MARRIAGE PATTERNS OF UNDOCUMENTED MALE AND FEMALE MEXICAN IMMIGRANTS IN THE UNITED STATES 2008-2012

A Dissertation

by

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ABSTRACT

My dissertation focuses on the marriage patterns of undocumented Mexican immigrants in the U.S. I infer which married Mexicans are undocumented in the 2012 American Community Survey 5 year (2008-2012) population estimates and use the mate selection, self-disclosure, and assimilation literatures as the foundations for my main hypothesis expecting endogamy among undocumented Mexicans. That is, I expect the majority of undocumented Mexicans to be married to one another. My analysis shows that my hypothesis is supported in both the data for the males and females. Furthermore, there are two main objectives in my dissertation. First, I identify and provide statistics for the main marriage paths taken by undocumented Mexican men and women. Then, I examine the effects of race, time living in the U.S., and English proficiency on these main marriage paths by estimating multinomial logistic regression models. I find that English proficiency may be the best predictor of the type of spouse an undocumented Mexican is likely to have. English proficiency increases the likelihood that a respondent is married to a non-Hispanic white, versus an undocumented Mexican the most. Both race and years lived in the U.S. produce inconsistent results in terms of direction and statistical significance. My research suggest that having an undocumented status affects many aspects of people's lives, including their intimate life.

DEDICATION

For my mother, Reyna Elizabeth Cruz

And father, Alfredo Ruben Cruz

For all your hard work, sacrifice, support and love.

Para mi madre, Reyna Elizabeth Cruz

Y padre, Alfredo Ruben Cruz

Por todos su trabajo, sacrificio, apoyo y amor.

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CHAPTER I

INTRODUCTION

The United States is the most popular country of destination for foreign-born persons of any country in the world. For many decades, the topic of undocumented migration has been one of great importance in the United States (Donato et. al. 2011). An undocumented immigrant is 1) someone who "avoided inspection by crossing borders clandestinely or…traveled with fraudulent documents, e.g., a falsified visa or counterfeit passport," or 2) a person who migrated with a temporary visa and overstayed the time limit of their visa (Armbrister 2003: 512). Immigrants in the former category are referred to as EWIs, since they entered the country without inspection or used fake documents at checkpoints, while immigrants in the latter category are referred to as visa overstayers. It is estimated that in 2012, visa overstayers comprised a little over 50% of the undocumented population in the U.S. (Warren and Kerwin 2015). Visa overstayers tend to be more diverse than EWIs; they come from various countries whereas EWIs in the U.S. mainly come from Mexico (Brown and Bean 2005).

Recent estimates from the Pew Research Center show that in 2014 there were 11.3 million undocumented immigrants in the U.S., accounting for 3.5% of the total U.S. population (Krogstad and Passel 2015). For many decades, the undocumented population in the U.S. steadily increased until it peaked at 12.2 million in 2007. Since then, the undocumented population has declined slightly and stabilized. Moreover, out of the all the undocumented migrants in the U.S., immigrants from Mexico are the largest

group. They account for about half (49%) of the undocumented population. In 2014, there were 5.6 million undocumented Mexicans residing in the U.S., a slight decline from the 6.9 million in the 2007 peak year. Most undocumented immigrants (60%) reside in California, Texas, Florida, New York, New Jersey and Illinois. Moreover, undocumented Mexicans make up 75% or more of the undocumented population in New Mexico (89%), Arizona (84%), Idaho (83%), Wyoming (82%), Colorado (78%), Oklahoma (76%), Wisconsin (76%), Kansas (75%), Oregon (75%), and Texas (75%) (Gonzalez-Barrera and Krogstad 2015).

Current research also shows that undocumented immigrants to the U.S. are now more diverse than ever before (Donato et. al. 2011). There is considerable heterogeneity among undocumented immigrants based on gender, age, and method of entry; undocumented migrants are now not only single men, but also many women and children, and they face more risks and costs of migration. Furthermore, while immigration from Mexico has usually been circulatory, that is, migrants would come to work in the U.S. when employers needed them and return home when the work season was over, the Immigration Reform and Control Act of 1986 and the passage of strict border enforcement policies such as "prevention through deterrence," have changed the migration patterns of Mexican immigrants (Massey et al. 2002). The increase in border enforcement has made it more difficult for undocumented immigrants to cross at popular points of entry without being apprehended. Therefore, many undocumented migrants now use alternate routes that avoid checkpoints and the Border Patrol. These alternate

routes force migrants to cross through more dangerous terrain and expose them to more risks.

Recent research shows that the militarization of the border actually backfired since it changed the circular migration flow from Mexico into permanent settled populations and increased the rate of undocumented population growth in the U.S. (Massey et. al. 2016). Currently, many families in the U.S. are comprised of family members with different immigration statuses. Passel and Cohn (2010) find that approximately 4 million U.S. citizen children have at least one parent who is undocumented, a number that almost doubled in the 2000 to 2009 period. Additionally, they estimate that there are approximately 1 million undocumented children living in the U.S.

The issue of undocumented immigrants and families in the U.S. has also been a heavily debated topic in the political arena. In the summer of 2012, President Obama executed a program known as Deferred Action for Childhood Arrivals (DACA). This program provides those who qualify a deportation deferment for two years. DACA recipients are also allowed to apply for a 2-year work permit, and in some states, are eligible to apply for a driver's license. However, DACA recipients are still considered to be undocumented, because DACA does not provide lawful presence in the U.S. (Department of Homeland Security 2016). In November of 2014, President Obama proposed to expand DACA to a larger number of undocumented immigrants and to also extend the program to 3 years instead of 2. Additionally, he proposed a new program, Deferred Action for Parental Accountability (DAPA), which would grant deferred action

to parents of U.S. citizens or permanent residents who have lived in the U.S. continuously since January 1, 2010 (Department of Homeland Security 2015).

About 1.8 million persons were estimated to qualify for the new, extended DACA program, and 3.5 million persons for the DAPA program (Krogstad and Passel 2014). Together, both programs would have provided relief to 5.3 million undocumented immigrants, about half of the undocumented population currently living in the U.S. However, these programs were never executed because a federal court order issued on February 16, 2015, suspended the expansion of DACA and implementation of DAPA (Department of Homeland Security 2015). The Supreme Court decision on this case is currently pending.

Given these changes in immigration policies and immigration flows, not to mention the anti-immigrant discourse spread by many presidential candidates in the media, the study of families with undocumented members is very important and relevant in today's society. My research in this dissertation will focus on the marriage patterns of undocumented male and female Mexican immigrants in the U.S. I will use American Community Survey (ACS) data for the five years from 2008 to 2012. Currently, there is no demographic and quantitative research on this specific topic. There is some research on the dating lives of undocumented immigrants in the U.S. (Pila 2014), and their family formation experiences (Enriquez 2016), but it is qualitative and focuses only on undocumented young adults. Moreover, there is research on the marriage patterns of Mexican immigrants in the U.S. (Qian et. al. 2012), but research that specifically focuses on the marriage patterns of undocumented Mexicans is lacking. My research thus aims

to fill this void and also provide demographic information not currently available about a population that is little studied demographically and sociologically. My findings will not only shed light on the marriages of undocumented Mexican males and females but also on marriages in the U.S. in general, since undocumented Mexicans marry all kinds of people.

I hold that it is very important and meaningful to undertake research on marriages where at least one partner is undocumented because "all family members, regardless of their immigration status, are impacted by various immigration-related laws and policies that sanction undocumented immigrants by imposing deportation threats, an inability to legally obtain employment, an inability to obtain a state-issued driver's license or identification card, and limited pathways to legalization" (Enriquez 2016). For example, research has shown that a parent's undocumented status can have negative consequences on their children's development, regardless of their children's immigration status. Yoshikawa argues "that the simple fact of coming without legal papers shapes the everyday interactions of young parents with institutions and organizations, as well as their housing, jobs, and households, even when their children are U.S. citizens, with all the rights that status implies" (Yoshikawa 2011:2). His research shows that an undocumented parent's immigration status tends to affect their children's cognitive and language skills starting at age 2 or 3, and that despite their survival strategies to provide a better life for their children, their immigration status represents a risk to their children's development. Furthermore, Yoshikawa (2011) writes that ignoring these children has costs for society because they "predict the future productivity and success

of the nation" (Yoshikawa 2011:3). I thus argue that undocumented marriages have important implications for U.S. society.

The perspectives and theories that guide this research are not only based on the literatures of sociology and demography, but also on my personal experiences as an undocumented individual and the dating and marriage patterns I have observed growing up surrounded by undocumented family members and friends. In my community, it was assumed that undocumented individuals would likely gain benefits from marrying a U.S. citizen or permanent resident. Most importantly, they had the possibility to use the documented status of their partners to apply for legal permanent residency and later, U.S. citizenship. However, many did not know that, contrary to popular belief, marrying a citizen does not give undocumented spouses automatic legalization (Schueths 2012). Nevertheless, while I did witness some of my undocumented friends marrying citizens for legalization purposes, many more of my friends and relatives, including all my undocumented family members in the U.S., married people who themselves were also undocumented. Thus, when I was searching for a dissertation topic, I decided to study undocumented marriages because I wanted to know if my personal observations were exceptions, or if they reflected the general behaviors of the larger undocumented population. I was puzzled by the fact that my cousins married partners who were also undocumented as opposed to citizens who would have allowed them to legalize their status. However, when I began dating in high school and especially in college, I realized how much my status tends to affect many aspects of my life, including my dating preferences, since it has an influence on my identity and views of the world. I turn now

to some of the general questions and hypotheses that will guide my research in this dissertation.

I hypothesize that the majority of undocumented Mexican immigrants in my sample will marry one another for a number of reasons that can be categorized under internal or external explanations. For example, I believe a person's undocumented status affects their romantic life externally, because I hypothesize that an undocumented status affects the marriage pool that is accessible to undocumented immigrants. Menjivar (2006) writes that "immigrants' legal status shapes who they are, how they relate to others, their participation in local communities, and their continued relationship with their homelands" (Menjivar 2006: 1000). Being undocumented tends to limit peoples' ability to enter certain institutions in society and therefore, their ability to interact with certain individuals who could be their potential partners.

Their undocumented status also tends to affect their romantic life for internal psychological reasons. Undocumented status is stigmatized in today's society, especially for Mexican immigrants who are often scapegoated by anti-immigrant sentiments in the media. I suspect that one of the factors that influences who undocumented people date and later marry is their perception of how accepting (or not accepting) their partner will be after they disclose their undocumented status. For example, undocumented people may be more likely to share their status with persons whom they know to be pro-immigrant or liberal than with persons known to be conservative or anti-immigrant. Furthermore, I expect that undocumented people are more likely to marry one another because they will feel more comfortable opening up and revealing their status to

someone who is also undocumented, or is likely to be undocumented, and who may be more understanding or supportive of their status. Also, they may have more in common with another undocumented person, and may share similar struggles living in the U.S. without papers.

For these reasons and others which I will cover in Chapter II, I hypothesize that being undocumented has an impact on whom undocumented people marry. Specifically, I hypothesize that the majority of the undocumented males and females in my sample will have spouses who are also undocumented. In Chapter II, I review and discuss the basic literature that supports my hypotheses. I will take into consideration the mate selection literature, assimilation literature self-disclosure literature and interracial marriage literature.

In Chapter III, I will describe the data and methods I will use in my dissertation. I use data from the 2008 through 2012 American Community Surveys. Since the ACS does not ask respondents whether they are undocumented, I will infer undocumented status with a methodology developed by demographers and which infers the likelihood of a person being undocumented based on several personal and institutional characteristics. I will discuss this methodology in detail in Chapter III. Also, in Chapter III, I will present an analysis of the quality of the data.

In Chapter IV I will present the results from the first part of my statistical analysis. I will present descriptive statistics for my variables, and I will describe the principal marriage paths that undocumented Mexican men and women may take, namely, 1) marriage with an undocumented Mexican; 2) marriage with a documented

Mexican born in Mexico; 3) marriage with a documented Mexican born in the U.S. (a U.S. citizen); 4) marriage with a non-Mexican Hispanic who is undocumented; 5) marriage with a non-Mexican Hispanic who is documented; and 6) marriage with a non-Hispanic White.

In Chapter V, I will estimate multinomial logistic regression equations separately for the men and women in my sample. I will examine the effects of race, time living in the U.S., and English proficiency on the main marriage paths I describe in Chapter IV. I expect that time living in the U.S. and English proficiency will be positively related to having a documented partner. I believe respondents who are more proficient in English and who have lived in the U.S. longer, are more likely to have a documented spouse than those who are not very good English speakers or who have not lived in the U.S. very long. Also, I will investigate the effects of race on the different marriage paths. Specifically, I am interested in examining the effects of identifying as White only on the different marriage paths.

Finally, Chapter VI will contain a summary of my findings and their contribution to the existing literature on marriages of Mexican immigrants. Furthermore, I will discuss the implications of my findings and future research that hopefully will expand our understanding of the marriage patterns of undocumented Mexicans.

CHAPTER II

LITERATURE REVIEW

In this literature review I will provide an overview of prior research related to the marriage patterns of undocumented Mexican immigrants in the U.S. This chapter is divided into three main sections, focusing on the following topics: mate selection, intermarriage as a form of immigrant assimilation, and self-disclosure in personal relationships.

Mate Selection

The literature on mate selection suggests that there are several factors that influence whom people choose as mates. Human mating theories are usually be classified into two main categories: one emphasizes mating behavior as strategic and motivated by goals, and the other perceives mating behavior as a result of forces outside of an individual's choice (Buss and Schmitt 1993).

