exchange theory and its derivatives are majority perspectives that have supporting evidence at times when examining Black male and white female unions. Furthermore, males achieved higher education levels than females in the past but now this is not the case since women, as a group, are attaining higher levels of education in general. As for African Americans, female higher educational attainment rates surpass those of African males (Slater 1994: 52). How much

does the access to education play a role in a Black man with higher education levels marrying a white woman with a similar or lower educational background to his?

Although there are very few theoretical perspectives on interracial cohabitations, one relevant perspective, the *winnowing process,* proposes that similar characteristics, including education levels and race are stronger in marriages than in other relationships (Blackwell & Lichter 2004, 719). In other words, there is more variability in dating and cohabitation unions but couples that progress to marriage share similar backgrounds.

As racial boundaries and levels of out-group unions occur, which subsequently change the racial and ethnic make-up of the American population, so should the theories and methods used to study out-group relationships. A theory that has yet to be proposed is that some Black men feel they can attain manhood through dating a white woman since this is viewed, by some, as the ultimate symbol of 'making it'. There also needs to be an examination of how and why some white women want to have relationships outside of their race. Perhaps, because it is still a bit dangerous and taboo. In a qualitative study on African American teenage childbearing, a reason for increased female headed households in the Black community was found to be associated with Black men preferring to form relationships with white women. One young Black man stated that dating white women "is the only thing I've got in my life that says I'm equal, that says I'm a man" (Burton 1990: 133). However, both of these reasons may fall under the movement toward 'secular individualism'. Popenoe (2007) used the term 'secular individualism' to help explain cohabitation, but if we combine secular individualism with ostentatiously proving one's individuality a person may have no or very few barriers to forming an interracial union. This may be a stronger driving factor than any other explanation given in previous literature; it is as if by being in an interracial/interethnic relationship a person is displaying individuality in a very obvious way.

In the past, Black men were not legally allowed to marry white women and dating, looking (think Emmitt Till), or having sexual relationships was scrutinized due to Jim Crow laws and discrimination. Now that it is not illegal, people in the United States will participate in having relationships with people

of dissimilar racial and ethnic backgrounds because they share interests, find each other attractive, and because they can. Secondly, discrimination is still alive and well in the United States, although it may be more subtle than in the past. For individuals who want to be in a relationship with someone of another race or ethnicity but face disapproval by the people around them, cohabitation could be the best alternative union type compared to the more permanent and usually more drastic step of marriage.

Research Questions and Hypotheses

We know that cohabitation is a growing type of union that may be used in various ways to satisfy different needs and wants depending on the individual person; reaffirming the changing attitudes towards maximizing utility through the expression of personal preferences that drive our society. We also know that the racial and ethnic lines are becoming less rigid and that out-group unions are increasing. The increased educational attainment by all people in the United States and especially by women plays a role in reducing the amount of educational variability within couples. With all these shifting patterns, this study aims to answer three questions. First, are there racial categories that have higher likelihoods of forming unions outside of their groups? Previous research shows that women of Hispanic origin are the most likely to form out-group unions, but what happens when their racial background is also included? Second, do educational determinants previously cited for out-group unions still hold true for today's society? Educational attainment and educational homogamy are often cited as reasons for interracial/ethnic unions. People with higher education levels are more likely to form unions outside their racial group; but what about the people at lower educational levels? The final question asks if residence plays a significant role in determining which females form out-group unions in a multivariate model.

The following are the specific hypotheses to be tested:

- Hispanic women will be more likely to have unions outside of their ethnicity when controlling for other characteristics for the female but also Hispanic whites will have even higher odds of out-

group unions since they classify themselves as both a minority (Hispanic) and part of the majority through the classification of white.

- The educational levels of the female and her partner will be significant in that those with educational attainment at the extremes – no high school degree and college degree or above – will have higher rates of out-group union formation. As for educational homogamy, it will not be significant in cohabitations but may still prove statistically significant in marriages.

- The exposure to a multitude of racially and ethnically diverse people encountered in metropolitan areas will increase the likelihood of forming out-group unions. There is more racial and ethnic variation in metropolitan areas. Residence will play a significant role in out-group union formation also because rural social norms could prevent the acceptance and existence of out-group relationships and out-group couples that were formed in non-metro areas may be attracted to the metro areas where interracial and interethnic relationships are more accepted.

Chapter Three

Data Measures and Methodology

       This chapter discusses the National Survey of Family Growth and the sample used for this study. The concept measurement of each variable studied is also detailed in this chapter. The last portion is about data analysis used to test the research hypotheses.

Data

       This study uses the female respondent file from Cycle 6 of the National Survey of Family Growth, which was collected in 2002. The survey is conducted by the National Center for Health Statistics with the participation and funding support of nine other programs of the U.S. Department of Health and Human Services. The NSFG is a nationally representative data set for the civilian, non-institutionalized female population ages 15 – 44 and every cycle recruits a new set of respondents. The first five waves were collected in 1973, 1976, 1982, 1988, and 1995. The interviews were voluntary, confidential, and collected by two hundred formally trained females with the assistance of Audio Computer-Assisted Self-Interview (ACASI) technology.

       Cycle 6 includes 12,571 interviews, 7,643 females and 4,928 males and also over-sampled Blacks and Hispanics. The females had an eighty percent response rate. The data includes retrospective information on relationship formation, socioeconomic and family background variables, along with information on reproductive history and sexual health. Only women from Cycle 6 who were currently married (N = 2844) or in a cohabiting union (N = 608) at the time of the interview are analyzed.

Concept Measurement

Dependent Variable

Two dichotomous dependent variables are examined. One measures if the married female is in an out-group marriage or not; the other measures the same for the cohabiting female.

Independent Variables

The independent and control variables fall into three categories: female demographic traits, female socio-economic characteristics, and partner attributes. Table 3-1 illustrates the three groups of independent variables in the analysis.

Table 3-1
Measurement of Independent Variables

Female Demographic Traits	Female Socio-Economic Characteristics	Partner Attributes
Race and Ethnicity • Non Hispanic white • Non Hispanic black • Hispanic white • Hispanic non-white **Residence** • Metropolitan Statistical Area, Central City • Metropolitan Statistical Area, Suburbs • Non Metropolitan Statistical Area **Age** • Interval Scale 15-44 **Nativity** • Born outside of the US • Born in the US	**Education Level** • Less than High School • High School Degree or GED • Some College • Bachelor's Degree or higher **Poverty Level** • below poverty line • poverty line - 199% • 200- 299% • 300 -399% • 400- 499% • 500% + **Previously Married** • Yes • No **Current Religion** • No Religion • Catholic • Conservative Protestant • Mainline Protestant • Other and non-denominational Protestant • Other Non-Christian	**Racial and ethnic background** • Non Hispanic white • Non Hispanic black • Hispanic white • Hispanic black **Highest Education** • Less than High School • High School Degree or GED • Some College • Bachelor's Degree or higher • Unknown **Education Homogamy** • Same education as partner • less education than partner • more education than partner • Unknown **Previously Married** • Yes • No

The first grouping, female demographic traits, contain measures for race/ethnicity, residence, nativity, and age. The race/ethnicity categories for the females are that of paradigm 1, which consists of four categories: white non-Hispanic, Black non-Hispanic, Hispanic white and Hispanic non-white. Residence is also examined using three values as defined by the U.S. Office of Management and Budget: metropolitan statistical area MSA (central cities), other MSA (suburban areas), and Non-MSA (non-metro areas). The metropolitan/ non-metropolitan categorization is included because central cites are where races and ethnicities interact during work, play, and transit. The suburban areas have less population density but are still easily accessible to cities. The non-metropolitan statistical areas, non-msa, have the lowest population density. It would have been preferable to include residential region since there are discernable differences on the prevalence of interracial relationship formation depending on geographic location (Qian 1999; Wright et al. 2003; Tucker & Mitchell-Kernan). Unfortunately, this information is not available in the public use file of the NSFG.

The nativity of the female is included because it has been found that whites born outside of the United States are more likely to marry interracially (Qian 1999:588). Female's age is necessary because some women have not entered into union formation. The women in the sample are between the ages of 15 and 44; older women have had time to be in the marriage market and encounter potential partners, while women still in high school have not had that opportunity. Age is the only interval scaled variable in the analysis.

The socio-economic characteristics include education level, poverty level, previously married, and religion. Education is examined using the highest educational level attained by the female. There are four categories: less than high school degree or GED, high school degree or GED, some college, and bachelor's degree or higher. Poverty level has five categories that measure the relationship of the yearly income to the poverty line. Minorities, specifically African Americans are more likely to have lower socio-economics status and cohabitation is most common between people with low-incomes (Edin et al 2004: 1008); this variable may give insight to out-group union formation. It has also been demonstrated

that lower social class is a predictor of cohabiting relationships since adults with lower educational levels have an increased probability of cohabiting. Edin and Kafelas' *Promises I Can Keep (2005)* examines how poor women place marriage on such a high pedestal that they are more likely to postpone marriage or cohabit with the men in their lives. Additionally, a dichotomous variable measuring if the female was previously married is included in the analysis since marriages after the first have a higher likelihood of being interracial (Tucker, & Mitchell-Kernan 1990).

The final variable in this grouping is religion. Religion is included in the analysis because not only does it influence the type of union (Lehrer 2000) but it is also related to education attainment (Lehrer 1999); however, only Jews, fundamentalist Protestants, Catholics and mainline Protestants were the religious groups analyzed in that particular study. The current religion of the female is categorized by denominations. Denominations all have their own world views and relate to childhood socialization (Steensland, et al 2000: 292). A person could form their ideas on out-group unions during childhood. The religion variable is measured by six categories: no religion, Catholic, conservative Protestant, mainline Protestant, non-denominational and other Protestant, and other non-Christian.

Lastly, three variables that measure partner characteristics are controlled. The male's education level (less than high school degree, high school degree or equivalent, some college, bachelor's degree or higher, and unknown), if he was previously married, and educational homogamy. Educational homogamy examines the disparity of educational levels for the female and her partner. It has only three values; female and male educational levels are the same, the female has more education than the male, or the female has less education than her partner.

Data Analysis

The first step is to calculate descriptive statistics for all of the variables for women who are married and cohabiting. The next step is to calculate Chi-Square analyses on the variables for married

and cohabiting women who are in out-group unions as compared to those in same-group relationships. Finally, separate binary logistic regression analysis is used to predict out-group marriages and cohabitations. Regression analyses are used to discern the relationship between interracial/interethnic unions and characteristics of the female and her partner. Binary logistic regression is conducted since the dependent variable in each model is a dichotomy measuring if the female is in an out-group marriage or not, or an out-group cohabitation or not. The analysis also allows the introduction of variable groups hierarchically to better identify the significance of relationships between independent and the dependent variables.

Chapter Four

Results

The results portion of the thesis is presented in three manners. The marriage sample is compared to the cohabiting sample in the descriptive statistics. Next, separate bi-variate analyses of the dichotomous variable measuring an out-group union with the independent variables are conducted. Finally, the binary logistic regression models are presented and discussed.

Descriptive Statistics

Table 6-1 presents descriptive statistics for selected variables for married and cohabiting women. Over three-quarters of married women are non-Hispanic white, while only 61.4% of cohabiting females are non-Hispanic white. It is interesting to note that over 20% of cohabitors are classified as Black (Hispanic and non-Hispanic) and no more than 12% of married women are Black. This racial difference is consistent with national data on marriage rates. Additionally, 53.9% of the married women live in central cities and 28.3% live in Suburban areas. On the other hand, there is less disparity in the proportion of cohabiting women living in the two metropolitan statistical areas for cohabiting women, 43.3% live in central cities, while 36.8% live in suburban areas. Only 8.7% of married females are between the ages of 15 and 24, while over a third of cohabiting females are this age. About 17% of women in marriages and cohabitations were born outside of the United States.

Furthermore, the socio-demographic characteristics highlight the differences between the two types of unions. For cohabitors the majority have attained a high school degree or GED; however, a majority of the married women in the sample have some college education or higher. Twenty-four percent of cohabiting women were below the poverty line, while only 12% of married women were. The variable measuring if the female had ever been married before shows that cohabiting women were more

likely to have been married before than women in current marriages, 25.6% compared to 18.5%. Finally, 20.1% of cohabiting women reported not having a religion, whereas 10.7% of married women reported this. The other denominations had similar percentages for married and cohabiting women, except for other and non-denominational Protestant; 14.3% compared to 8.9%, for married and cohabiting females, respectively.

Interestingly, the variables that measure partners' attributes highlight differences between marriages and cohabitations. Over a quarter of cohabiting partners are Hispanic or Black, when examining Hispanic origin and race independently, while non-Hispanic whites make up half of the cohabiting partner sample. In contrast, three-fourths of husbands are non-Hispanic white. When examining educational attainment, 8.9% of husbands had less than high school degree and 21.3% had attained a high school degree. The percentages for these lower education attainment levels are higher for cohabiting partners; nearly 20% had less than a high school degree, while 30.9% did have a high school degree. Regarding educational homogamy between the couple, there was a slight increased likelihood for a married woman to have the same educational level as her husband than for cohabiting women (43.8% to 40.2%, respectively). However, 18.6% of married women did not report their husband's educational level compared to 12% of cohabitors. The high percentage of unknown data for this variable is peculiar since it's highly probable that she did indeed know her husband's educational level; this may have an effect on the differences in educational homogamy.

Table 4-1

Description of Sample by Union Type (percent), Weighted

	Married N = 2844	Cohabiting N = 608
Female Demographic Traits		
Race and Ethnicity		
Non Hispanic white	76.3	61.4
Non Hispanic black	8.3	15.4
Hispanic white	11.8	16.9
Hispanic black	3.7	6.3
Residence		
Metropolitan Statistical Area, Central City	53.9	43.3
Metropolitan Statistical Area, Suburbs	28.3	36.8
Non Metropolitan Statistical Area	17.8	19.9
Age		
15 – 19	0.7	9.9
20 – 24	8.0	27.7
25 – 29	16.9	21.4
30 – 34	22.4	14.5
35 – 39	24.7	13.0
40 – 44	27.3	13.6
Nativity		
Born outside of the US	17.1	16.8
Born in the US	82.9	83.2
Female Socio-Economic Characteristics		
Education Level		
Less than High School	10.4	24.0
High School Degree or GED	29.8	36.6
Some College	29.7	26.3
Bachelor's Degree or higher	30.1	13.0
Poverty Level		
below poverty line	12.0	24.1
poverty line - 199%	17.9	24.7
200- 299%	19.8	21.2
300 -399%	18.3	9.8
400- 499%	19.4	9.5
500% +	12.7	10.7
Previously Married		
Yes	18.5	25.6
No	81.5	74.4
Current Religion		
No Religion	10.7	20.1
Catholic	30.2	31.6
Conservative Protestant	21.8	20.8
Mainline Protestant	17.3	13.1
Other and non-denominational Protestant	14.3	8.9
Other Non-Christian	5.8	5.5

Table 4-1 Continued		
Partner Attributes		
Racial and ethnic background		
Non Hispanic white	75.2	55.2
Non Hispanic black	8.9	18.5
Hispanic white	11.8	18.5
Hispanic black	4.1	7.8
Highest Education		
Less than High School	8.9	19.8
High School Degree or GED	21.3	30.9
Some College	23.7	24.7
Bachelor's Degree or higher	27.5	12.6
Unknown	18.6	12.0
Education Homogamy		
Same education as partner	43.8	40.2
less education than partner	18.2	24.4
more education than partner	19.4	23.4
Unknown	18.6	12.0
Previously Married		
Yes	12.8	31.7
No	87.2	68.3

Bi-variate Analysis

The next step in analysis is to examine any significant differences for women who are in out-group unions compared to those who are in same group unions by using cross tabular analyses for married and cohabiting women. Table 6-2 presents the percentage of females in same race and out-group relationships for each category of a variable. The table illustrates how within marriages there are more statistically significant differences than in cohabitations; cohabitators are more similar no matter the racial make-up of the couple.