Some examples of human mating theories in the former category, i.e., the one that emphasize the conscious or unconscious choice-making strategies made by individuals, include Freud and Jung's theory, which suggests that individuals look for partners that share similar characteristics as their opposite-sex parent (Eckland 1968). Another theory in this category suggests that people seek partners who will complement them; they search for partners who have characteristics they themselves lack (Winch 1958). However, much more research suggests that people look for mates who share similar characteristics (Thiessen and Gregg 1980), or who have resources of equal value

(Berscheid and Walster 1974). Another theory that falls under this category is the Ideal Standard Model (Overall, et al. 2006). This theory postulates that people have certain standards or ideal preferences that are used as measures when choosing partners. People continue to use these standards throughout their relationships to evaluate their partners. If, however, their partners fail to meet these standards, and do not change, people may be motivated to leave their partner and the relationships. All these theories have one thing in common: they all emphasize that people make choices when picking their partners.

Theories that do not fall under this category, on the other hand, state that forces outside of an individual's choice influence their mate selection (Buss and Schmitt 1993). This category includes sociological and propinquity theories. These theories suggest that people are likely to start relationships with people with whom they frequently come into contact. For example, research has shown that the distance between two people is a strong predictor of whether a relationship will develop (Eckland 1968). However, one of the most important principles relevant to this research is homophily, that is, "the principle that contact between similar people occurs at a higher rate than among dissimilar people" (McPherson et al. 2001:416). The principle of homophily is often used to explain marriage patterns in the U.S. and many other places in the world. Many people all over the world tend to marry others who are similar to them in terms of social class, occupation, and educational attainment (McPherson et al. 2001).

It is important to note that researchers have distinguished between different types of homophily. According to Lazarsfeld and Merton (1954), there are two kinds: status homophily and value homophily. Status homophily refers to contact between similar

people based on ascribed, informal or formal statuses, while value homophily is contact between similar people based on similar values, attitudes and beliefs (McPherson, et al. 2001). The former includes demographic characteristics people are born with and that are often used to stratify individuals in a society; examples are age and sex, and race and ethnicity. Status homophily is also based on characteristics that can be attained or acquired such as educational attainment or occupational status.

Value homophily, on the other hand, deals with internal states that can help predict one's future behavior since it deals with values, attitudes and beliefs. First, I will describe status homophily in more detail, and then I will move on to a discussion of value homophily since the latter is sometimes influenced by the former (McPherson, et al. 2001).

I will start with homophily based on race and ethnicity. In the United States, race and ethnicity are considered by many to be the characteristic that most divides people and their social networks (McPherson et al. 2001). Research shows that people are more likely to know people of the same race or ethnicity than otherwise (Lawrence 2000). More importantly for this dissertation, there is strong evidence of race and ethnic homophily in various types of relationships including friendships in school (Marsden 1988), friendships at work (Ibarra 1995), and in the most intimate type of relationship, namely, marriages (Kalmijn 1998). Following this evidence, I predict that my data will show that most undocumented Mexican immigrants will be marrying one another. That is, I predict there will be endogamy not only based on ethnicity, but also on nationality and on immigration status.

Furthermore, I am also interested in seeing the effect that race, white versus non-white, will have on the marriage patterns of undocumented Mexican males and females. Julie Dowling's work (2014) suggests race does not accurately capture the identity of Mexican and Mexican Americans as a group in the U.S. She conducted 86 in-depth interviews with Mexicans and Mexican Americans in two border towns in Texas and in a city in the Dallas/Fort Worth area. While she found that many Mexican Americans may identify racially as white, especially those who live near the U.S./Mexico border, she discovered they still experienced racism and discrimination and often times do not phenotypically look white. Dowling hypothesized that Mexican Americans who identify as such do so to distance themselves from first generation immigrants to avoid racism and discrimination. Given her findings, I predict that many of the undocumented Mexican males and females in my sample may identify racially as white. But whether race is statistically significant in predicting and influencing their marriage patterns in real life remains to be examined. To portray how race plays a role in marriage patterns in the U.S., I will present current trends of intermarriage for the major race and ethnic groups in the next subsection.

Besides race and ethnicity, studies in close relationships show that homophily in age may well be stronger than any other characteristic (McPherson et al. 2001). However, it is oftentimes taken for granted in marriage research and frequently ignored. Nevertheless, it is important to note that age homogamy strongly exists in marriage. Hence in this dissertation, I will use age as a control variable in my multinomial regression equations.

Another characteristic where homophily exists in intimate relationships is religion. Although it is not as strong as race and ethnicity and age, religious homogamy is still evident in marriage, friendships, and confiding relations (McPherson et al. 2001). Religion can frequently play an important role in marriage selection, especially among people who practice religions that require higher church involvement or that are more traditional in doctrine. Research shows that people with those types of religions are more likely to be in religious endogamous relationships (Kalmijn 1998). Regarding Mexican Americans specifically, an early study of Mexican American intermarriage of southwest Texas showed that endogamy between Spanish surname couples was mostly seen in Catholic ceremonies (Murguia 1982) However, data gathered in the past decades have shown that religious homogamy is decreasing in the U.S. (Kalmijn 1998). Therefore, I am not using religion as a variable in in this dissertation.

Up to now, I have described status homophily based largely on ascribed status, that is, statuses that are for the most part inherited from one's family. The next type of status homophily I describe is for the most part achieved. These include variables such as education, occupation, and social class. Research has shown that there is significant homophily on these achieved characteristics (Kalmijn 1998, McPherson et al. 2001). Research specifically has shown that people marry within their socioeconomic group rather than with someone outside their group. Moreover, groups vary in the degree to which they are closed or open to outsiders (Kalmijn 1998). Socioeconomic groups that are at the very top and bottom of the socioeconomic hierarchy seem to be more closed than those in the middle. Therefore, there may be less endogamy in the middle class than

in the high and low socioeconomic classes. However, this finding may be affected by the role of opportunity, since those at the very bottom have to marry those in a higher socioeconomic position if they marry outside their group, and those at the very top can only choose those in lower groups (Kalmijn 1998).

Regarding undocumented Mexicans in the United States, it is well known that they are at the lowest end of the socioeconomic hierarchy. Research has shown that their undocumented status and other limitations help keep them in low-wage, dead-end jobs (Hall et al. 2012). According to Douglas and Saenz (2008), Mexican immigrants are at the "bottom rungs" of the labor force, providing cheap labor and often doing work that the average Americans refuse to do, work often described as the "three D's," namely, dirty, dangerous and demeaning. Their limited income and low socioeconomic status are likely to affect the people to whom they have access or with whom they come into contact, and may feel comfortable dating. As I mentioned previously, people are likely to marry within their own socioeconomic class, especially if they have a very low status. Thus it is likely that undocumented Mexican immigrants are marrying others who are also undocumented or who are poor regardless of their race, ethnicity or immigration status.

Furthermore, undocumented immigrants are likely to live in poor, segregated communities which will also tend to affect the marriage market to which they are exposed. According to Oropesa and colleagues (1994), residential segregation is related to an increase in marriages among Mexican Americans. Research also suggests that residential proximity and similarities in culture, language and physical traits, not only

facilitate marriages between Mexicans, but also between Mexicans of different generations (Qian et al. 2012). Furthermore, since undocumented immigrants may not be allowed to rent apartments or to buy homes in certain neighborhoods due to anti-immigrant housing legislation, they may live in even more segregated communities than other minorities. While not much research has been conducted that focuses on how undocumented status influences residential segregation, Hall and Stringfield (2014) have written that the fear of being identified as undocumented and the difficulties related to acquiring housing may lead undocumented immigrants to remain in segregated ethnic communities. Doing so allows them some protection, because they are able to hide in the shadows of their documented peers and facilitates their ability to use their social networks.

Besides social class homogamy, research has shown strong evidence of educational homogamy in marriage in the United States and in many other countries in the world (Kalmijn 1998). Education works in a similar way as social class; it is less likely for marriage to occur between people who are dissimilar educationally. According to marriage research in the United States, the strongest boundary in education is between those who are college graduates and those who are not (Kalmijn 1991). This finding contributes to the idea that colleges serve as marriage markets for young adults (McPherson et al. 2001). Furthermore, sometimes colleges are physically separated from areas where less educated people live, making it even easier for homogamy to exist among person attending college (Kalmijn 1998).

Undocumented immigrants in the U.S., however, rarely attend college. Research has shown that in the U.S., Mexicans have the least educational attainment when compared to other racial and ethnic groups; specifically, research shows that only half of foreign-born Mexicans have a high school diploma (Ramirez and Cruz 2003). Hence, while there still may be educational homogamy among undocumented Mexican immigrants, colleges may not be where most of them meet their spouses. This is so because even those who migrated to the U.S. at a young age will likely face many obstacles when trying to get a higher education due to stringent immigration policies and financial aid limitations (Diaz-Strong et al. 2011).

Besides social class and education, patterns of occupational homogamy are also evident in marriages in many societies (McPherson et al. 2001). Patterns of occupational homogamy are usually divided between the blue-collar and white-collar occupations. However, researchers have suggested that homogamy exists more along the cultural status of peoples' occupations rather than among the economic status of their occupations, suggesting that cultural, rather than economic similarity is more important (Kalmijn 1994).

The labor characteristics of undocumented immigrants are important to note when researching their marriage patterns because they are mostly labor migrants (De Genova 2002). Labor force data show that the labor force participation rate of undocumented men is 96 percent, a rate that far exceeds that of males in the general population (Passel et al. 2004). Undocumented women, on the other hand, tend to have a somewhat lower labor force participation rate, 62 percent (Passel et al. 2004). While

undocumented Mexican immigrants may hold many different types of jobs, according to Douglas and Saenz (2008) there are certain occupations in the U.S. that are likely to be held by Mexican immigrants. For men, these include occupations such as cooks, waiters, dishwashers, janitors, agricultural workers, carpenters, construction laborers, roofers, meat processing workers, welders, metal workers, and hand packers, among other jobs. For women, some of the occupations are the same with a few exceptions. They include the following: cooks, janitors, maids and housekeeping cleaners, personal and home care aides, agriculture workers, electronics assemblers, meat processing workers, metal workers, laundry and dry-cleaning workers and hand packers, among other occupations.

Investigating the occupations of undocumented Mexicans is especially important because research has shown that the workplace provides a social context where people can meet their spouse (Oropesa et al. 1994). Kalmijn (1998) has written that "unmarried people do not just wander around a region looking for a spouse; they spend most of their life in small and functional places, such as neighborhoods, schools, workplaces, bars and clubs" (Kalmijn 1998:403). Kalmijn has shown that the sociological literature focuses most frequently on the school, the neighborhood, and the workplace. Thus, from the previous paragraph, we see that some men and women may be meeting their spouses at work. However, some undocumented immigrants may also work in sex-segregated workplaces. For example, Douglas and Saenz's (2008) work, described in the previous paragraph, suggests that men may be more likely than women to work as construction laborers, while women may be more likely than men to work as housekeepers. Therefore, the extent to which the workplace provides dating options for heterosexual

undocumented immigrants who work in sex-segregated jobs, needs also to be examined. Nevertheless, the workplace may still be a key institution where single undocumented immigrants find their spouses.

Up to now I have discussed status homophily, that is, homopily based mostly on demographic characteristics that are often used to stratify people in society, such as race and ethnicity, age, religion education, social class and occupation. Now I will describe a different type of homophily, namely, value homophily, which is based on having similar values, attitudes and beliefs. Experimental research in social psychology has shown that people who have similar values, attitudes and beliefs are more likely to be attracted to one another and more likely to interact with one another (Huston and Levinger 1978). Research has shown that homophily based on intelligence was one of the first characteristics to be observed (Almack 1922). Futhermore, research has also shown that adults are likely to associate with people who share their political orientations (Huckfedlt and Sprague 1995). This is particularly important when focusing on the undocumented population, since opinions of undocumented migration are closely intertwined with political affiliations or political beliefs. In a later section, I will describe in more detail how having an undocumented status can affect who undocumented immigrants feel comfortable opening up to because of their stigmatized status, and how this in turn may affect their dating life and marriage pool.

Kalmijn (1998) has explained why there is large support for value homophily and homogamy. He has written the following: “Similarity of values and opinions leads to mutual confirmation of each other’s behavior and worldviews, similarity of taste is

attractive because it enlarges opportunities to participate in joint activities, and similarity of knowledge creates a common basis for conversation, which enhances mutual understanding" (Kalmijn 1998: 399). He continues by arguing that since cultural likeness leads to personal attraction, cultural similarity is a prerequisite for relationships to develop. Furthermore, he has noted that since cultural similarity is so influential, it tends to encourage individuals to maintain lasting relationships with others who share their culture. Also, because marriage consists of making joint decisions, such as deciding what home to buy, how to raise children, and how to spend family time, differences in opinions, ideas, and preferences could well prompt disagreements between the couples. Kalmijn has written that "people prefer to marry someone who has similar cultural resources because this enables them to develop a common life-style in marriage that produces social confirmation and affection" (Kalmijn 1998:400). Thus, in this dissertation, I will hypothesize that not only are undocumented Mexicans likely to marry one another, but they will also be likely to marry other Mexicans and even other Hispanics regardless of their immigration status, largely because they share a similar culture which is likely to include language, religion, traditions, and even opinions of family gender roles and childrearing.

Also, since people are more likely to interact with those with similar values, attitudes, and beliefs, they are not only likely to start relationships with these people but through interactions and networks with these people. According to the marriage selection literature, many people are likely to meet their significant others through their social networks: through family, friends, or the people they know (Knobloch and Dovan-

Kicken 2006). Therefore, many undocumented Mexican immigrants may be meeting their spouses through their social networks, especially if they remain closely tied to their communities which, as I have previously mentioned, is very likely, since doing so may provide a protective space for them to live. Also, the perceived support of close social networks such as those of friends and family should be related to a person's involvement in a romantic relationship (Parks et al. 1983). That is, people take into consideration how their friends and family are likely to react if they date or marry certain individuals. This is important to note, especially since some researchers believe that familism is evident among Latino communities and is a fundamental part of their family life (Mendez-Luck et al. 2016). Familism can be described as "a multidimensional construct composed of core values such as strong family identification, attachment, mutual support, family obligation, and familial interconnectedness" (Mendez-Luck et al. 2016:813). Therefore, the opinions of family members may well play a major part in the marriage selection of many Latinos and especially among undocumented Mexican immigrants who may have even closer ties to their family. For example, undocumented Mexicans may rely on family members who are citizens or residents for certain resources or favors; hence they may feel even more obligated to take their family's opinions of their romantic life into consideration when dating and choosing their spouse.