Table 4-2

Chi-Square Analyses of Out-Group Unions and Independent Variables (percent), Weighted

	<u>Married</u>			<u>Cohabiting</u>		
	Same Race/ Ethnicity	Out- Group	Chi- Square	Same Race/ Ethnicity	Out- Group	Chi- Square
Female Demographic Traits	90.9	9.1		83.7	16.3	
Race and Ethnicity						
Non Hispanic white	94.6	5.4		83.8	16.2	
Non Hispanic Black	92.5	7.5		90.7	9.3	
Hispanic white	74.6	25.4		79.5	20.5	
Hispanic Non-white	64.6	35.4	294.563***	75.9	24.1	13.745**
Residence						
MSA - Central City	90.6	9.4		79.8	20.2	
MSA - Suburban Areas	88.7	11.3		83.3	16.7	
Non MSA	95.2	4.8	17.464***	93.1	6.9	7.957*
Age						
15 – 19	66.4	33.6		85.9	14.1	
20 – 24	86.5	13.5		80	20	
25 – 29	87.8	12.2		82.3	17.7	
30-34	90.4	9.6		86.8	13.2	
35-39	92.7	7.3		87.3	12.7	
40-44	93.6	6.4	26.475***	85.2	14.8	2.544
Nativity						
Born outside of the US	83.2	16.8		84.2	15.8	
Born in the US	92.3	7.7	35.728***	83.6	16.4	0.52
Female Socio-Economic Characteristics						
Education Level						
Less than High School	85.7	14.3		86.1	13.9	
High School Degree or GED	90.1	9.9		83.3	16.7	
Some College	90.8	9.2		81.9	18.1	
Bachelor's Degree or higher	93.9	6.1	14.957**	83.7	16.3	1.556
Poverty Level						
Below poverty line	88.3	11.7		86.5	13.5	
poverty line - 199%	87.3	12.7		83.7	16.3	
200- 299%	91.4	8.6		86.1	13.9	
300 -399%	92.7	7.3		84.4	15.6	
400- 499%	91	9		75.7	24.3	
500% +	95.3	4.7	15.108*	78.8	21.2	3.498

Table 4-2 continued

	Married			Cohabiting		
	Same Race/ Ethnicity	Out-Group	Chi-Square	Same Race/ Ethnicity	Out-Group	Chi-Square
Current Religion						
No Religion	88.4	11.6		83.3	16.7	
Catholic	87.1	12.9		80.8	19.2	
Conservative Protestant	94.3	5.7		88.6	11.4	
Mainline Protestant	95.4	4.6		88.4	11.6	
Other & non-denom. Protestant	89.1	10.9		77.5	22.5	
Other Non-Christian	93.6	6.4	52.586***	81.5	18.5	4.38
Previously Married						
Yes	90.6	9.4		82.1	17.9	
No	92.6	7.4	1.495	88.1	11.9	2.411
Partner Attributes						
Racial and ethnic background						
Non Hispanic white	96.2	3.8		94.3	5.7	
Non Hispanic Black	85.9	14.1		76.5	23.5	
Hispanic white	73	27		70.8	29.2	
Hispanic Non-white	58.2	41.8	182.462***	56.3	43.7	28.739***
Highest Education						
Less than High School	83.8	16.2		87.4	12.6	
High School Degree or GED	88.9	11.1		83.9	16.1	
Some College	87.4	12.6		81.2	18.8	
Bachelor's Degree or higher	91	9		82	18	
Unknown	90.2	9.8	13.684**	77.3	22.7	6.222
Education Homogamy						
Same education level	90.1	9.9		85.7	14.3	
Less education than partner	85	15		81.5	18.5	
More education than partner	88	12		82.6	17.4	
Unknown	90.2	9.8	11.407**	77.3	22.7	4.123
Previously Married						
Yes	89.2	10.8		80.5	19.5	
No	91.2	8.8	4.105*	85.1	14.9	1.364

The race and ethnicity variable for the female is statistically significant in both marriages and cohabitations. In marriages 5.4% of non-Hispanic whites, 7.5% of non-Hispanic Black, 25.4% Hispanic whites, and 35.4% of Hispanic non-whites are in out-group marriages. The whole sample of married

women yields 9.1% out-group marriages; it is very apparent that married Hispanic women are more likely to have a husband outside of their racial and/or ethnic group than any other racial/ethnic category. Now for cohabiting women, Hispanic women are still the most likely women to be in an out-group union but the range between the percentages is not as great as it is for married women. An intriguing finding from this variable is that non-Hispanic Black women is the only category to fall below the percentage of out-group unions cohabitations with 9.3% of non-Hispanic Black women being in out-group cohabitations, while the average for the whole cohabiting sample is 16.3%. Finally, in marriages, non-Hispanic whites are the least likely to form out-group unions, while in cohabitations non-Hispanic Black women are the least likely.

The residence variable is also statistically significant in both models. Fewer out-group unions occur for women in non-metropolitan areas. More out-group marriages occur in the suburbs; 11.3% of women who live in the suburbs have husbands who do not share the same race and ethnicity category. On the other hand, more out-group cohabitations occur to women living in central cities, 20.2%.

An interesting difference is that more out-group marriages occur to women who are near or below the poverty line than at any other poverty levels. Furthermore, nearly 15% of women who have less than a high school education out-marry, while only 6.1% of women with a college degree or higher do the same. This low income and low education level combination acts as a measurement for low socio-economic status. Empirical studies demonstrate how cohabiting women are more likely to be in lower socio-economic status. However this pseudo-SES categorization of out-group married women does not hold true for cohabiting women. Although still not statistically significant, cohabiting women that are 400% and above the poverty line have out-group cohabitation rates above the average for the sample. When we look at cohabiting females' education levels, despite still not being significant, women with less than a high school degree have the least amount of out-group unions, 13.9%.

The final variable that is statistically significant for both models is the one measuring her partner's race and ethnicity. A larger percentage of the females' partners are Hispanic non-whites; 41.8%

for married women and 43.7% for cohabiting women. Alternatively, fewer partners are non-Hispanic whites. These statistics are interesting because they demonstrate the lower involvement of non-Hispanic whites in out-group unions.

Religion, which plays a role in the difference between people in marriages and cohabitations, is statistically different for women who out-marry; the religion variable is not statistically significant for cohabiting females. Catholic women are the most likely to out-marry and 12.9% do. Mainline Protestant married women have the lowest percentage of out-group marriage with 4.6%

In sum, women who out-marry are statistically different than the women who choose to marry within their group. Most of the independent variables included in the study are significant for married women. The only variable that is not statistically significant is if she was previously married. When considering cohabiting unions only three variables are statistically different female's race/ethnicity, residence, and the cohabiting partner's race/ethnicity. Out-group cohabitations occur most frequently to Hispanic non-white women and least frequently to non-Hispanic Black females (9.3% to 24.1%, respectively). Additionally, out-group cohabitations made up 6.9% of all cohabitations in non-metro areas while central cities had the largest share of these unions, 20.2%.

Multivariate Analyses

Separate models predict marriage and cohabiting out-group unions. Female demographic measures are introduced first, followed by her socio-economic characteristics, and then finally the partners' attributes. For the regression analysis the racial categories from paradigm one are used. A .05 criterion of statistical for a two-tailed test is employed. In the multivariate analyses the partner's race/ethnicity variable is removed to take into account multi-collinearity between the dependent variable which measures the racial and ethnic differences of the couple.

Table 6-3 shows the binary logistic regression analysis for married women. In model 1, which contains only female socio-demographic variables, the Nagelkerke R-square is .175. Race and ethnicity statistically significantly relate to the likelihood of out-marrying. Hispanic non-whites are 12.6 times more likely and Hispanic whites are 8.3 times more likely than non-Hispanic females to be in an interracial/ethnic marriage; these are both significant at the .001 level. Non-Hispanic Blacks are only 1.9 times more likely than non-Hispanic whites to be in an out-group marriage but this is still statistically significant at the .01 level. Women living in central cities have an odds ratio of 1.6 compared to women living in non-metro areas. Furthermore, foreign born women were about half as like to be in an out-group marriage compared to natives. The final variable in model 1, age, is statistically significant at the .05 level and indicates that the older the female is the less likely she is to out-marry.

Next, for model 2, the Nagelkerke R-square increases to .192 as the female socio-economic characteristic variables are added to the analysis. Once again, females who are not non-Hispanic whites have increased likelihoods of being in an interracial/ethnic marriage, with Hispanic non-whites being 15.6 times more likely than non-Hispanics to do so. Interestingly, central city residence is no longer significant in the regression; however, the statistical significance for age increases. In model 2, nativity is still an important component in determining which women are in out-group marriages. Poverty level and the variable measuring if she has been married before are not significant but having a high school degree increases the female's likelihood of being in an out-group marriage by 1.6 times over women with less than a high school degree. In addition, women who are conservative Protestants are about half as likely to out-marry compared to women who report no religion.

The final model, which adds the husband's characteristics, show that the female's race/ethnicity, nativity, being conservative Protestants, and age are all still statistically significant. However, the female's education level is no longer significant and the addition of the husband's educational level does not statistically change the model. But females with husbands who were previously married are 1.7 times more likely to be in an out-group marriage. The Nagelkerke R-square is .202

In sum, the multivariate analysis in table 6-3 reveals that being non-Hispanic Black, Hispanic white, and Hispanic non-white compared to non-Hispanic whites increase the odds ratio of being in an out-group marriage. Women who are native born, older or a conservative Protestant all have significantly lower likelihoods of being in an out-group marriage. Furthermore, women who are in out-group marriages are more likely to have husbands who have been married before.

Table 4-3

Logistic Regression Results for the Relationship between Independent Variables and Out-Group Marriages

	Model 1		Model 2		Model 3	
	B	Odds Ratio	B	Odds Ratio	B	Odds Ratio
Female Demographic Traits						
Female's Race & Ethnicity (Non-Hispanic White omitted)						
Non Hispanic Black	0.633	1.883**	0.819	2.268***	0.829	2.290***
Hispanic White	2.114	8.281***	2.307	10.048***	2.326	10.233***
Hispanic Non-white	2.531	12.571***	2.744	15.550***	2.770	15.954***
Residence (Non Metropolitan Statistical Area)						
Central City	0.446	1.562*	0.310	1.364	0.289	1.336
Suburban Area	0.275	1.316	0.152	1.164	0.135	1.146
Nativity - born outside US	-0.554	0.575***	-0.430	0.651**	-0.467	0.627**
Age	-0.024	0.977*	-0.027	0.974**	-0.031	0.969**
Female Socio-Demographic Characteristics						
Education Level (< High School Degree omitted)						
High School Degree or GED			0.450	1.568*	0.420	1.522
Some College			0.376	1.456	0.346	1.413
Bachelor's Degree or higher			0.277	1.320	0.321	1.378
Poverty Level (Below Poverty Level omitted)						
poverty line - 199%			0.192	1.212	0.172	1.188
200- 299%			0.122	1.129	0.074	1.076
300 -399%			0.167	1.182	0.127	1.135
400- 499%			0.465	1.592	0.381	1.464
500% +			0.208	1.231	0.134	1.143
Previously Married			0.077	1.080	-2.312	0.099
Current Religion (No Religion omitted)						
Catholic			-0.428	0.652	-0.413	0.622
Conservative Protestant			-0.718	0.488**	-0.728	0.483**
Mainline Protestant			-0.452	0.636	-0.494	0.610
Other & non-denom. Protestant			0.098	1.103	0.102	1.107
Other Non-Christian			-0.447	0.640	-0.455	0.635
Partner Attributes						
Partner's Education Level (< High School Degree omitted)						
High School Degree or GED					-0.055	0.946
Some College					0.288	1.227
Bachelor's Degree or higher					0.124	1.132
Unknown					2.580	13.202
Education Homogamy (Same Education Level omitted)						
less education than partner					0.288	1.334
more education than partner					0.061	1.063
Partner Previously Married					0.479	1.615**
Constant	-2.393		-2.565		-2.502	
Nagelkerke R Square	0.175		0.192		0.202	
- 2 log likelihood	1726.896		1699.538		1683.868	
Degrees of Freedom					28	

*** p < .001; **p < .01; *p < .05
Sample size: 2,827

We now turn our attention to the model predicting out-group cohabitation. The logistic regression results for cohabiting women bring to light different findings from those predicting out-group marriages. In model 1, both Hispanic white and Hispanic non-white women were about three times more likely than non-Hispanic whites to be in an interracial union. Residents in central cities were three times more likely than non-metro women to be in out-group cohabitation. Women born outside of the United States were statistically less likely to be in an interracial union. Age was not a significant predictor of out-group unions for cohabitors. The Nagelkerke R-square is .132.

The next model includes the socio-economic characteristic variables for females. None of these are statistically significant predictors of out-group cohabitations. The Nagelkerke R-square remains at .132. However, the categories for the female's race/ethnic composition are strengthened in this model. Hispanic whites are now 4.5 times more likely and Hispanic non-whites are 4.4 times more likely than non-Hispanic whites to be in out-group unions.

In the final model, the Nagelkerke R-square increases to .167. Additionally, the female's race/ethnicity, residence, and nativity are still statistically significant. The odds ratio for Hispanic whites increases to 4.980, while the odds ratio for Hispanic non-whites increase to 5.293 compared to non-Hispanic whites. The odds ratio for central city residents remains the same, whereas women born outside of the US are .404 as likely to be in out-group cohabitations – a slight decrease from the previous model. Additionally, in model 3 women who have been previously married are about half as likely to be in an interracial cohabitation. Furthermore, when the female does not know the highest attained education level of her partner, she is 13 times more likely to be in an out-group cohabitation and when her partner has been previously married she is .8 as likely to be in an interracial/ethnic union.

Overall, the cohabiting regression model predicts that females who are Hispanic white, Hispanic non-white or living in a central city have increased probabilities of being in out-group cohabitations. On the other hand, foreign born women, those who were married before or have partners that have been previously married, significantly decrease the odds of being in an out-group union. Interestingly, women

who do not know or report their cohabiting partners' education level are significantly less likely to be in a union outside their racial/ethnic group. It is not explicitly clear why this occurs.

Table 4-4

Logistic Regression Results for the Relationship between Independent Variables and Out-Group Cohabitations