Intermarriage as Assimilation

On June 12, 1967, the Supreme Court ruled that states could not prevent interracial marriages (Wang 2015). Since then, rates of intermarriage in the U.S. have increased. According to the Pew Research Center, 12% of new marriages in 2013 were

interracial marriages, and among all current marriages, 6.3% were interracial (Wang 2015). Data show that some racial groups have higher rates of intermarriage than other groups. In 2013, 58% of American Indians, 28% of Asians, 19% of blacks, and 7% of whites were married to someone of a different race (Wang 2015). Taking ethnicity into consideration, in 2010, 26% of Hispanics, 28% of Asians, 17% of blacks, and 9% of whites married someone of a different race or ethnicity (Wang 2012). Rates of intermarriage also vary by gender. Black men are more likely than black women to intermarry, while Asian women are more likely than Asian men to intermarry (Wang 2015). White and Hispanics intermarriage rates, however, do not seem to vary by gender (Wang 2010). The rise of intermarriage in the U.S. may be related to changing social norms. In 2014, 37% of Americans believed intermarriage was a good thing for society, a rise from 24% four years prior (Wang 2015). In 2014, only 9% believed intermarriage was a bad thing for society, while 51% said it didn't make much difference.

Studying the rates of intermarriage for racial groups in the U.S. is important for various reasons. According to Gordon's assimilation theory, the final stage of assimilation for immigrants to the U.S. is marital assimilation (Gordon 1964). Gordon believed that intermarriage between minority groups and the majority (white) group, would lead to the full integration of minority groups into U.S. society. Marriage between different racial/ethnic groups is seen as the closest type of relationship because marriage is considered an intimate and sacred institution. It is not only bound by legal terms but also by blood, since it is within marriage that procreation and childrearing usually occur (Rosenfeld 2002). Thus, rates of intermarriage have been considered to be the most basic

measure of social distance between racial/ethnic groups (Gordon 1964). Similarly, Kalmijn writes that, "Because marriage is an intimate and often long-term relationship, intermarriage or heterogamy not only reveals the existence of interaction across group boundaries, it also shows that members of different groups accept each other as social equals" (Kalmijn 1998:396). Therefore, racial/ethnic intermarriage can measure how open or closed racial/ethnic groups are to outsiders.

Gordon's assimilation theory however, is believed by some researchers to only explain the assimilation of European immigrants in the U.S. and not necessarily the assimilation experience of all minority groups in America (Omi and Winant 1994). A more contemporary theory, often referred to as segmented assimilation theory, suggests that assimilation with whites is not the only way that assimilation can occur for minority groups in the U.S. (Portes and Rumbaut 1996). Portes and Rumbaut have written that Mexican Americans may also assimilate into the lower classes in the U.S. Regarding marriage, for example, since Mexicans may work, go to school with, or live near African Americans or other minorities, their proximity to them could well increase their chances of developing romantic partnerships with them, and thus affect their assimilation process (Portes and Rumbaut 1996).

Other researchers have also looked at alternative marriage assimilation possibilities. Qian and colleagues (2012) investigated the different ways Mexicans, Puerto Ricans, Filipinos, and Chinese integrate and assimilate into the U.S. by examining their marriage and cohabiting partners using data from the 2000 U.S. Census. Besides studying their marriages with non-Hispanic whites, they also examined

intergenerational marriages within the same minority group, panethnic marriages, and marriages with other minority groups. Their research yielded strong support for ethnic endogamy, that is, the practice of marrying within the same ethnicity, and to a lesser extent, panethnic endogamy, that is, the practice of marrying within a related ethnic group. Indeed, they found that most Mexicans were marrying other Mexicans and to a lesser extent other Hispanics. They also found that immigrant marriages with non-Hispanic whites tend to vary by ethnicity, nativity, age of arrival, and educational attainment (Qian et al. 2012).

Research focusing on immigrant assimilation through marriage has also been conducted among the different Hispanic immigrant groups in the U.S. Shin (2011) examined the marriage patterns of Mexicans, Cubans and Dominicans who either came to the United States as children (younger than age 18) or who were born in the U.S., by examining data from the 2005-2007 American Community Survey. His descriptive statistics show that there is much variation between the three groups. Only less than 1 percent of Cubans had limited English proficiency. On the other hand, more than one third Mexicans had limited English proficiency. Dominicans fell in between Cubans and Mexicans with about 24 percent of its members categorized as having limited English proficiency. Similarly, regarding educational attainment, more than 70 percent of Cubans had some college education or more, while about the same amount of Mexicans (60 percent) had a high school education or less. Dominicans fell in between those two groups. Regarding racial identification, the majority of Cubans (80 percent) identified as "white," while the majority of Dominicans (60 percent) identified as "some other race."

For Mexicans, about one half (49 percent) identified as "white" and the other half (47 percent) identified as "some other race." Dominicans were more likely than the other groups to identify as "Hispanic-black" (7 percent). Only 2 percent of Cubans identified as "Hispanic-black," and Mexicans were even less likely to identify as such (less than 1 percent). Lastly, in all three groups about 5 percent identified as being "mixed" race.

Shin's (2011) results of the endogamy and intermarriage rates for Mexican, Cuban, and Dominican men and women indicate that Mexicans have a higher rate of ethnic endogamy when compared to Cubans and Dominicans. Cubans were the most likely to marry non-Hispanic whites (about 30 percent), while Dominicans were the most likely to marry other (non-Dominican) Hispanics. Dominicans were also the most likely to marry non-Hispanic minorities. For each of the three groups, the rates between men and women were very similar.

Shin (2011) estimated multinomial logistic regression equations separately for males and females for each of the three groups. For example, for Mexican men, he estimated the log odds of them having a wife who is a: 1) non-Hispanic white; 2) non-Hispanic minority; and 3) non-Mexican Hispanic, compared to having a wife who is Mexican. Shin found that there are minimal differences between the male and female coefficients. Thus, he concluded that there were no gender differences among the different Hispanic groups and their different marriage paths. His results also show that U.S. born Mexicans were more likely to marry non-Hispanic whites than foreign-born Mexicans regardless of their age at arrival in the U.S. Mexicans and Cubans who spoke fluent English were more likely to marry whites than those who spoke limited English.

Shin writes that his results are consistent with the assimilation perspective, because they suggest "that linguistic assimilation promotes more intermarriage, because the social boundaries of immigrant-group members expand as they gain fluency in English, which can ease tensions with or prejudices from Anglos" (Shin 2011: 1394). Similarly, he finds that the education coefficient for Mexicans is significant and positive, that is, as their level of education increases, they are more likely to marry non-Hispanic whites. Cubans and Dominicans had similar patterns with respect to education and intermarriage. Regarding race, he finds that Mexicans who identified as "white" were not significantly different in their marriage behavior compared to those who identified as "some other race." "White" Dominicans were more likely to marry non-Hispanic whites. By contrast, race did not affect the marriage patterns of Cubans.

Finally, Shin (2011) finds that for Mexicans, contextual factors were all statistically significant. He finds support for the structural argument that the likelihood that Mexicans will marry one another is proportional to their group size; the larger the number of Mexicans in the Metropolitan Statistical Area, the more likely they are to marry one another. This finding was also evident in the famous 2008 study by Telles and Ortiz, who found that the likelihood that Mexicans in Los Angeles would marry other Hispanics was related to the proportion of Hispanics in their neighborhood (Telles and Ortiz 2008). Similarly, Shin (2011) supports a consistent finding in the demographic literature that underlines the effects of sex ratios on marriage behavior. He measures the sex ratio as the number of co-ethnic women (18 and over) divided by co-ethnic men and women in the same age group. His results indicate that an excess of co-ethnic women is

related to an increase in intermarriage among women but to a decrease in intermarriage among men.

Shin's (2011) study is important for my research for several reasons. First, his findings legitimize my plan to focus only on Mexicans as opposed to Hispanics in general. His data show that there are many differences among various Hispanic groups with regard to their group characteristics and their marriage behavior. Also, in this dissertation I use similar variables to those used by Shin, specifically, English proficiency, years in the U.S., and race. And as in Shin's study, I too predict that as English proficiency and time in the U.S. increases, undocumented Mexicans will be less likely to marry one another. Also, I investigate the effects of race on the marriage patterns of undocumented Mexicans. Shin found that race and time in the U.S. were not statistically significant for Mexicans in his regressions. However, he did find that Mexicans who were foreign-born were less likely to marry non-Hispanic whites. Also, he found that English proficiency was related to an increase in marriage with non-Hispanic whites.

Self-Disclosure: Undocumented Status as a Stigma

As I stated in the introduction, undocumented Mexican immigrants are consistently stigmatized in society and frequently scapegoated in the media. With so much anti-immigrant sentiment in today's society, coming out as an undocumented immigrant can be a very difficult and risky decision. Undocumented immigrants may feel embarrassed, ashamed, afraid, or may put themselves at risk of deportation by revealing their status. Undocumented immigrants do not always need to reveal their

status to the people they meet. But in an intimate relationship, concealing an undocumented status may be almost impossible, since it often affects many aspects of an individual's life.

Looking at the literature on self-disclosure in personal relationships (Green et al. 2006), I suspect that there are several psychological and tangible benefits that may be realized from disclosing undocumented status to a romantic partner if the partner responds positively. For example, if the partner is a legal resident or a U.S. citizen, he or she may use their legal status to obtain various benefits that their undocumented spouse cannot acquire. Undocumented spouses may even have a chance of legalizing their immigration status if their partner is a U.S. citizen. However, it is important to note that marrying a citizen does not give undocumented spouses automatic legalization (Schueths 2012). Also, partners who respond positively to the disclosure may promote feelings of self-worth in their undocumented spouse by accepting them for who they are, thus validating their identity regardless of their status. Having a supportive partner who will listen to the difficulties of living as an undocumented individual in the U.S. can help undocumented spouses make sense of their experiences and possibly reduce the emotional impact of being undocumented. Thus, the self-disclosure literature suggests that disclosing a stigmatized status, such as an undocumented status, with a romantic partner who responds positively to the disclosure, can not only improve their spouse's mental health but also their overall wellbeing (Green et al. 2006).

On other hand, the literature on self-disclosure also suggests that there can be several dangerous consequences from disclosing an undocumented status to a partner if

the partner responds negatively (Green et al. 2006). Partners may reject their undocumented partner, or they may not be helpful or understanding about their situation, especially if they themselves are not undocumented, and if they do not know anyone who is undocumented, or if they are unfamiliar with the issues undocumented people face in the U.S. and the reasons why undocumented immigration to the U.S. exists. Disclosure could even lead to a controlling, unequal, or abusive relationship, since the disclosure recipient would possess important information that could be used to hurt their partner. Specifically, an undocumented spouse may lose his or her privacy and even be at risk of deportation. Also, partners who are U.S. citizens may doubt the true intentions of their undocumented spouse; they may believe they are being used by their spouse to gain legalization. Therefore, undocumented people must think carefully about some of these issues and possibilities before they disclose their status to their partner. As I mentioned in the introduction, I believe they must assess how accepting (or not accepting) their partner will be if they disclose their undocumented status. I suspect that they are more likely to disclose their status to people they believe may have pro-immigrant or liberal beliefs than to those who they suspect are anti-immigrant. Similarly, they may feel more comfortable disclosing their status to others who they suspect are also undocumented or who they believe may be understanding and supportive of their status.

Conclusion

According to Kalmijn (1998), marriage patterns are affected by various social forces. He writes that there are three main variables that together influence marriage

patterns. According to Kalmijn, these are as follows: "the preferences of individuals for certain characteristics in a spouse, the influence of the social group of which they are members, and the constraints of the marriage market in which they are searching for a spouse" (Kalmijn 1998:398). In this chapter, I have reviewed the marriage literature that focuses on those three factors and many others that play a role in the marriage patterns in the U.S. I mainly focused my attention on the characteristics of the undocumented Mexican population in the U.S. and how and whether those characteristics might affect their marriage behavior.

Taking into consideration not only the self-disclosure literature, but also the assimilation literature and mate selection literature just reviewed, I believe there will be large support for endogamy among undocumented Mexicans. That is, I expect the vast majority of undocumented Mexicans to marry one another. To a lesser extent, I expect undocumented immigrants to marry documented Mexicans, followed by other Hispanics. I expect them to marry non-Hispanic Whites and non-Hispanic minorities to a lesser extent.

I also expect that the likelihood that undocumented Mexicans have undocumented Mexican spouses will decrease as their English proficiency increases. Furthermore, I expect that the likelihood that an undocumented Mexican has an undocumented Mexican spouse will decrease as time living in the U.S. increases. Finally, I am interested in examining if race, specifically identified as White only or not White only, will have an effect on the marriage patterns of undocumented Mexicans.

In general, I believe that undocumented Mexicans who have better chances of assimilating, whether it be via their English proficiency or the time spent in the U.S., will be less likely to be in endogamous marriages; that is, they will have better chances of marrying someone who is not a fellow undocumented Mexican. I am not sure exactly how race will influence these marriages. I suspect many Mexicans may not see themselves as "white" or "black" but simply identify as "Mexican." Thus, they may be forced to pick a race when answering the survey even though they do not necessarily identify on a daily basis as such. Therefore, I suspect that race may not play a major role in their marriage behavior.