Variables	Model 1 B	Model 1 Odds Ratio	Model 2 B	Model 2 Odds Ratio	Model 3 B	Model 3 Odds Ratio
Female Demographic Traits						
Female's Race & Ethnicity (Non Hispanic White omitted)						
Non Hispanic Black	-0.113	0.893	-0.274	0.760	-0.272	0.762
Hispanic white	1.180	3.253***	1.504	4.501***	1.605	4.980***
Hispanic non-white	1.335	3.800***	1.478	4.382***	1.660	5.293***
Residence (Non Metropolitan Statistical Area omitted)						
Central City	1.093	2.984**	1.052	2.865**	1.053	2.865**
Suburban Area	0.811	2.251	0.778	2.199	0.809	2.268
Nativity - born outside US	-1.142	0.319***	-0.880	0.415**	-0.906	0.404**
Age	-0.006	0.994	-0.004	0.996	-0.019	0.982
Female Socio-Economic Characteristics						
Education Level (< than High School Degree omitted)						
High School Degree or GED			0.440	1.553	0.570	1.769
Some College			0.270	1.310	0.392	1.480
Bachelor's Degree or higher			0.096	1.101	0.293	1.341
Poverty Level (Below Poverty Line omitted)						
poverty line – 199%			0.282	1.326	0.372	1.451
200- 299%			0.335	1.398	0.355	1.426
300 -399%			0.654	1.923	0.637	1.890
400- 499%			0.679	1.972	0.610	1.864
500% +			0.860	2.364	0.904	2.2.470
Previously Married			-0.523	0.593	-0.746	0.474**
Current Religion (No Religion omitted)						
Catholic			-0.506	0.603	-0.419	0.658
Conservative Protestant			0.254	1.290	0.271	1.311
Mainline Protestant			-0.256	0.774	-0.242	0.785
Other & non-denom. Protestant			0.370	1.448	0.481	1.617
Other Non-Christian			0.389	1.473	0.387	1.473
Partner Attributes						
Partner's Education Level (< High School Degree omitted)						
High School Degree or GED					0.334	1.396
Some College					0.210	1.233
Bachelor's Degree or higher					0.437	1.548
Unknown					2.558	12.906**
Education Homogamy (Same Education Level omitted)						
less education than partner					0.238	1.269
more education than partner					-0.007	0.993
Partner Previously Married					-0.174	0.840**
Constant	-2.433		-3.039		-2.479	
Nagelkerke R square	0.132		0.132		0.167	
- 2 log likelihood	531.434		511.019		497.180	
Degrees of Freedom					28	

*** p < .001; **p < .01; *p < .05

Sample size: 606

Chapter Five

Conclusions

The three parts of the chapter first discusses the findings and implications of the study on out-group marriages and cohabitations. Next, the limitations to the research are presented and finally directions for future research are offered.

Findings and Implications

Studies seeking to examine interracial unions must actively seek out participants from all racial backgrounds and aim to oversample under-represented groups. The examination of interracial and interethnic unions first starts with the determination of which couples fall into this categorization. When using a four category system to include Hispanic origin and race the groupings are Non-Hispanic White, Non-Hispanic Black, Hispanic white, and Hispanic non-white, it is apparent that cohabitations are more likely than marriages to be out-group unions. The measurement of race is a complicated process for three reasons. First, the combination of all Hispanics together does not allow for accurate analysis on the current state of inter-ethnic union formation. The second thorny issue is the fact that the female's race was categorized into white, Black and other in the public use file of the NSFG; the other category combines women who are Asian, Hawaiian, or Native American. Finally, race and ethnicity are social construct, as well as ethnicity, but studying them separately tells an incomplete story of what's going on. Because previous research uses race as measured by one category, there is not much prior direction in this field.

The first research question deals with racial/ethnicity categories and asked if there are categories that are more likely to form unions outside of their own racial and ethnic groups? It was hypothesized that Hispanic white women would be the most likely to have out-group unions since they encompass both

majority and minority categorizations. The results of the bi-variate and binary logistic regression neither supported nor fail to support this hypothesis. Hispanic non-whites were 16 times more likely than non-Hispanic whites to have a husband who did not share her racial and ethnic background. While in cohabitations, Hispanic non-whites were 5 times more likely than non-Hispanic whites to be in an interracial/ethnic union. Given that Hispanics and non-whites are minorities in the population, the results demonstrate that minorities are more likely to be in out-group unions than the majority, non-Hispanic whites.

The second research question involves variables measuring educational attainment. Are educational attainment levels and educational homogamy still as relevant and significant in out-group union formation as they were in previous historical literature? The second hypothesis, which dealt with educational attainment levels, was not completely supported by the analysis. The hypothesis states that women who had no high school degree or a bachelor's degree or higher – women who are at the extremes in the educational attainment continuum – will have higher likelihoods of forming out-group unions, and married women's educational homogamy would be significant while in cohabitations it would not be. The results did not support this hypothesis. The bi-variate analysis found significant differences in educational level and educational homogamy for married women who were in out-group unions compared to those in same-group marriages. However, in the final multivariate regression model, educational attainment of the women and educational homogamy are no longer significant. The education variables in the cohabitation model were not significant in the bi-variate or the regression analyses. The social exchange theory, which states that higher socio-economic status will be exchanged for higher racial status, is not supported by these results.   The lack of support signifies a need to develop new theories that do not involve the exchange of status as a predictor of out-group union formation.

The final research question addresses metropolitan residence as a predictor for out-group union formation. It asks if living in a metropolitan area compared to a non-metropolitan area plays a significant role in determining which females form out-group unions. The final hypothesis was not fully supported

in the analyses. In the bi-variate analysis this variable is statistically significant for both marriages (p < .001) and cohabitations (p < .05). Women who were in out-group unions were statistically different in their place of residence.   A larger percentage of married women living in the suburbs were in interracial/ethnic unions compared to married women living in central cities or non-metro areas; whereas a larger percentage of cohabiting women living in central cities were in out-group unions compared to cohabiting women living in central cities or non-metro areas.   The regression analyses reveal that residence is not a significant predictor in out-group marriages. Yet, in the cohabitation regression model, women living in central cities had significantly higher odds to being in an out-group union than women living in non-metro areas. Central city women were about three times more likely than women living in non-metro areas to be in a relationship with a cohabiting partner who had a different racial/ethnic background.

The multivariate analysis illustrates how the factors that lead to out-group marriage are different from those who decide to out-group cohabitate. This adds to the literature, in that there is an intrinsic difference between people who decide to partake in these two types of unions. By using key variables – education, educational homogamy, residence, and race/ethnicity – that are commonly discussed independently in logistic regression models and not finding much significance, stresses the fact that the likelihood of forming unions outside of one's racial or ethnic group is not predicted by demographic or socio-economic characteristics of a female.

Possible Limitations of the Analysis

As with any study, there are limitations. The first limitation would be not having the ability to report the detailed race and Hispanic origin for the people in the study. The only people used who reported being Asian, Hawaiian, or Native American were those who also reported being of Hispanic origin in order to separate Hispanics into two categories: Hispanic whites and Hispanic non-whites. This

not only reduced the sample size but does not give full breadth to persons with Asian, Hawaiian, or Native American backgrounds .   Another limitation in the study is not having access to the geographical region variable for the female's current living situation.   Although residence in terms of metropolitan areas was included, it was not significant for out-group marriages and only living in central cities was significant for out-group cohabitations.   The final limitation involves the relatively small number of cohabitations in the NSFG, which leads to small numbers of interracially/ethnically mixed unions. Finally, there is a small proportion of people who report themselves as Hispanic Blacks for two reasons. African Americas are likely to only choose one race and Latinos have an aversion to self-reporting themselves as Black (Darity et al. 2005: 108).

Directions for Future Research

Future research must make purposeful steps in collecting, using, and analyzing nationally representative data that allows for the complete breakdown of race and ethnicity; not just a combination of the two socially constructed concepts.   If nothing else, this research shows the need for it.   The measurement of race and ethnicity is an important and changing concept in the United States.   Despite the changing racial and ethnicity measurements, it is necessary to continue to use these measurements in empirical studies and research because they are used to compare the past to the present situation.   There also needs to more research on the individual decisions to be in an out-group union.   Perhaps large data sets need to include attitudinal questions that measure a person's view on individualism, social climate, and racial issues.   Racial issues still exist in the United States and the changing positions on union formation leads to spurious conjectures that interracial/ethnic unions measure racial (lack of) tensions.   It is necessary for future research to more thoroughly understand the intersection between race, ethnicity, and shifting patterns in union formation.

Additionally, Cycle 6 of the National Survey of Family Growth is the first cycle to survey men. A future research project could examine males using the same data analysis to see if significant variables differ due to gender. Moreover, the results from the study demonstrate that there are other factors beyond demographics and socio-economic characteristics that could better predict and out-group union than the ones used in the analyses. Perhaps attitudinal questions that measure a person's preferences about out-group formation and their thoughts on the racial/ethnic climate could better forecast out-group union formation.