CHAPTER III

DATA AND METHODS

This chapter describes the data and methods I will use in this dissertation to analyze the marriage patterns of undocumented male and female Mexican immigrants in the U.S. First, I describe my data source, the 2008-2012 American Community Survey 5-year population estimates. I discuss how these data were collected, what they are used for, and what is done to protect the identity of the respondents. I also discuss the limitations of using data from the American Community Survey. Then, I describe the method I used to infer which of the respondents are undocumented. I describe how I constructed my dependent variable, and I describe all the variables I use in detail. Then, I describe the quality of the data and discuss how missing, illegible, and inconsistent data are imputed in the ACS. Finally, I describe the statistical methods I will use to test my hypotheses and specify the hypotheses I will test.

American Community Survey

I will be using the 2012 American Community Survey (ACS) 5-year (2008-2012) population estimates. After the 2000 Census, the ACS replaced the "long" form questionnaire that a subset of the population had previously answered in the decennial Censuses. The ACS asks many demographic, housing, social, and economic questions. It not only asks basic questions about age, sex, race, and Hispanic origin, but also questions about housing characteristics. Furthermore, it is designed to gather reliable geographic data from households, not individuals. The ACS is considered to be timely,

reliable, and representative of the nation. It is a continuous survey that provides up-to-date information for states and local areas (United State Census Bureau 2016).

ACS data must be as accurate as possible; they are used by governments, educators, businesses, journalists, researchers, and many other people for many different purposes. For example, federal, state, and local governments use these data to evaluate the needs of the population. Thus, having quality data from the ACS is crucial, because they influence the decisions that affect many aspects of people's lives in the U.S. Therefore, each household that receives the ACS is responsible for responding in order for the ACS to accurately represent their community (United State Census Bureau 2016).

Every year about one in 38 households in the U.S. is invited to participate in the ACS. That is, every month about one in 480 households receive the ACS. Each household can only participate in the survey once every five years. Selected households are mailed the questionnaire which they fill out and mail back to the U.S. Census Bureau; some may also chose to complete the questionnaire online. The Census mails about 295,000 questionnaires each month. If the survey is not completed within a few weeks, the same households receive another paper survey in the mail. After about six weeks, the Census Bureau attempts to call those who have not yet returned the survey so to conduct the survey over the phone. If they are unsuccessful, the Census Bureau sends a representative to the address to conduct the survey in person. The Census will also send a representative to conduct interviews in group living quarters like dorms, prisons, or nursing homes. Finally, Census representatives look over the surveys that are returned

and contact households that returned surveys with missing data to try to fill in that information (United State Census Bureau 2016).

The U.S. Constitution gives the Census Bureau the authority to collect data via the Census under Title 13 of the U.S. Code, otherwise known as the "Census Act." Additionally, the U.S. courts have ruled that the Constitution does not limit the gathering of statistics only to the decennial census. Thus, the Census Bureau is allowed to conduct the ACS in addition to the Census. Furthermore, Congress gives the Census Bureau discretionary authority to choose the questions that are on the surveys. However, the questions on the census and the ACS reflect the statistics that are needed. For example, questions are asked that will help implement various federal programs. The Federal government uses these data to guide policy decisions including federal assistance which mainly comes in the form of grants. Furthermore, census and ACS data are made available to the public through online access tools. Researchers, such as myself, can use these data to investigate an array of topics (United State Census Bureau 2016).

Each Census Bureau employee must take the U.S. Census Bureau Oath of Nondisclosure. The oath states that employees "will not disclose any information contained in the schedules, lists, or statements obtained or prepared by the Census Bureau to any person or persons either during or after employment" (United State Census Bureau 2016:11). Employees who fail to maintain their oath of keeping ACS information confidential are subject to pay a fine of up to $250,000 and may even serve up to five years in jail. Furthermore, the Census Bureau takes additional measures to ensure the privacy of its respondents. Names, addresses and other identifying

information are deleted from the data files. The bureau uses statistical methodologies to prevent releasing information that will help identify certain individuals. Furthermore, it does not ask for Social Security numbers, credit card or bank account information, information that is often used to steal a person's identity (United State Census Bureau 2016).

Limitations of Using the American Community Survey

The ACS and the Census do not ask respondents to identify their immigration status; they do not ask immigrant respondents if they are permanent residents of the U.S., or if they are in the U.S. lawfully. Therefore, for my dissertation, I must infer which foreign-born Mexicans are undocumented so as to be able to identify my target population. For my research, this is the biggest limitation of using the ACS. It would have been much easier to infer undocumented status if respondents were asked not only if they were citizens, which the ACS asks, but also if they were permanent residents, had a visa, or other immigration document allowing them to be in the U.S. lawfully. In the following subsection, I discuss my methodology for finding the undocumented Mexican respondents in the ACS 2008-2012 dataset.

First, I must mention another limitation of using the ACS. The questions that are on the ACS do not let me know where respondents met their spouses. This is crucial information because I am interested in researching how having an undocumented status in the U.S. affects people's marriage behavior. I do not know how many of the undocumented Mexicans met their spouses in the U.S. I suspect that some of the respondents could have met their spouses in Mexico before they migrated. Also, several

of these respondents may have migrated with their spouses to the U.S. If I could identify which respondents were married in Mexico or other countries besides the U.S., I would delete these respondents. Therefore, in an attempt to partially get around this liability, I restrict my sample to persons who married within the last year. This way, the chances that respondents met their spouses in the U.S. are much greater.

I must also note that ACS does not let me know the immigration status of the respondents when they met their spouses. So, even though I may identify respondents as undocumented at the time of the survey, I do not know their status when they met their spouses. This is another reason why limiting my sample to respondents who married within the last year is useful.

Lastly, it is important to note that all marriages in the ACS are between men and women. Therefore, I can only present research on heterosexual marriages. Furthermore, I restrict my sample to marriages where the spouse lives in the household. I cannot include data on marriages where the spouse is absent because I would not have data on the spouse since the ACS only collects data for the household members.

Inferring Undocumented Status

In order to study the target population, I must be able to infer which foreign-born Mexicans are undocumented. As I previously mentioned, this inference is necessary because the American Community Survey does not ask respondents to identify their immigration status. Hall and Stringfield (2014) have developed a methodology to infer which Mexican immigrants, of age 18 and up, are undocumented from the 2000 Census and 2006-2008 ACS. They based their analysis on the following criteria: 1) non-U.S.

citizenship; 2) migration during the 1990s or 2000s; 3) 12th grade education or lower; 4) not currently enrolled in school; and 5) not employed by the government.

After adjusting for a 15% undercount, this method has been shown to provide accurate measures of the undocumented Mexican population in the U.S. (Hall and Stringfield 2014). Using this method, Hall and Stringfield estimate that from 2006 to 2008, there were 5.52 million undocumented Mexicans in the U.S. Furthermore, they estimate that 52.9% of all adult Mexican immigrants living in the U.S. were undocumented. Hall and Stringfield find that their estimates are very close the estimates produced by Passel and Cohn (2009) on the undocumented population for 2008. Also, their state-level estimates of the undocumented Mexican population correlate highly ($r = .97$) with the estimates produced by Warren and Warren (2013) and Kasarda and Johnson (2006) on the undocumented Hispanic population living in North Carolina (Hall and Stringfield 2014).

Other researchers have also indicated that undocumented Mexicans tend to be in certain types of jobs and cannot receive government benefits (Pew Research Center 2013). I acknowledge that the methods I described have been used to identify undocumented Mexicans, thus, these methods may not work as well to identify all types of Hispanics who are undocumented. Nevertheless, I take all of this information into consideration to infer which respondents and spouses in the 2008-2012 ACS are undocumented.

I use the following criteria to identify which respondents are most likely to be undocumented in my ACS sample: 1) non-U.S. citizenship; 2) 12th grade education or

less; 3) non-federal, non-state, or non-local government employee; 4) receiving no income from welfare or social security; and 5) not receiving Medicare or Medicaid. Respondents who do not fit all of the criteria will be considered documented.

I acknowledge that some undocumented immigrants, especially those who came to the U.S. at a young age, may have more than a high school degree. There may be some respondents who have taken classes at a community college or at a junior college that could be left out of this analysis. Therefore, I would like to be more flexible with the educational variable than previous researchers. So, I will also have two other datasets, one for males and one for females, which includes respondents who have 2 years of college education or less along with all of the other criteria I previously mentioned. I do not include respondents who have more than 2 years of college education, especially those who have a 4 year college degree or more, to avoid including international students who are in the U.S. on student visas.

Dependent Variable

My dependent variable will represent six main marriage paths among undocumented Mexicans. I chose these marriage paths after carefully reviewing the literature and the data and determining which paths were the most common. The main marriage paths are: 1) marriage with an undocumented Mexican; 2) marriage with a documented Mexican born in Mexico; 3) marriage with a documented Mexican born in the U.S. (a U.S. citizen); 4) marriage with a non-Mexican Hispanic who is undocumented; 5) marriage with a non-Mexican Hispanic who is documented ; and 6) marriage with a non-Hispanic White. In Chapter IV, I will show how many respondents

fall under each of these main marriage paths. I also present all the other respondents who do not fall under these 6 paths and describe the characteristics of their spouses. The multinomial regression models that I will estimate, however, only include respondents who fall under these six marriage paths. The following paragraphs describe how I assign respondents to each path.

The American Community Survey links the information of the spouse to the respondent, so I identify undocumented spouses using the same criteria I use for the respondents. That is, respondents with spouses who are 18 and over, born in Mexico, are present in the household and have all the characteristics I outlined in the previous subsection, will be assigned a numerical value of 1, to represent the first marriage path, marriage with a fellow undocumented Mexican. As I previously mentioned, however, I want to be more lenient with the education variable, so I thus use the education variable in two different ways when inferring undocumented status. In one way, I identify undocumented status for both the respondent and the spouse by using the education variable like most researchers do, by setting the upper limit at a 12^{th} grade education or less. In the more lenient way, I identify undocumented status for both the respondent and the spouse by setting the upper limit of the education variable at 2 years of college or less. I will compare the differences I observe using these two methods in the following chapters.

The second marriage path contains undocumented Mexicans who have spouses who are 18 and over, born in Mexico, and who do not meet all the criteria to be categorized as undocumented. The third marriage path will be assigned to those married

to spouses who have all the characteristics of category two, that is, spouses who are documented Mexicans, but who are born in the U.S. and thus, are U.S. citizens. The fourth marriage path consists of people who are married to non-Mexican Hispanics who are undocumented, that is, spouses who meet all of the criteria I outlined to be considered undocumented but are of a Hispanic origin other than Mexican. Like the first marriage path, I use the education variable in two different ways when inferring undocumented status. In one method, I set the education upper limit at a 12^{th} grade education or less, and in the other method, I set it at 2 years of college or less. The fifth marriage path will be assigned to those with spouses who are non-Mexican Hispanics who are documented. Finally, the sixth category will be assigned to respondents who are married to non-Hispanic Whites.

Variables Used to Create the Dependent Variable

In this section, I describe the variables used to create the dependent variable which describes the six main marriage paths taken by undocumented respondents. As I mentioned earlier, I identify undocumented spouses using the same criteria I use for the respondents. Since the ACS links the information of the spouses to the respondents, I use the following variables to identify undocumented spouses: educational attainment of the spouses, Medicaid and Medicare use of the spouses, social security income of the spouses, welfare use of the spouses, type of the employment of the spouses, and citizenship status of the spouses. Furthermore, to identify the first and second marriage paths (i.e., marriage with spouses who were born in Mexico), I use the variable of the birthplace of the spouse. Similarly, I use that variable to identify the third marriage path,

marriage with spouses born in the U.S. I also use variables on the race and ethnicity of the spouse, to identify the rest of the marriage paths.

Citizenship of the Spouse

The "citizen_sp" variable represents the citizenship status of the respondent's spouse. This variable distinguishes between citizens and non-citizens. There are 4 possible answer categories: 0) N/A, which indicates that the respondent did not answer this question about their spouse because their spouse was not foreign born, 1) spouse born abroad of American parents, 2) spouse is a naturalized citizen, and 3) spouse is not a citizen. Respondents with undocumented spouses, must have reported that their spouse was not a citizen. However, it is important to note that the third category not only includes spouses who are undocumented, but also spouses who are Legal Permanent Residents or green card holders, visitors to the U.S, and other non-naturalized immigrants.

Education of the Spouse

The "educ_sp" variable represents the educational attainment of the respondent's spouse. It is measured as the highest year of schooling completed. Therefore, if someone indicated that their spouse dropped out of school during the 10^{th} grade, their spouse is classified as having completed 9^{th} grade. There several possible categories: 0) NA/or no schooling, 1) nursery school to 4^{th} grade, 2) 5^{th} , 6^{th} , 7^{th} , or 8^{th} grade, 3) 9^{th} grade, 4) 10^{th} grade, 5) 11^{th} grade, 6) 12^{th} grade, 7) 1 year of college, 8) 2 years of college, 9) 3 years of college, 10) 4 years of college, and 11) 5 + years of college. To be identified as an undocumented spouse using the conservative method, spouses must be in any

category that is less than category 7, that is, they must have a 12th grade education or less. To be identified as an undocumented spouse using the more lenient method, spouses must be in any category that is less than category 9, that is, they must have completed 2 years of college or less.

Social Security Income of the Spouse

The "incss_sp" variable represents the amount of pre-tax Social Security income the respondent's spouse received the previous year. It is a continuous variable and includes any income from Social Security pensions, survivor benefits, permanent disability insurance, or U.S government Railroad Retirement insurance payments. Undocumented immigrants are unable to receive Social Security benefits because they either lack a Social Security Number, are using a fake Social Security Number, or are using one that does not belong to them. According to the Social Security Administration (2016a), "only noncitizens with permission to work from the Department of Homeland Security can get a Social Security number." Thus, in order for spouses to be considered undocumented, respondents must have reported that their spouse has not received any Social Security income. However, it must be noted that undocumented people who are granted DACA (Deferred Action for Childhood Arrivals) do have a Social Security Number because they have been granted an Employment Authorization Card that allows them to legally work in the U.S. This is not an issue in this dissertation because DACA was enacted in the Fall of 2012, and the sample I am using, the ACS 2008-2012, asks about Social Security Income received during the previous year of the survey.