Finally, there exist studies on skin tone and its effects on life outcomes. Goldsmith et al (2006) have found that African Americans that are light skin fare better in earnings than dark Black African Americans, as compared to whites (pg. 244). The more people who form out-group marriages and cohabitations, the more likely their children will be various shades of brown. In our changing society, with changing demographics, and changing attitudes and values towards union formation we may need to shift our focus beyond the Black, white, Hispanic comparison to studying colorism and the importance of shade differentials for life outcomes.

Appendix A

Paradigm 2 Bi-Variate Correlations for Married and Cohabiting Females in Out-Group Unions (percent), Weighted

	Married			Cohabiting		
	Same Race	Out-Group	Chi Square	Same Race	Out-Group	Chi Square
Female Demographic Traits	92.1	7.9		85.2	14.8	
Race and Hispanic origin						
White	94.2	5.8		83.8	16.2	
Black	92.2	7.8		90.7	9.3	
Hispanic	81.7	18.3	18.085***	85.3	14.7	3.528
Residence						
MSA, CC	91.8	8.2		80.8	19.2	
MSA, other	90.3	9.7		85.3	14.7	
Non MSA	95.6	4.4	13.016***	94.9	5.1	7.960*
Nativity						
Born outside of the US	90.2	9.8		88.5	11.5	
Born in the US	92.4	7.6	1.796	84.5	15.5	3.987*
Age						
15 - 19	77.6	22.4		88.9	11.1	
20 - 24	86.5	13.5		82.0	18.0	
25 - 29	88.4	11.6		82.9	17.1	
30-34	91.4	8.6		89.7	10.3	
35-39	93.9	6.1		88.1	11.9	
40-44	95.1	4.9	19.440**	85.2	14.8	2.005
Female Socio-Economic Characteristics						
Education Level						
Less than High School	91.7	8.3		90.2	9.8	
High School Degree or GED	90.8	9.2		84.4	15.6	
Some College	91.3	8.7		82.3	17.7	
Bachelor's Degree or higher	94.3	5.7	8.656*	83.7	16.3	5.73
Poverty Level						
below poverty line	92.2	7.8		90.8	9.2	
poverty line – 199%	89.9	10.1		84.2	15.8	
200- 299%	92.2	7.8		87.7	12.3	
300 -399%	92.7	7.3		84.4	15.6	
400- 499%	91.5	8.5		76.4	23.6	
500% +	95.2	4.8	1.306	78.8	21.2	7.515
Previously Married						
Yes	91.7	8.3		83.6	16.4	
No	93.5	6.5	0.885	89.5	10.5	2.034

	Married			**Cohabiting**		
	Same Race	Out-Group	Chi Square	Same Race	Out-Group	Chi Square
Current Religion						
No Religion	88.7	11.3		83.6	16.4	
Catholic	90.1	9.9		84.3	15.7	
Conservative Protestant	95.5	4.5		89.4	10.6	
Mainline Protestant	95.1	4.9		88.4	11.6	
Other and non-denominational Protestant	88.9	11.1		78.7	21.3	
Other Non-Christian	93.6	6.4	32.800***	83.2	16.8	5.620
Partner Attributes						
Race and Hispanic Origin						
White	96.2	3.8		94.3	5.7	
Black	85.9	14.1		76.5	23.5	
Hispanic	76.6	23.4	44.959***	72.1	27.9	13.528***
Highest Education						
Less than High School	90.7	9.3		90.7	9.3	
High School Degree or GED	91.3	8.7		85.0	15	
Some College	89.7	10.3		82.6	17.4	
Bachelor's Degree or higher	94.3	5.7		82.0	18	
Unknown	93.5	6.5	5.258	77.3	22.7	11.178*
Education Homogamy						
less education than partner	92.8	7.2		87.3	12.7	
same education level	89.7	10.3		83.9	16.1	
more education than partner	91.3	8.7		83.0	17.0	
Unknown	93.5	6.5	12.281**	77.3	22.7	5.06
Previously Married						
Yes	92.3	7.7		81.1	18.9	
No	90.1	9.9	4.417*	87.1	12.9	1.837

Appendix B

Paradigm 3 Bi-Variate Correlations for Married and Cohabiting Females in Out-Group Unions (percent), Weighted

	Married			**Cohabiting**		
	Same Ethnicity	Out-Group	Chi Square	Same Ethnicity	Out-Group	Chi Square
Female Demographic Traits	93.4	6.6		89.3	10.7	
Race						
Black	94.3	5.7		93.7	6.3	
White	93.3	6.7		88.3	11.7	
Other	93.9	6.1	0.731	89.2	10.8	0.717
Ethnicity						
Hispanic	80.5	19.5		83.8	16.2	
Non-Hispanic	95.6	4.4	199.724***	90.8	9.2	20.934***
Residence						
MSA, CC	93.3	6.7		83.8	16.2	
MSA, other	91.9	8.1		91.3	8.7	
Non MSA	96.3	3.7	10.555**	97.5	2.5	15.013***
Nativity						
Born outside of the US	92.2	7.8		89.3	10.7	
Born in the US	93.9	6.1	0.685	89.2	10.8	0.66
Age						
15 - 19	77.6	22.4		90.6	9.4	
20 - 24	89.6	10.4		87.5	12.5	
25 - 29	91.4	8.6		87.9	12.1	
30-34	93.3	6.7		96.4	3.6	
35-39	94.1	5.9		91.0	9.0	
40-44	95.6	4.4	13.280*	88.9	11.1	0.872
Female Socio-Economic Characteristics						
Education Level						
Less than High School	91.4	8.6		93.1	6.9	
High School Degree or GED	92.6	7.4		89.2	10.8	
Some College	92.9	7.1		86.7	13.3	
Bachelor's Degree or higher	95.5	4.5	7.453	87.5	12.5	4.981
Poverty Level						
below poverty line	92.0	8.0		90.8	9.2	
poverty line - 199%	91.9	8.1		90.6	9.4	
200- 299%	93.6	6.4		89.7	10.3	
300 -399%	94.0	6.0		87.9	12.1	
400- 499%	93.1	6.9		88.4	11.6	
500% +	96.0	4.0	2.014	84.0	16.0	2.854

	Married			**Cohabiting**		
	Same Ethnicity	Out-Group	Chi Square	Same Ethnicity	Out-Group	Chi Square
Previously Married						
Yes	93.1	6.9		88.4	11.6	
No	94.6	5.4	0.156	91.5	8.5	1.001
Current Religion						
No Religion	90.9	9.1		89.8	10.2	
Catholic	90.4	9.6		85.8	14.2	
Conservative Protestant	96.3	3.7		92.5	7.5	
Mainline Protestant	96.2	3.8		90.8	9.2	
Other and non-denominational Protestant	92.9	7.1		86.1	13.9	
Other Non-Christian	95.7	4.3	41.015***	95.7	4.3	2.379
Partner Characteristics						
Racial background						
Black	94.4	5.6		92.2	7.8	
White	94.3	5.7		90.2	9.8	
Other	87.8	12.2	4.617	78.1	21.9	6.171*
Ethnicity						
Hispanic	75.9	24.1		71.2	28.8	
Non-Hispanic	96.6	3.4	73.783***	95.4	4.6	13.459***
Highest Education						
Less than High School	91.5	8.5		91.8	8.2	
High School Degree or GED	93.4	6.6		88.9	11.1	
Some College	91.3	8.7		88.5	11.5	
Bachelor's Degree or higher	95.0	5.0		87.4	12.6	
Unknown	94.6	5.4	2.348	92.4	7.6	5.767
Educational Homogamy						
less education than partner	94.3	5.7		87.7	12.3	
same education level	90.4	9.6		89.0	11.0	
more education than partner	93.0	7.0		91.2	8.8	
Unknown	94.6	5.4	12.460**	92.4	7.6	0.782
Previously Married						
Yes	91.3	8.7		87.8	12.2	
No	93.7	6.3	6.170**	89.9	10.1	0

Bibliography

Batson, Christie D., Qian, Zhenchao & Lichter, Danitel T. (2006). "Interracial and Intraracial Patterns of Mate Selection Among America's Diverse Black Populations". *Journal of Marriage and Family, 68*, 658-672.