Supplementary Security Income of the Spouse

Similar to the previous variable, the "incsupp_sp" variable is continuous and represents the amount of pre-tax Supplemental Security Income (SSI) the respondent's spouse received the previous year. This income is funded by general tax revenues (not through Social Security taxes) and given to elders, disabled, or blind people to help meet their basic living expenses (Social Security Administration 2016b). Spouses must not have received any Supplementary Security Income in order to be considered undocumented. As I mentioned in the previous paragraph, in general, undocumented people are unable to receive this income since they lack a Social Security Number.

Welfare Income of the Spouse

The "incwelfr_sp" variable reports the pre-tax welfare income the respondent's spouse received the previous year. It includes income from various public assistance programs, but it does not include monetary assistance received from private charities. The amount and type of aid available for individuals with little to no income varies from state to state; however, most states offer aid for basic living needs including: health care, food stamps, child care assistance, unemployment, cash aid, and housing (Welfare Info 2016). This variable is also continuous. In order for spouses to be considered undocumented, they must not have received any income from welfare programs. Welfare is reserved for U.S. citizens or qualifying non-citizen legal residents (Welfare Info 2016); therefore, undocumented immigrants do not qualify for welfare programs.

Health Insurance through Medicare of the Spouse

The "hinscare_sp" variable represents whether respondents indicated that their spouse was covered by Medicare at the time of the interview. This variable is coded 1) if the respondent's spouse did not receive Medicare or, 2) if the respondent's spouse did receive Medicare. "Medicare is a federally funded program available to most U.S. citizens and permanent legal residents who have lived continuously in the country for five years or more and are age 65 or older", therefore, in order to be considered undocumented, spouses must not have received health insurance through Medicare (E Health Medicare 2016).

Health Insurance through Medicaid of the Spouse

The "hinscaid_sp" variable is similar to the previous variable. It represents whether the respondent's spouse was covered by Medicaid, Medical Assistance, or any other type of government-assistance plan reserved for those who are disabled or have low income. This variable is coded 1) if the respondent's spouse did not receive Medicaid or, 2) if the respondent's spouse did receive Medicaid. Like the previous variable, in order to be considered undocumented, spouses must not have received health insurance through Medicaid, since they are unable to receive these benefits.

Class of Worker of the Spouse

The "classwrkd_sp" variable represents the respondent's answer when asked what type of worker they considered their spouse to be. Possible answer choices were the following: 0) N/A, 10) Self-employed, 11) Employer, 12) Working on own account, 13) Self-employed, no incorporated, 14) Self-employed, incorporated, 20) Works for

wages, 21) Works on salary (1920), 22) Wage/salary, private, 23) Wage/salary at non-profit, 24) Wage/salary, government, 25) Federal government employee, 26) Armed forces, 27) State government employee, 28) Local government employee, and 29) Unpaid family worker. In order for spouses to be considered undocumented, they must not have been coded under category 25, as a federal government employee, category 26, in the armed forces, category 27, as a state government employee, and category 28, as a local government employee. Undocumented people are unlikely to work for local, state, and federal entities because their social security number and/or proof of employment authorization are highly likely to be verified by the employer before being hired.

Birthplace of the Spouse

The "bpl_sp" variable represents the U.S. state, U.S. area or territory, or foreign country where the respondent's spouse was born. Codes 1-120 represent U.S. states, areas, or territories. Codes 150-900 represent foreign countries or territories. In order to identify the first marriage path, marriage with an undocumented spouse from Mexico, spouses must be categorized under code 200, which represents those born in Mexico. In order to identify the third marriage path, marriage with a Mexican U.S. citizen, spouses must be categorized under codes 1-120, representing their birth in the U.S. or in any of the U.S. territories.

Hispanic Origin of the Spouse

The "hispan_sp" variable represents whether the respondent's spouse is of Hispanic/Spanish/or Latino origin and if so, the type of Hispanic. This variable is coded in the following way: 0) Non-Hispanic, 1) Mexican, 2) Puerto Rican, 3) Cuban, and 4)

Other. I use this variable, specifically, if the spouse is Hispanic or not, to describe the spouses of undocumented men and women in my sample.

Race of Spouse

The variable "race_sp" refers to the race of the respondent's spouse. This variable is coded in the following way: 1) White, 2) Black/Negro, 3) American Indian or Alaska Native, 4) Chinese, 5) Japanese, 6) Other Asian or Pacific Islander, 7) Other race, 8) Two major races, and 9) Three or more major races. I use this variable, specifically, if the spouse is non-Hispanic white or not, to describe the spouses of undocumented men and women in my sample.

Independent Variables

In this section I describe the variables I will use in the multinomial regression models. There are three main variables I am interested in, namely: years in the U.S., English proficiency, and race. I use age of the respondent as a control variable.

Years in the U.S. of the Respondent

The variable "yrsusa1" represents the number of years a foreign born respondent has been in living in the U.S. I will keep this variable as a continuous variable in the multinomial regressions.

English Proficiency of the Respondent

The variable "speakeng" represents whether the respondent speaks English and if so, how well they speak English, if they speak a language other than English at home. Possible answer categories include the following: 1) Does not speak English, 3) Yes, speaks only English, 4) Yes, speaks English very well, 5) Yes, speaks English well, and

6) Yes, speaks English but not well. I will recode this variable as a dummy variable. First, I will combine category 1 and 6 and assign those respondents a 0 which will represent respondents who do not speak English or speak English but not well. Then, I will combine category 3, 4 and 5 and assign them a 1, which will represent respondents who speak only English, speak English well, or speak English very well.

Race of the Respondent

The variable "race" refers to the race of the respondent. This variable is coded the following way: 1) White, 2) Black/Negro, 3) American Indian or Alaska Native, 4) Chinese, 5) Japanese, 6) Other Asian or Pacific Islander, 7) Other race, 8) Two major races, and 9) Three or more major races. I will recode this variable as a dummy variable. I will assign respondents who identify as being White only, a 1, and will assign all others a 0.

Age of the Respondent

The "age" variable represents the respondent's age as of their last birthday. This variable is continuous and will serve as a control variable in the multinomial regression models.

Datasets

This section describes the variables that are used to select the sample datasets for this dissertation. I first begin by extracting a dataset that only includes Mexicans born in Mexico who are not U.S. citizens, who are 18 and over, with spouses present in their household who are also 18 and older, who were married within the last year of the survey. In order to identify which remaining respondents are undocumented, I delete the

following: 1) respondents who received Medicaid or Medicare, 2) respondents who received social security income, 3) respondents who received welfare, 4) respondents who had a federal, state, or local job, and 5) respondents who had higher than a 12th grade education (for the conservative method) or respondents who had more than 2 years of college (for the more lenient method). I am interested in observing how marriage patterns differ among the sexes; thus once I identify all the undocumented Mexican respondents, I divide the dataset into two, one for males and one for females, to be able to undertake separate analyses. The following paragraphs describe the variables I use to select my sample.

Birthplace of the Respondent

The "bpl" variable represents the U.S. state, U.S. area or territory, or foreign country where the respondent was born. Codes 1-120 represent U.S. states, areas, or territories. Codes 150-900 represent foreign countries or territories. In order to identify undocumented respondents from Mexico, respondents must be categorized under code 200, which represents those born in Mexico.

Citizenship of the Respondent

The "citizen" variable represents the respondent's citizenship status. This variable distinguishes between citizens and non-citizens. There are 4 possible answer categories: 0) N/A, which indicates that the respondent did not answer this question because they were not foreign born, 1) born abroad of American parents, 2) naturalized citizen, and 3) not a citizen. Respondents must have reported that they were in category 3, not a U.S. citizen, to be considered undocumented.

Age of the Respondent and the Spouse

The "age" variable represents the age of the respondent. Similarly, the "age_sp" represents the age of the respondent's spouse. These variables are continuous. For this dissertation, I am only focusing on marriages where both spouses are adults. Therefore, I delete respondents who are younger than 18 years old or who have spouses who are younger than 18 years old.

Married within the Last Year

The "marrinyr" variable represents whether the respondent was married within the last year (12 months) prior to the date of the interview. This variable is coded 1) if respondents were not married within the last year, and 2) if they were married within the last year. I only keep respondents in my sample who were married within the last year.

Health Insurance through Medicare of the Respondent

The "hinscare" variable indicates whether the respondents reported that they were covered by Medicare at the time of the interview. This variable is coded 1) if the respondent did not receive Medicare or, 2) if the respondent did receive Medicare In order to be considered undocumented, respondents must not have received health insurance through Medicare.

Health Insurance through Medicaid of the Respondent

The "hinscaid" variable is similar to the previous variable. It represents whether the respondent was covered by Medicaid, Medical Assistance, or any other type of government-assistant plan reserved for those who are disabled or have low income. This variable is coded 1) if the respondent did not receive Medicaid or, 2) if the respondent

did receive Medicaid. As with the previous variable, in order to be considered undocumented, respondents must not have received health insurance through Medicaid.

Social Security Income of the Respondent

The "incss" variable represents the amount of pre-tax Social Security income the respondent received the previous year. It is a continuous variable and includes any income from Social Security pensions, survivor benefits, permanent disability insurance, or U.S government Railroad Retirement insurance payments. In order for respondents to be considered undocumented, they must have reported that they did not received any Social Security income.

Supplementary Security Income of the Respondent

Similar to the previous variable, the "incsupp" variable is continuous and represents the amount of pre-tax Supplemental Security Income (SSI) the respondent received the previous year. Respondents must not have received any Supplementary Security Income in order to be considered undocumented.

Welfare Income of the Respondent

The "incwelfr" variable reports the pre-tax welfare income the respondent received the previous year. It includes income from various public assistance programs. This variable is also continuous. In order for respondents to be considered undocumented, they must not have received any income from welfare programs.

Class of Worker of the Respondent

The "classwrkd" variable represents the respondent's answer when asked what type of worker they considered themselves to be. Possible answer choices were coded as

follows: 0) N/A, 10) Self-employed, 11) Employer, 12) Working on own account, 13) Self-employed, no incorporated, 14) Self-employed, incorporated, 20) Works for wages, 21) Works on salary (1920), 22) Wage/salary, private, 23) Wage/salary at non-profit, 24) Wage/salary, government, 25) Federal government employee, 26) Armed forces, 27) State government employee, 28) Local government employee, and 29) Unpaid family worker. In order for respondents to be considered undocumented, they must not have reported working for the armed forces, the federal government, the state government, or the local government.

Education of the Respondent

The "educ" variable represents the educational attainment of the respondent. There are several possible categories: 0) NA/or no schooling, 1) nursery school to 4th grade, 2) 5th , 6th , 7th , or 8th grade, 3) 9th grade, 4) 10th grade, 5) 11th grade, 6) 12th grade, 7) 1 year of college, 8) 2 years of college, 9) 3 years of college, 10) 4 years of college, and 11) 5 + years of college. To be identified as an undocumented respondent using the conservative method, respondents must have a 12th grade education or less. To be identified as an undocumented respondent using the more lenient method, spouses must have completed 2 years of college or less.

Quality of the Data

The majority of the data in the ACS have been edited for missing, illegible or inconsistent values (IPUMS USA 2016). Sometimes respondents or enumerators fail to answer a certain question or sometimes the answer is illegible. Also, sometimes respondents answer a question but answer it incorrectly, since it contradicts other

questions they answered in the survey. According to the USA Integrated Public Use Microdata Series (IPUMS USA) website, there are three ways in which computers impute, or edit, missing, illegible or inconsistent data. These three methods are the following: 1) logical edits, 2) hot deck allocation, and 3) cold deck allocation.

In the first method, logical edits, values are inferred for missing or inconsistent values from other answers the respondent gave in the survey. For example, if there is missing information about a person's race and there is information on the survey showing that both of that person's parents were "white", then that person is assigned "white" as their race. These types of edits are considered to be very reliable. The second method, hot deck allocation, is used when logical edits are impossible. This method replaces the missing data with observed data from respondents who share similar characteristics with the missing, illegible or inconsistent case. The last method, cold deck allocation, is used when the hot deck allocation fails to find a similar case to "borrow" for the missing case. In cold deck allocation, a value is randomly assigned from a pre-determined distribution. A modal value is also sometimes assigned to the missing case in cold deck allocation. All of these three allocation methods are considered to provide better estimates than if cases with missing values were to be deleted (IPUMS USA 2016).

The IPUMS allows users to see data quality flags for the computer allocations. In this section, I examine the allocation flags for the variables I am using, to see whether data were imputed. Allocation flags are scored a 4 if data are missing, illegible or inconsistent, and therefore, were allocated and scored a 0 if data were not allocated. The

allocation flags do not specify which allocation method was used. Running tabulations on the allocation flags lets me know what percentage of the variable was allocated.

Table 3.1 shows the percent of allocations for each variable according to the data quality flags that were available for the variables and data sample extracted for this dissertation. The table shows that for all variables, less than 10% of the cases were allocated, that is, less than 10% of the cases for each variable were missing, illegible or inconsistent and had to be imputed. This suggests that the sample data are of relatively high quality since there is a very small amount of missing data for each variable.

Statistical Methods

To obtain the percentages of undocumented Mexicans who took the six different marriage paths, I will look at the descriptive statistics of the dependent variable for both males and females. Furthermore, I will also look at the respondents who did not fit into these six categories and observe the characteristics of their spouses. To test the rest of my hypotheses, I will estimate multinomial logistic regression equations. This type of model is appropriate because the dependent variable is categorical and unordered (Hanushek and Jackson 1977). I will use the first category, marriage with an undocumented Mexican, as the reference category.

I will estimate the regression using Stata 13.1. Since I am using micro-data from a sample survey, I will first use the "svy" command provided by the statistical software in Stata 13.1, to adjust the standard errors for the complex survey design of the ACS. If I did not introduce these adjustments, the Stata software would assume the data were collected by a simple random sample; thus, the "svy" command will let me adjust the

analyses according to the population and strata weights in the 2012 ACS 5 year estimates (StataCorp 2013).

Once I estimate the multinomial regressions, I will calculate the odds ratios from the logit coefficients ($\Omega = e^{logit}$). The reference category will be marriage to undocumented Mexican spouses. Thus, the interpretations for the odds ratios for the race variable will be in the order of the following: undocumented Mexicans who identify racially as being White only are _ times more/less likely to have a documented Mexican spouse born in Mexico relative to having an undocumented Mexican spouse; they are _ times more/less likely to have a documented Mexican spouse born in the U.S. relative to having an undocumented Mexican spouse; they are _ times more/less likely to have a non-Mexican Hispanic undocumented spouse compared to having an undocumented Mexican spouse; they are _ times more/less likely to have a non-Mexican Hispanic documented spouse compared to having an undocumented Mexican spouse; and _ times more/less likely to have a non-Hispanic White spouse compared to having an undocumented Mexican spouse. The rest of the independent variables will be interpreted similarly, but modified according to their operationalization.

Hypotheses

The following hypotheses will be tested in this dissertation: H_1: The percentage of undocumented Mexicans having an undocumented Mexican spouse will be the highest followed by the percentage of them having a documented Mexican spouse and a spouse who is a non-Mexican Hispanic. The lowest marriage percentages will be with non-Hispanic Whites and non-Hispanic minorities.

H_2: Identifying racially as White only will likely not be statistically significant in the models portraying the different marriage patterns of undocumented Mexicans.

H_3: For undocumented Mexicans, there will be a negative relationship between their English proficiency and the likelihood of being married to an undocumented Mexican. That is, as their English proficiency increases, their likelihood of being married to an undocumented Mexican will decrease.

H_4: For undocumented Mexicans, there will be a negative relationship between time living in the U.S. and the likelihood of being married to an undocumented Mexican. That is, as their time living in the U.S. increases, their likelihood of being married to an undocumented Mexican will decrease.

Conclusion

This chapter began with a discussion of the data to be used in this dissertation, namely, the 2008- 2012 American Community Survey 5 year population estimates. I described in detail how the ACS is collected and the limitations of using this survey given my research focus. I also described the method I will use to infer which respondents are undocumented immigrants from Mexico. I described the variables I will employ to construct the dependent variable, and I listed the six main marriage paths undocumented men and women take. Then, I described in detail all the independent variables I will use. Next, I discussed how the ACS imputes missing, illegible and inconsistent data, and I presented a table showing the percent of cases that were allocated by the ACS for the variables I use. Lastly, I presented the statistical methods I

will use in the next two chapters, Chapter 4 and Chapter 5, and listed the specific hypotheses that will be tested.

CHAPTER IV

DESCRIPTIVE STATISTICS AND MARRIAGE PATHS

In this chapter I present the first of several statistical analyses in this dissertation, namely, the descriptive statistics for the independent variables. Additionally, I report my estimated numbers of undocumented Mexican male and female respondents according to each of the main marriage paths, as follows: 1) marriage with an undocumented Mexican; 2) marriage with a documented Mexican born in Mexico; 3) marriage with a documented Mexican born in the U.S. (a U.S. citizen); 4) marriage with a non-Mexican Hispanic who is undocumented; 5) marriage with a non-Mexican Hispanic who is documented; and 6) marriage with a non-Hispanic White. I begin by describing the data for the undocumented Mexican men using the conservative method in regards to the education variable, that is, by identifying as undocumented respondents and spouses those who had a 12^{th} grade education or less. Then, I describe the data for the men using the more lenient method in regards to the education variable, that is, by identifying undocumented respondents and spouses as those who had 2 years of college or less. Next, I describe the data for the undocumented Mexican women, first using the conservative method and then the lenient method.

Furthermore, I compare the results I obtain for the males when I apply the conservative method to infer undocumented status, with the lenient method. Then I compare the results for the males with the females, specifically, those I obtain from using the conservative method for the males with the results I obtain using the

conservative method for the females. Then, I compare the results I obtain for the females when I apply the conservative method to infer undocumented status, with the lenient method. Lastly, I compare the results I obtain using the lenient method for the females with the results I obtain using the lenient method for the males.

Descriptive Statistics for the Undocumented Mexican Men (Conservative Method)

Using the conservative method for inferring the number of undocumented Mexican men in my sample, I estimate that there are 2,201 such men in this dataset. Regarding the independent variable representing the number of years the respondent has lived in the U.S., the average is 12.87 years. The minimum number of years is 0 and maximum is 62 years. The variable representing the English proficiency of the respondents shows that 955 respondents, or 43.39%, do not speak English or speak English but not well. Regarding race, 1,285 respondents, about 58.38%, identified as being white, while 916 respondents, or 41.62%, identified as being non-white. The control variable, age, shows that the mean age among the respondents was 30.81. The minimum age was 18 years old and the maximum was 68.

Marriage Paths for the Undocumented Mexican Men (Conservative Method)

Table 4.1 shows the number of undocumented Mexican men, using the conservative method, who took each of the six main marriage paths. The majority of men, 881 respondents (40.03%), fall under the first marriage path, that is, they are married to an undocumented Mexican woman. There are 451 respondents (20.49%) who are married to a documented Mexican woman born in Mexico, the second marriage path. A few more, 495 respondents (22.49%), fall under the third marriage path; they are

married to a documented Mexican woman born in the U.S. (a U.S. citizen). There were 55 respondents (2.50%) who are married to an undocumented non-Mexican Hispanic woman. These respondents are categorized under the fourth marriage path. A couple more, 78 respondents (3.54%), fall under the fifth marriage path; they are married to a documented non-Mexican Hispanic woman. Many more, 191 respondents (8.68%) are married to a non-Hispanic white woman. They took the sixth main marriage path. When I differentiate between documented and undocumented non-Hispanic white spouses, I find that only 1 of the white persons is likely to be undocumented.

Finally, 50 respondents (2.27%), are married to types of spouses who do not fall into the six main categories. Among these respondents, 19 are married to women who are Mexican but who were not born in Mexico or the U.S., and therefore do not fit in the previous marriage paths. Among the remaining 31 respondents, 11 are married to a black woman, 4 to an American Indian or Alaska Native woman, 2 to a Chinese woman, 1 to a Japanese woman, 6 to a Pacific Islander or other type of Asian woman, 2 to women of another race not listed in the ACS, and 5 to women of two major races.

Descriptive Statistics for the Undocumented Mexican Men (Lenient Method)

There are 2,439 undocumented Mexican men in this dataset. Using the lenient method to identify undocumented respondents adds 238 more respondents to the previous count (using the conservative approach). These added respondents completed either 1 or 2 years of college. Among all of the respondents in this dataset, the average number of years they have lived in the U.S. is 13.03 years. Including the college educated respondents in the analysis does not change this variable much (12.87 years

versus 13.03 years). The English proficiency variable shows that 999 respondents (40.96%) do not speak English or speak English but not well. As expected, adding the college educated to the data reduces the percentage of respondents in this category. Regarding race, 1,429 respondents (58.59%) identified as being white while 1,010 respondents (41.41%) identified as being non-white. These numbers are almost identical to the race statistics for the dataset using the conservative method. Finally, the control variable, age, shows that the average age is 30.90 years old, which is almost identical to the average in the previous dataset.

Marriage Paths for the Undocumented Mexican Men (Lenient Method)

Table 4.2 shows the number of undocumented Mexican men, using the lenient method, according to each of the six main marriage paths. Most of the men, like the ones in the conservative dataset, took the first marriage path and are married to an undocumented Mexican woman. The percentage of respondents under this category changes from 40.03% (881 respondents) in the conservative dataset, to 41.33% (1,008 respondents) using the lenient dataset.

The second marriage path, on the other hand, marriage to a documented Mexican woman born in Mexico, decreases slightly using the lenient method. The percentage drops from 20.49% (451 respondents) in the conservative dataset, to 17.47% (436 respondents).

The number of respondents who took the third marriage path of marriage with a documented Mexican woman born in the U.S., that is, marriage with a U.S. citizen,

increases slightly from 22.49% (495 respondents) in the conservative dataset, to 23.08% (563 respondents), using the lenient method.

For the fourth marriage path, marriage with an undocumented non-Mexican Hispanic woman, the percentages increases slightly from 2.50% (55 respondents) in the conservative dataset, to 2.79% (68 respondents), in the lenient dataset.

The percentage of people under the fifth marriage path, marriage with a documented non-Mexican Hispanic woman, is almost the same in both datasets.

Lastly, the final main category, marriage with a non-Hispanic white, rises slightly from 8.68% (191 respondents) in the conservative dataset, to 9.31% (227 respondents), in the lenient dataset.

The number of male respondents who married other types of spouses using the lenient method is 2.46% (60 respondents), which is very similar to the percentage of men in the conservative dataset 2.27% (50 respondents).

Descriptive Statistics for the Undocumented Mexican Women (Conservative Method)

There are fewer undocumented women than men in the ACS using either method to infer undocumented status. The conservative method yields 1,612 undocumented Mexican women. The average number of years they lived in the U.S. is 11.47 years, which is slightly less than the number of years for men in the conservative dataset (12.87 years). The minimum is 0 and maximum is 46, which is a lot less than the maximum number of years the men have lived in the U.S. (62 years in both datasets). Regarding their English proficiency, the majority, about 56.64% or 913 respondents, do not speak

English or speak English but not well. Comparing these statistics with those of the men in the conservative dataset, more undocumented women are less proficient at English (56.64% versus 43.49%) than men. Regarding race, 61.17% (986 respondents) identify as being white. This percentage is slightly larger than the one for the men's (58.38%) in the conservative dataset. The age statistics for the women are almost the same as those for the men.

Marriage Paths for the Undocumented Mexican Women (Conservative Method)

Table 4.3 shows the number of undocumented Mexican women, via the conservative method, who took each of the six main marriage paths. Most women 54.22% (874 respondents) are married to undocumented Mexican men. Compared to the undocumented men in the conservative dataset, more undocumented women than men, 54.22% versus 40.03%, are married to an undocumented spouse.

Regarding the second marriage path, 19.54% (315 respondents), are married to a documented Mexican man born in the U.S. This statistic was very similar to the males in the conservative dataset (20.49%).

The third marriage path, marriage with a documented Mexican man born in the U.S. had 221 respondents. The percentage of respondents in this marriage path, 13.71%, is lower for women than for men (22.49%) in the conservative dataset.

There were only 37 (2.30%) of women who had an undocumented non-Mexican Hispanic husband, which is about the same as for men.

Similarly, the percentage of women who had a documented non-Mexican Hispanic spouse (3.91%) was about the same as the men's (3.54%). There were 63 undocumented women in this fifth marriage path.

Finally, there were 71 women who are married to a non-Hispanic White man. The percentage of women in this sixth and last marriage path, 4.40%, was double the men's (8.86%) in the conservative dataset. None of the undocumented women are married to a non-Hispanic white man who is undocumented.

Furthermore, there are 31 women (1.92%) who are married to spouses who do not fit the previous categories. This number is smaller than the number of males (50 respondents or 2.27%) who are married to other types of spouses, in the conservative dataset.

Descriptive Statistics for the Undocumented Mexican Women (Lenient Method)

The more lenient method to infer undocumented status, produces a dataset with 1,837 women, 215 more respondents than the conservative method. The average number of years they have lived in the U.S. is 11.48 years. These statistics are about the same as those produced with the conservative dataset. The men in the lenient dataset, have lived on average 1.5 more years in the U.S. than the women.

Regarding English proficiency, the majority, 53.18% or 977 respondents, do not speak English or speak English but not well. Adding the college educated women only raises this statistic by about 3.5% from the conservative dataset. The rest of the women, 46.82%, or 860 respondents, speak only English, speak English well, or speak English

very well. Compared with the men's statistics using the lenient dataset, men are more proficient in English (59.04% versus 46.82%).

Regarding race, the majority of women identify as being white (1,116 respondents or 60.75%) which is very similar to the women in the conservative dataset (986 respondents or 61.17%). Compared to the percent of men in the lenient dataset, more women identify as being white (60.75% versus 58.59%). There are 731 women respondents (39.25%) who identify as non-white, about the same percent in the conservative dataset (38.83%). More men in the lenient dataset, compared to women, identify as being non-white.

Finally, the average age for these women is 30.16 years. These age statistics are almost the same as those for the women in the conservative dataset and the men in the lenient dataset.

Marriage Paths for the Undocumented Mexican Women (Lenient Method)

Table 4.4 shows the number of undocumented of Mexican women who took each of the six main marriage paths when I apply the lenient method to infer undocumented status. Like the women in the conservative dataset, most women (1,000 respondents or 54.44%) in this dataset report being married to an undocumented Mexican man. The same percentage (54%) was seen in the dataset using the conservative method for women. The percentage of men married to an undocumented woman using the lenient method is much lower (41%).

The number of undocumented women married to a documented man born in Mexico is 295, about 16.06%. The conservative method yielded a higher percentage,

19.54%. For men in the lenient dataset, the percentage for this marriage path was similar (17.47%).

The third marriage path, marriage with a documented Mexican man born in the U.S., a U.S. citizen, has 283 women (15.41%). The percentage rises a bit from the percentage of women in the conservative dataset (13.71%). The men in the lenient dataset have a much higher percentage (23.08%).

The next marriage path, marriage with an undocumented non-Mexican Hispanic man, yields 50 women, or 2.72%, using the lenient method, which was about the same percentage for women using the conservative method (2.30%). The percentage for the men in the lenient dataset was also very similar, 2.79%.

There are 70 women, or 3.81% of respondents, who are married to a documented non-Mexican Hispanic man. The percentage is about the same for women in the conservative dataset (3.91%). For this fifth marriage path, men in the lenient dataset fared about the same (3.57%).