Baca Zinn, Maxine & Wells, Barbara. (2000). "Diversity Within Latino Families: New Lessons for Family Social Science". *Handbook of Family Diversity*, eds Demo, David H., Allen, Katherine, R., & Fine, Mark A. New York: Oxford University Press.

Baca Zinn, Maxine. (1995). "Social Science Theorizing for Latino Families in the Age of Diversity". *Understanding Latino Families: Scholarship, Policy, and Practice*, ed. Zambrana, Ruth E. Thousand Oaks: Sage Publications.

Baca Zinn, Maxine. "Race and the Family Values Debate". *Challenges for Work and Family in the Twenty-First Century*. New York: Aldine de Gruyter.

Baca Zinn, Maxine & Thornton Dill, Bonnie. (1996). "Theorizing Difference from Multiracial Feminism". *Feminist Studies, 22*, 321-331.

Blackwell, Debra L., & Lichter, Daniel T. (2004). "Endogamy among Dating, Cohabiting, and Married Couples". *The Sociological Quarterly, 45*, 719-737.

Brown, Susan L. & Snyder, Anastasia R. (2006). "Residential Differences in Cohabitors' Union Transitions". *Rural Sociology, 71*, 311-334.

Burton, Linda M. (1990). "Teenage Childbearing as an Alternative Life-Course Strategy in Multigeneration Black Families". *Human Nature, 1*, 123-143.

Crowder, Kyle D. & Tonay, Stewart E. (2000). "A New Marriage Squeeze for Black Women: the Role of Racial Intermarriage by Black Men". *Journal of Marriage and the Family*, 62, 792-807.

Darity, William A. Jr., Dietrich, Jason, & Hamilton, Darrick. (2002). "Passing on Blackness: Latinos, Race, and Earnings in the USA". *Applied Economics Letters, 9*, 847-853.

Darity, William A. Jr., Dietrich, Jason, & Hamilton, Darrick. (2005). "Bleach in the Rainbow: Latin Ethnicity and Preference for Whiteness". *Transforming Anthropology, 13*, 103-109.

Davis, Kingsley. (1941). "Intermarriage in Caste Societies". *American Anthropologist, 43*, 376-395.

Dubois, W.E.B. (1903, 1997). *The Souls of Black Folk*. Edited by Blight, David W., & Gooding-Williams, Robert. Boston: Bedford Books.

Edin, Kathryn & Kefalas, Maria. (2005). *Promises I Can Keep: Why Poor Women Put Motherhood Before Marriage*. Berkeley, CA: University of California Press.

Edin, Kathryn, Kefalas, Maria, & Reed, Joanna M. (2004). "A Peek Inside the Black Box: What Marriage Means for Poor Unmarried Parents". *Journal of Marriage and Family, 66,* 1007-1014.

"(The) Effect of Higher Education on Interracial Marriage". (1997). *The Journal of Blacks in Higher Education, 16,* 55-56.

Farley, Reynolds. (1999). "Racial Issues: Recent Trends in Residential Patterns and Intermarriage". *Diversity and Its Discontents: Cultural Conflict and Common Ground in Contemporary American Society*, eds. Smelser, Neil J. & Alexander, Jeffrey C. Princeton, NJ: Princeton University Press.

Foeman, Anita Kathy & Nance, Teresa. (1999). "From Miscegenation to Multiculturalism: Perceptions and Stages of Interracial Relationship Development". *Journal of Black Studies, 29*, 540-577.

Frazier, E. Franklin. *The Negro Family in the United States*. (1939). Chicago. The University of Chicago Press.

Gehman, Mary. (1994). *The Free People of Color of New Orleans*. New Orleans. Margaret Media, Inc.

Goldsmith, Arthur H., Hamilton, Darrick, & Darity, William Jr. (2006). "Shades of Discriminations: Skin Tone and Wages". *The American Economic Review, 96*, 242-245.

Goldsteing, Joshua R. & Harknett, Kristen. (2006). "Parenting across Racial and Class Lines: Assortative Mating Patterns of New Parents Who are Marred, Cohabiting, Dating or No Longer Romantically Involved". *Social Forces, 85*, 121-143.

Grieco, Elizabeth M. & Cassidy, Rachel C. (2001). "Overview of Race and Hispanic Origin: 2000". *Census 2000 Brief*. Washington, DC: U.S. Census Bureau.

Gullickson, Aaron. (2006). "Black/White Interracial Marriage Trends, 1850-2000". *Journal of Family History, 31,* 289-312.

Guzman, Betsy. (2001). "The Hispanic Population". *Census 2000 Brief.* Washington, DC: U.S. Census Bureau.

Hanger, Kimberly S. (1997) "Coping in a Complex World: Free Black Women in Colonial New Orleans". *The Devil's Lane: Sex and Race in the Early South*. eds. Clinton, Catherine and Gillespie, Michele. New York: Oxford University Press.

Harris, David R. & Ono, Hiromi. (2001). "Cohabitation, Marriage, and Markets: A New Look at Intimate Interracial Relationships". Unpublished paper. http://www.people.cornell.edu/pages/drh36/. Accessed 2/2007.

Harris, Rosalind P. & Worthen, Dreamal. (2003). "African Americans in Rural America". *Challenges for Rural America in the Twenty-First Century.* University Park, PA. Penn State Press.

Herring, Cedric, & Amissah, Charles. (1997). "Advance and Retreat: Racially Based Attitudes and Public Policy. *Racial Attitudes in the 1990s: Continuity and Change*, eds Tuch, Steven A. & Martin, Jack K. Wesport CT: Praeger.

Heuveline, Patrick & Timberlake, Jeffrey M. (2004). "The Role of Cohabitation in Family Formation: The United States in Comparative Perspective". *Journal of Marriage and Family, 66*, 1214-1230.

Hirschman, Charles. (2004). "The Origins and Demise of the Concept of Race". *Population and Development Review, 30*, 385-415.

Hunter, Andrea G. (2002). "(Re)envisioning Cohabitation: a Commentary on Race, History, and Culture". *Just Living Togethe*, eds. Booth, Alan and Ann C. Crouter. Mahwah, NJ: Lawrence Erlbaum Associates.

Johnston, James Hugo. (1970) *Race Relations in Virginia and Miscegenation in the South, 1776-1860.* Amherst, Mass.: University of Massachusetts Press.

Jones, Nicholas A. & Smith, Amy S. (2001). "The Two or More Races Population: 2000". *Census 2000 Brief.* Washington, DC: U.S. Census Bureau.

Joyner, Kara & Kao, Grace. (2005). "Interracial Relationships and the Transition to Adulthood". *American Sociological Review, 70*, 563-581.

Kalmijn, Matthijs. (1993). "Trends in Black/white Intermarriage." *Social Forces, 72*, 119-146.

Kalmijn, Matthijs. (1998). "Intermarriage and Endogamy: Causes, Patterns, Trends". *Annual Review of Sociology, 24,* 395-421.

Lee, Jennifer, Bean, Frank D., Batalova, Jeanne, & Sandhu, Sabeen. (2003). "Immigration and the Black-White Color Line in the United States". *The Review of Black Political Economy*, Fall 2003, 43-76.

Lee, Sharon M. & Edmonston, Barry. (2005). "New Marriages, New Families: U.S. Racial and Hispanic Intermarriage. *Population Bulletin, vol. 60, No. 2.*

Lehrer, Evelyn L. (2000). "Religion as a Determinant of Entry into Cohabitation and Marriage". *The Ties that Bind: Perspectives on Marriage and Cohabitation*, eds. Waite, Linda J, et al. New York: Aldine de Gruyter.