The last marriage path, marriage with a non-Hispanic White man, has 97 women or 5.28% of the respondents. Out of these, 2 women are married to an undocumented non-Hispanic white man when I infer undocumented status using the lenient method. This percentage is about the same for women in the conservative dataset (4.40%). Compared to the men in the lenient dataset, more men are married to a non-Hispanic white spouse (9.31%).

Finally, there are 42 women (2.29%) who are married to men who do not fit in any of the previous categories.

Summary: Descriptive Statistics

Table 4.5 shows the descriptive statistics for the independent variables for the undocumented men and women according to the method used to infer undocumented status. There are more undocumented men than women in the ACS 2008-2012 sample using either method. There are 2,201 male respondents in the conservative dataset and 2,439 in the lenient dataset. There are 1,612 female respondents in the conservative dataset and 1,837 in the lenient data set.

Furthermore, the results show that adding the college educated to the data via the lenient method does not really change very much the average number of years the respondents have lived in the U.S. For both men and women, the average increases only slightly when the lenient method is used.

Regarding English proficiency, adding the college educated to the male and female datasets via the lenient method, increases the percent of respondents who speak only English, speak English well, or very well, by about 3 percent for both the men and the women. This is expected, since those who have college experience are more likely to be proficient in English than those who did not attend college. Also, more men are proficient in English when compared to the women. Regarding race, adding the college educated via the lenient method does not really affect the percentage of respondents who identify as white or non-white.

Lastly, both men and women in my samples are on average a little over 30 years old.

Summary: Marriage Patterns

Tables 4.1-4.4, shows that most undocumented men and women in the 2008-2012 ACS, regardless of the method used to infer status, have undocumented spouses. The percent of undocumented women married to undocumented men, about 54% in both female datasets, is higher than the percent of undocumented men married to undocumented women in both male datasets, about 40%. Regarding the undocumented men, the next largest percentage belongs to those married to a documented Mexican born in the U.S. (22.49% in the conservative dataset and 23.08% in the lenient dataset). For undocumented women, however, the next largest percentage belongs to those married to a documented Mexican born in Mexico (19.54% in the conservative dataset and 16.06% in the lenient dataset). For this second marriage path, for men, the conservative method yields 20.49% and 17.47% for the lenient method. There were 13.71% of women in the conservative dataset, and 15.41% in the lenient dataset who married a documented Mexican born in the U.S., the third marriage path.

Regarding the fourth marriage path, marriage with an undocumented non-Mexican Hispanic, all four datasets had between 2-3% of respondents. Similarly, the fifth marriage path, marriage with a documented non-Mexican Hispanic had between 3-4% of respondents. The percentage of respondents in the sixth marriage path, marriage with a non-Hispanic white, however, is very different for men and women. Many more undocumented men, 8.68% in the conservative dataset and 9.31% in the lenient dataset, were married to non-Hispanic whites. Only about 4.40% of women in the conservative dataset and 5.28% in the lenient dataset, were married to a non-Hispanic white.

Finally, the percentage of respondents who are married to spouses that do not fall under any of the above categories, was between about 2-2.5% for both men and women irrespective of whether I used the conservative or lenient method.

Conclusion

In this chapter I presented the first part of the statistical analysis of the data. First, I described the descriptive statistics for the independent variables for the undocumented Mexican men in the conservative dataset and then reported the number and percentage of respondents in that dataset who took each of the six main marriage paths. Next, I presented the same information for men in the lenient dataset. Finally, I did the same for women in the conservative and lenient dataset.

I found minor differences when using the lenient method versus the conservative method to identify undocumented respondents and spouses; that is, the lenient dataset, the dataset that includes respondents who had 1 or 2 years of college, has very similar characteristics as the conservative dataset which only includes respondents who had 12 years of education or less. The lenient dataset, however, does include a little over 200 respondents more, when compared to the conservative approach, but the descriptive statistics on age, race, years in the U.S., and English proficiency, are more or less the same. Furthermore, overall, I also find that the conservative method and the lenient method produce similar results regarding the percent of respondents who take each of the six main marriage paths.

In Chapter 3, I presented four main hypotheses. With the data described in this fourth chapter, I am now able to test my first hypothesis. I hypothesized that the

percentage of undocumented Mexicans having an undocumented Mexican spouse would be the highest, followed by the percentage of them having a documented Mexican spouse and a spouse who is a non-Mexican Hispanic. I also hypothesized that the lowest marriage percentages would be with non-Hispanic Whites and non-Hispanic minorities. I find that the first part of my hypothesis, i.e., that the percentage of undocumented Mexicans married to one another is the highest, is supported by the data for both the men and women. However, as I previously mentioned, the percent of undocumented women who are married to undocumented men is a little bit higher than the percent of undocumented men married to undocumented women. Also, the data for the men and women are consistent with my hypothesis that the next highest percentage is marriage with a documented Mexican spouse, regardless of whether they were born in Mexico or the U.S.

On the other hand, my hypothesis that the percent of undocumented Mexicans married to non-Mexican Hispanics would be higher than the percent married to non-Hispanic Whites is not supported by the data for the males. About 6.04% of men in the conservative dataset and 6.36% in the lenient dataset are married to non-Mexican Hispanics (marriage path 4 and 5). The percent of males married to non-Hispanic whites is a little bit higher. About 8.68% of men in the conservative dataset and 9.31% in the lenient dataset are married to non-Hispanic whites. The data for the women, on the other hand, do support my hypotheses that more of them are married to non-Mexican Hispanics than non-Hispanic whites, but only slightly, by a little less than 2%. Finally, I

correctly predicted that the lowest percentages would belong to respondents who are married to non-Hispanic minorities.

In conclusion, for the most part, I correctly predicted the order of the marriage paths for both the undocumented men and women. Two other important findings are that: 1) the percent of undocumented Mexican women who are married to undocumented Mexican men is higher than the percent of undocumented Mexican men who are married to undocumented Mexican women, and 2) the percent of undocumented Mexican men that are married to non-Hispanic white women is higher than the percent of undocumented Mexican women who are married to non-Hispanic white men. In a later chapter, I will go into more detail on why this may be the case and some of the reasons why the marriage patterns follow the order that they do.

CHAPTER V

MULTINOMIAL LOGISTIC REGRESSION MODELS

In this chapter I present the results of the multinomial logistic regression equations for undocumented Mexican men and women using the lenient and conservative methods to infer documentation status. I provide four different multivariate analyses of the various marriage paths, two for the males and two for the females. The dependent variable represents the main marriage paths taken by the undocumented respondents, namely: 1) marriage with an undocumented Mexican; 2) marriage with a documented Mexican born in Mexico; 3) marriage with a documented Mexican born in the U.S. (a U.S. citizen); 4) marriage with a non-Mexican Hispanic who is undocumented; 5) marriage with a non-Mexican Hispanic who is documented; and 6) marriage with a non-Hispanic White. A small number of respondents took alternative marriage paths; since their numbers are so small, I omit them from the multinomial logistic models. Since the dependent variable is categorical and unordered, multinomial logistic regression is the appropriate statistical approach to use to conduct the analyses (Hanushek and Jackson 1977). Finally, I have designated the first marriage path, marriage with an undocumented Mexican, as the reference category, since the majority of the respondents fall into this category.

As I briefly mentioned in Chapter 3, I use Stata's "svy" suite of statistical methods to take into account the complex sampling design of the ACS; otherwise, the data would be treated as if they were a simple random sample of the U.S. population

(StataCorp 2013). This would be problematic because doing so tends "to understate the true extent of sampling error in the data… (because) when observations are *clustered* (drawn from a few selected sampling points), for many variables the within-cluster variance tends to be smaller than the variance across the population as a whole. This in turn implies that the between-cluster variance, i.e., the variance of the cluster means, which gives the standard error for clustered samples, is inflated relative to the variance of the same variable computed from a simple random sample drawn from the same population. Reduced within-cluster variance, especially with respect to sociodemographic variables, is typical within the small areas that make up… (a) stage of multistage probability samples: areas of a few blocks tend to be more homogeneous with respect to education, age, race, and so on than the population of the entire country. The result is that when we use statistical procedures based on the assumption of simple random sampling, our computed standard errors typically are too small. What we need to do is to take account not only of the variance among individuals within a cluster, but of the variance between clusters" (Treiman 2009: 207-208). Therefore, using Stata's "svy" commands is important because they adjust the regressions according to the population and strata weights of the 2012 ACS 5 year estimates (StataCorp 2013).

Multinomial Logistic Regression Models for the Undocumented Mexican Men (Conservative Method)

Table 5.1 reports the results from the maximum-likelihood multinomial logistic regression estimated for the undocumented Mexican men using the conservative method to infer status. As I previously mentioned, the difference between the conservative

method and the lenient method is that the lenient method includes respondents who have two years of college or less, while the conservative method only includes respondents with a 12th grade education or less.

The F-test value for this regression is 12.88 and is statistically significant at the level of 0.000, which allows me to reject the null hypothesis that all the multinomial logit coefficients are zero. Table 5.1 also indicates the values of the multinomial logit coefficients reporting the log odds of a man, for each unit of the independent variable, of taking each of the main marriage paths relative to taking the first marriage path. I interpret these logit coefficients as odds ratios by exponentiating the coefficients ($\Omega = e^{\text{logit coefficient}}$).

The variable indicating the number of years the respondent has lived in the U.S. is only statistically significant for men who are married to documented Mexican spouses who are U.S. born. The Ω value for this variable is 1.041, that is $e^{0.040} = 1.041$. This means that each additional year the respondent has lived in the U.S. multiplies their risk of being married to a Mexican born in the U.S. (a U.S. citizen), versus being married to an undocumented Mexican, by 1.041, holding the other variables constant. That is, the odds of having a U.S.-born Mexican spouse versus an undocumented Mexican spouse, increase by about 4.1 percent (odds ratio – 1 * 100) with each additional year the respondent lives in the U.S. I have interpreted the relative risk ratios (logit coefficients) in terms of "percent change" by calculating the odds ratio, minus 1, times 100 (Poston 2012).

The next variable, a dummy variable which indicates whether the respondent speaks only English, speaks English well or very well, is positive and statistically significant for all the marriage paths except for marriage with a documented Mexican born in Mexico. So, compared to respondents who do not speak English, or speak English but not well, respondents who speak only English or speak English well or very well, are 1.619 times ($e^{0.482} = 1.619$) more likely to be married to a Mexican born in the U.S. versus being married to an undocumented Mexican, holding the other variables constant. That is, the odds of having a U.S.-born Mexican spouse versus an undocumented Mexican spouse increases by 61.9 percent, if the respondent speaks only English or speaks English well or very well. Similarly, respondents who are proficient in English, compared to those who are not, are 1.896 times ($e^{0.640} = 1.896$) more likely to be married to an undocumented non-Mexican Hispanic versus an undocumented Mexican, holding the other variables constant. That is, the odds increase by 89.6 percent. And respondent who are proficient in English, compared to those who are not, are 2.344 times ($e^{0.852} = 2.344$) more likely to be married to a documented non-Mexican Hispanic versus an undocumented Mexican, holding the other variables constant. Lastly, respondents who are proficient in English, compared to those who are not, are 7.501 times ($e^{2.015} = 7.501$) more likely to be married to a non-Hispanic white, versus an undocumented Mexican, holding the other variables constant.

The next dummy variable, indicating if the respondent identifies racially as white, is negative and statistically significant for respondents who are married to documented non-Mexican Hispanics and to non-Hispanic whites. So, compared to

respondents who identify as non-white, respondents who identify as white are 0.638 times ($e^{-0.449} = 0.638$) as likely to have a documented non-Mexican Hispanic spouse instead of an undocumented Mexican spouse, holding the other variables constant. That is, the odds of having a non-Mexican Hispanic spouse versus an undocumented Mexican spouse decrease by about 36.2 percent. Furthermore, respondents who identify as white, versus non-white, are 0.639 times ($e^{-0.448} = 0.639$) as likely to have a non-Hispanic white spouse versus an undocumented Mexican spouse, holding the other variables constant, Thus, the odds decrease by 36.1 percent.

Multinomial Logistic Regression Models for the Undocumented Mexican Men (Lenient Method)

Table 5.2 shows the results from the maximum-likelihood multinomial logistic regression predicting the marriage paths for undocumented Mexican men using the lenient method to infer undocumented status. This method adds to the analysis any respondents who had two years of college or less. Thus, this analysis includes an additional 228 respondents. The F-test value for this regression is 13.71, and like the previous regression, it is statistically significant at the level of 0.000. Therefore, I reject the null hypothesis that all the multinomial logit coefficients are zero.

Like the previous model, the variable representing the number of years the respondent has lived in the U.S. is only statistically significant for men who are married to documented Mexican spouses who are U.S. born (U.S. citizens). This coefficient is 0.041, practically the same as in the previous regression (0.040). This means that for each additional year the respondent is in the U.S., their odds of being married to a

Mexican born in the U.S., versus being married to an undocumented Mexican increase by about 4.2 percent.

Also, as was the situation in the conservative model, the dummy variable in the lenient model measuring whether the respondent is proficient in English, is positive and statistically significant for all the marriage paths except for the path of marriage with a documented Mexican born in Mexico. Respondents who are proficient in English, compared to those who are not, are much more likely to be married to a Mexican born in the U.S., or to be married to an undocumented non-Mexican Hispanic, or to be married to a documented non-Mexican Hispanic, or to be married to a non-Hispanic white, versus being married to an undocumented Mexican, holding the other variables constant.

The race variable in this model is also negative and statistically significant, as in the conservative model, for respondents who are married to documented non-Mexican Hispanics and who are married to non-Hispanic whites. Compared to respondents who identify as non-white, respondents who identify as white are 0.658 times as likely to have a documented non-Mexican Hispanic spouse versus an undocumented Mexican spouse, holding the other variables constant. Similarly, respondents who identify as white, versus non-white, are 0.621 times as likely to have a non-Hispanic white spouse versus an undocumented Mexican spouse.