Lichter, Daniel T., Heaton, Tim B., & Fuguitt, Glenn V. (1986). "Convergence in Black and White Population Redistribution in the United States". *Social Science Quarterly, 67*, 21-31.

Lichter, Daniel T., LeClere, Felicia B., & McLaughlin, Diane K. (1991). "Local Marriage Markets and the Marital Behavior of Black and White Women". *The American Journal of Sociology, 96*, 843-867.

Loving v. Commonwealth of Virginia. (1967). 388 US. 1.

Manning, Wendy D. (2004). Children and the Stability of Cohabiting Couples . *Journal of Marriage and Family, 66*, 509-520.

Manning, Wendy D & Landale, Nancy S. (1996). "Racial and Ethnic Differences in the Role of Cohabitation in Premarital Childbearing". *Journal of Marriage and Family, 58*, 63-77.

Martin, Joan M. (2000). "Placage and the Louisiana Gens de Couleur Libre." *Creole: The History and Legacy of Louisiana's free People of Color,* ed. Kein, Sybil. Baton Rouge: Louisiana State University Press.

McLaughlin, Diane K., Lichter, Daniel T., & Johnson, G. M. (1993). "Some Women Marry Young: Transitions to First Marriage in Metropolitan and Nonmetropolitan Areas". *Journal of Marriage and the Family, 55*, 827-838.

Merton, Robert K. (1941). "Intermarriage and the Social Structure: Fact and theory". *Psychiatry 4,* 361-374.

Mills, Gary. (1977) *The Forgotten People*. Baton Rouge: Louisiana State University Press.

Monahan, Thomas. (1976). "An overview of statistics on interracial marriage in the United States, with data on its extent from 1963-1970." *Journal of Marriage and the Family, 38,* 94-105.

Omi, Michael & Winant, Howard. (1994). *Racial Formation in the United States: From the 1960s to the 1980s, 2d ed*. New York: Routledge.

Ortiz, Vilma. (1995). "The Diversity of Latino Families". *Understanding Latino Families: Scholarship, Policy, and Practice*, ed Zambrana, Ruth E. Thousand Oaks: Sage Publications.

Pascoe, Peggy. (1991). "Race, Gender, and Intercultural Relations: The Case of Interracial Marriage". *Frontiers, 7,* 5-18.

Popenoe, David. (2007). "The State of Our Unions: The Social Health of Marriage in America, 2007". *The Marriage Project.* Rutgers University. Accessed 2/13/2008.

Popenoe, David & Whitehead, Barbara Dafoe. (1999). "The State of Our Unions: The Social Health of Marriage in America, 1999". *The Marriage Project*. Rutgers University. Accessed 4/14/2008. http://marriage.rutgers.edu/Publications/SOOU/SOOU.htm

Population Reference Bureau. "Intergroup Married Couples: 1998". (1999). Population *Today, 27*.

Prewitt, Kenneth. (2002). "Race in the 2000 Census: a Turning Point". *The New Race Question: how the Census Counts Multiracial Individuals.* Edited by Perlman, Joel & Waters, Mary C . New York: Russell Sage.

Qian, Zhenchao. (1999). "Who Intermarries? Education, Nativity, Region, and Interracial Marriage, 1980 and 1990". *Journal of Comparative Family Studies, 30*, 579-597.

Raley, R. Kelly. (2000). "Recent Trends and Differentials in Marriage and Cohabitation: The United States". *The Ties That Bind: Perspectives on Marriage and Cohabitation*, eds. Waite, Linda J., et al. New York: Aldine de Gruyter.

Ramirez ,Roberto, R. (2004). "We the People: Hispanics in the United States". *Census 2000 Brief.* Washington, DC: U.S. Census Bureau.

Schoen, Robert & Cheng, Yen-Hsin Alice. (2006). "Partner Choice and the Differential Retreat from Marriage". *Journal of Marriage and Family 68*, 1-10.

Schoen, Robert & Wooldredge J. (1989). "Marriage Choices in North Carolina and Virginia, 1969-71 and 1979-81*". Journal of Marriage and the Family 51*, 465-481.

Simmons, Tavia & O'Connell, Martin. (2003). "Married-Couple and Unmarried-Partner Households: 2000". *Census 2000 Special Reports*. U.S. Department of Commerce.

Slater, Robert B. (1994). "The Growing Gender Gap in Black Higher Education". *The Journal of Blacks in Higher Education, 3*, 52-59.

Smock, Pamela J. (2000). "Cohabitation in the United States: An Appraisal of Research Themes, Findings, and Implications". *Annual Review of Sociology, 26*, 1-20.

Snipp, C. Matthew. (2003). "Racial Measurement in the American Census: Past Practices and Implication for the Future". *Annual Review of Sociology, 29*, 563-588.

Snyder, Anastasia R. (2006). "The Role of Contemporary Family Behaviors in Nonmarital Conception Outcomes of Nonmetro Women: Comments on Albrecht and Albrecht". *Rural Sociology, 71*, 155-163.

Snyder, Anastasia R., Brown, Susan L., & Condo, Erin P. (2004) "Residential Difference in Family Formation: The Significance of Cohabitation". *Rural Sociology, 69,* 235-260.

Sollors, Werner. (1997). *Neither Black not White yet Both: Thematic Explorations of Interracial Literature*. New York City: Oxford University Press.

Spraggins, Renee E. (2000). "We the People: Women and Men in the United States." *Census 2000 Special Reports*. U.S. Department of Commerce.

Staples, Robert. (2006). *Exploring Black Sexuality*. Lanham, MD: Rowman & Littlefield Publishers, Inc.

Steensland, Brian, Park, Jerry Z., Regnerus, Mark D., Robinson, Lynn D., Wilcox, W. Bradford, Woodberry, Robert D. (2000). The Measure of American Religions: Toward Improving the State of the Art". *Social Forces, 79*, 291-318.

St. Jean, Y., & Parker, R. E. (1995). Disapproval of Interracial Unions: The Case of Black Females. *American families: Issues in race and ethnicity,* ed Jacobson, Cardell K. New York: Garland.

Suro, Robert. (1999). "Mixed Doubles". *American Demographics, 21*, 56-62.

Tucker, M. Belinda & Mitchell-Kernan, Claudia. "New Trends in Black American Interracial Marriage: The Social Structural Context". *Journal of Marriage and the Family, 52,* 209-218.

Walster, E., Walster, G.W., & Berscheid, E. (1978). *Equity: Theory and research*. Boston: Allyn and Bacon.

Williams, Linda Faye. (2003). *The Constraint of Race*. The Pennsylvania State University Press, University Park, PA.

Wright, Richard, Houston, Serin, Ellis, Mark, Holloway, Steven, & Hudson, Margaret. (2003). "Crossing Racial Lines: Geographies of Mixed-race Partnering and Multiraciality in the United States". *Progress in Human Geography, 27*, 457-474.

World Fact Book. (2007). Central Intelligence Agency. Accessed April 2007.

Wu, L.L., Bumpass, L.L., & Musik, K. (2001). "Historical and Life Course Trajectories of Nonmarital Childbearing". Out of Wedlock: Causes and Consequences of Nonmarital Fertility, eds. Wu, L.L. & Wolfe, B. New York: Russell Sage Foundation

U.S. Bureau of the Census, special tabulation. (2000a). "Hispanic Origin and Race of Wife and Husband in Married Households for the United States: 2000". Accessed 3/3/2008. http://www.Census.gov/population/cen2000/phc-t19/tab01.pdf

U.S. Bureau of the Census, special tabulation. (2000b). "Hispanic Origin and Race of Opposite-Sex Unmarried-Partner Households for the United States: 2000". Accessed 3/3/2008. http://www.Census.gov/population/cen2000/phc-t19/tab02.pdf

U.S. Bureau of the Census. (2003). "Interracial Married Couples: 1980 to 2002". Annual Social and Economic Supplement: 2003 Current Population Survey. Accessed 2/17/2008. www.Census.gov/population/socdemo/hh-fam/tabMS-3.pdf.