Adding the college educated to the data via the lenient method, however, does change the statistical significance of one of the race coefficients; it turns the race coefficient positive and significant for respondents who are married to documented Mexicans born in the U.S. Respondents who identify as white, versus non-white, are

1.253 times as likely to have a documented Mexican spouse born in the U.S. versus an undocumented Mexican spouse, holding the other variables constant.

Multinomial Logistic Regression Models for the Undocumented Mexican Women (Conservative Method)

Table 5.3 shows the results from the maximum-likelihood multinomial logistic regression equation estimated for the undocumented Mexican women using the conservative method to infer status. The F-test value for this regression is 12.16, very similar to the men's (12.88) using the same method, and is also statistically significant at the level of 0.000. This tells me that there is something statistically significant in the model; in other words, I am able to reject the null hypothesis that all the multinomial logit coefficients are zero.

The variable indicating the number of years the respondent has lived in the U.S. is significant only for women who are married to non-Hispanic whites. For the men, using the same method, this variable was only significant for men married to U.S. born Mexicans. For women, this means that each additional year the respondent has been in the U.S., multiplies their risk of being married to a non-Hispanic white, versus being married to an undocumented Mexican by 1.047, holding the other variables constant. That is, the odds increase by 4.7 percent.

The next variable, English proficiency, is positive and statistically significant for women married to U.S. born Mexicans, to documented non-Mexican Hispanics, and to non-Hispanic white spouses. For the men in the conservative model, English proficiency was also significant and positive for these groups, in addition to also being significant

and positive for those married to undocumented non-Mexican Hispanics. Regarding women, those who are proficient in English, as opposed to those who are not, are 3 times more likely to be married to a Mexican born in the U.S. versus being married to an undocumented Mexican. Also, women who are proficient in English, versus those who are not, are 2 times more likely to be married to a documented non-Mexican Hispanic versus to an undocumented Mexican. And, women who are proficient in English, compared to those who are not, are 7 times more likely to be married to a non-Hispanic white, versus an undocumented Mexican.

The race variable, is positive and statistically significant for women who are married to undocumented non-Mexican Hispanics and negative and statistically significant for women who are married to documented non-Mexican Hispanics. For men in the conservative model, the race coefficient was also negative and significant for those married to documented non-Mexican Hispanics but also for non-Hispanic whites, while the coefficient for men who are married to undocumented non-Mexican Hispanics was not significant at all.

Multinomial Logistic Regression Models for the Undocumented Mexican Women (Lenient Method)

In Table 5.4 I report the results from the maximum-likelihood multinomial logistic regression equation that was estimated for undocumented Mexican women using the lenient method to infer status. The F-test value is statistically significant, allowing me to reject the null hypothesis that all the multinomial logit coefficients are zero. These results are similar for the women and the men in the previous analyses.

Regarding the coefficients for the independent variables, years lived in the U.S. is negative and significant for women married to documented Mexicans born in Mexico, but positive and significant for those married to Mexicans born in the U.S. These two coefficients were not statistically significant in the previous model. On the other hand, the coefficient for women married to non-Hispanic whites loses statistical significance in the lenient dataset.

So, for each additional year the respondent lives in the U.S., her odds of being married to a documented Mexican born in Mexico, versus being married to an undocumented Mexican decrease by 2 percent. Conversely, for each additional year the respondent lives in the U.S., her odds of being married to a Mexican born in the U.S., versus being married to an undocumented Mexican increase by 3.3 percent.

The next variable, English proficiency, has similar effects in the conservative model; in this model, it remains positive and significant for women married to Mexicans born in the U.S., for women married to documented non-Mexican Hispanics, and for women married to non-Hispanic whites. For men in the lenient dataset, the coefficients for these groups were also positive and significant, but also, for men married to undocumented non-Mexican Hispanics.

Accordingly, women who are proficient in English, versus those who are not, are 3 times more likely to be married to a Mexican born in the U.S. versus an undocumented Mexican, holding the other variables constant. They are 2.7 times more likely to be married to a documented non-Mexican Hispanic versus an undocumented Mexican.

And, they are 8.8 times more likely to be married to a non-Hispanic white, versus an undocumented Mexican, holding the other variables constant.

The next variable, race, is only significant (and negative) for women married to documented non-Mexican Hispanics. The coefficient for women married to undocumented non-Mexican Hispanics loses statistical significance in the lenient dataset. Thus, women who identify as white, versus non-white, are about half as likely to have a documented non-Mexican Hispanic spouse versus an undocumented Mexican spouse, holding the other variables constant. That is, the odds decrease by 41.8 percent, which is only a bit lower than the percent decrease for women in the conservative model (46.9 percent) and a little higher than the percent decrease for men in the lenient model (34.2 percent).

Summary of the Results

In my analyses of the marriage paths chosen by undocumented Mexican men, the coefficients did not change much when I added to the sample the respondents who had one or two years of college. That is, the coefficients in the conservative and lenient datasets were very similar. There was only one coefficient that lost statistical significance when I used the dataset obtained via the lenient method, namely, the coefficient for the control variable of age with respect to men married to non-Hispanic whites. Furthermore, there was only one coefficient that gained statistical significance, the race coefficient for men married to Mexicans born in the U.S. Additionally, both models produced F-test values permitting me to reject the null hypothesis that all the multinomial logit coefficients were zero.

I found that the independent variable representing the number of years the respondent has lived in the U.S., is not a very good predictor of the man's marriage path. Years residing in the U.S. was only significant for men married to Mexicans born in Mexico. English proficiency on the other hand, was a much better independent variable in my models; it was positive and statistically significant for all of the men, except for those married to documented Mexicans born in Mexico. Furthermore, this coefficient became larger with each change in marriage path. So, English proficiency has the largest effect on the likelihood that an undocumented Mexican man is married to a non-Hispanic white, versus an undocumented Mexican. The race variable, on the other hand, produced inconsistent results. For one group, namely men married to Mexicans born in the U.S., it was positive and significant, while for others, namely men married to documented non-Mexican Hispanics and non-Hispanic whites, it was negative and significant. It was not significant for all other men.

In my analyses of the marriage paths selected by undocumented Mexican women, the multinomial regression coefficients changed slightly when I added into the dataset the respondents with a college education. Three coefficients gained statistical significance: the coefficient for years in the U.S. for women married to documented Mexicans born in Mexico, and to Mexicans born in the U.S., and the age coefficient for women married to non-Hispanic whites. Two coefficients lost statistical significance: the coefficient for years in the U.S. for women married to non-Hispanic whites, and the race coefficient for women married to undocumented non-Mexican Hispanics. Furthermore,

like the males, both models produced F-test values allowing me to reject the null hypothesis that all the multinomial logit coefficients were zero.

For women, the variable representing the number of years the respondent has lived in the U.S., was shown to produce inconsistent results. In the lenient dataset, this coefficient was negative and significant for women married to documented Mexicans born in Mexico, but positive and significant for women married to Mexicans born in the U.S., and not statistically significant for all other women. Therefore, as was the case for the men, this variable may not be a very robust predictor of the type of spouse women are likely to have. It works satisfactorily for some undocumented Mexican women but does not work well at all for other undocumented Mexican women. Furthermore, the coefficients for the English proficiency variable for women were also similar to those for the men. That is, they were positive and significant for the majority of the women. Specifically, this coefficient was positive and significant for women married to Mexicans born in the U.S., for those married to documented non-Mexican Hispanics, and for those married to non-Hispanic whites. As was the case for the men, English proficiency has the largest effect on the likelihood that an undocumented Mexican women is married to a non-Hispanic white, versus an undocumented Mexican. The race variable, in the lenient model, was only significant (and negative) for women married to documented non-Mexican Hispanics. Therefore, race was also not a very good predictor of the type of spouse undocumented Mexican women are likely to have. Thus, all three variables, years in the U.S., English proficiency, and race, produced similar results for both men and women.

Conclusion

In this chapter, I presented results from the multinomial logistic regressions predicting the marriage paths for undocumented Mexican men and women using the conservative and lenient methods to infer status. I interpreted the coefficients for all of the four models for each of the independent variables and concluded that English proficiency appears to be the best predictor of the type of spouse an undocumented Mexican is likely to have. English proficiency increases the likelihood that a respondent is married to a non-Hispanic white, versus an undocumented Mexican, the most. Both race and years in the U.S. produce inconsistent results in terms of direction and statistical significance.

The results from Chapter 4 allowed me to test my first hypothesis. In this chapter, I was able to test my 2nd, 3rd, and 4th hypothesis. My second hypothesis, that identifying racially as White only would likely not be statistically significant in the models portraying the different marriage patterns of undocumented Mexicans, is mostly supported by the women in the lenient dataset, since only one of the race coefficients was significant. For men in the lenient dataset, three of the race coefficients were significant. But as I previously stated, the results were inconsistent in that some were positive and significant and others negative and significant. My third hypothesis, that there would be a negative relationship between respondents' English proficiency and their likelihood of being married to an undocumented Mexican, is supported. I find that as respondents' English proficiency increases, their likelihood of being married to an undocumented Mexican decreases. Finally, my fourth hypothesis, that there would be a

negative relationship between time living in the U.S. and the likelihood of being married to an undocumented Mexican, is only supported for one marriage path in each model. The variable representing the number of years lived in the U.S. produced inconsistent results and for the most part was not statistically significant. In the next chapter, I compare my results with previous studies and discuss my contributions to the existing literature on the marriage patterns of Mexican immigrants.

CHAPTER VI

CONCLUSIONS AND FUTURE RESEARCH

My dissertation had two main objectives. The first was to identify and provide statistics for the main marriage paths taken by undocumented Mexican men and women in the 2008-2012 time period, using data from the American Community Survey. The second objective was to examine the effects of race, time lived in the U.S., and English proficiency on the main marriage paths by estimating multinomial logistic regression models. In this chapter, I will summarize my research and findings, and discuss areas of research that can be explored to better understand the marriage behavior patterns of undocumented Mexican immigrants in the U.S.

Summary: Identifying Sample

One of the major undertakings of this dissertation was identifying which of the respondents and spouses represented in the 2008-2012 American Community Survey were likely to be undocumented. This tactic was necessary because the ACS does not collect information on the immigration status of its respondents. While the survey does ask if respondents are U.S. citizens, it does not ask if they are in the U.S. lawfully. Thus, I took into consideration how other researchers have inferred undocumented status. I relied specifically on the prior research of Hall and Stringfield (2014) and demographers at the Pew Research Center (2013), to develop a proxy variable that would help me identify which foreign-born Mexican immigrants were likely to be undocumented in the ACS. Specifically I used the following criteria: 1) non-U.S. citizenship; 2) 12^{th} grade

education or less; 3) non-federal, non-state, or non-local government employee; 4) receiving no income from welfare or social security; and 5) not receiving Medicare or Medicaid.

To avoid excluding undocumented respondents who had more than a high school education, I wanted to be more flexible with the educational variable. Thus, I created two additional datasets, one of males and another of females, to include respondents who had 2 years of college education or less along with all of the other criteria I outlined. I abstained from including respondents who had more education, specifically those who had four years of college, to avoid including international students on visas. In addition, respondents who did not meet all of the criteria I outlined in the previous paragraph were deleted from my study since I considered them to be documented. Lastly, I used the same criteria to identify spouses who were likely to be undocumented.

Summary & Discussion: Marriage Paths

After examining the data, I found that there were six main marriage paths taken by my Mexican respondents, namely, 1) marriage with an undocumented Mexican; 2) marriage with a documented Mexican born in Mexico; 3) marriage with a documented Mexican born in the U.S. (a U.S. citizen); 4) marriage with a non-Mexican Hispanic who is undocumented; 5) marriage with a non-Mexican Hispanic who is documented; and 6) marriage with a non-Hispanic White.

When I used the conservative method to infer status, I began with a total of 2,201 undocumented Mexican men. When I used the more lenient method, by adding those who had one or two years of college, my number of undocumented Mexican men

increased to 2,439 respondents. Furthermore, I identified a total of 1,612 undocumented Mexican women using the conservative method and 1,837 using the lenient method. For both sexes, I found that for the most part, the percentages of those taking each of the six main marriage paths did not change appreciably when I added the college educated. Thus, in order to be more inclusive, in this section I summarize the percentages I obtained using the lenient method to infer status. Table 4.2 shows the results for the men and Table 4.4 shows the results for the women (see these two tables in Chapter 4 of my dissertation).

I found that most men, 1,008 respondents (41.3%) took the first marriage path and are married to an undocumented Mexican woman. There were 426 respondents (17.5%) who took the second marriage path, marriage with a documented Mexican born in Mexico. A few more, 563 respondents (23.1%) took the third marriage path, marriage with a U.S. born Mexican. Only 68 respondents (2.8%) took the fourth marriage path, marriage with an undocumented non-Mexican Hispanic. A few more, 87 respondents (3.6%) took the fifth marriage path, marriage with a documented non-Mexican Hispanic. Lastly, 227 respondents (9.3%) took the sixth marriage path, marriage with a non-Hispanic white. Finally, there were 60 respondents (2.5%) who married other types of spouses. Table 4.2 describes their partners in more detail.

Regarding the data for the women, I found that: 1,000 of the female respondents (54.4%) are married to an undocumented Mexican man; 295 (16.1%) are married to a documented Mexican born in Mexico; 283 (15.4%) are married to a Mexican born in the U.S.; 50 (2.7%) are married to an undocumented non-Mexican Hispanic; 70 (3.8%) are

married to a documented non-Mexican Hispanic; 97 (5.3%) are married to a non-Hispanic white; and 42 (2.3%) are married to other types of spouses. Table 4.4 contains more information on these statistics.

My first hypothesis was that the percentage of undocumented Mexicans having an undocumented Mexican spouse would be the highest, followed by the percentage of them having a documented Mexican spouse and a spouse who is a non-Mexican Hispanic. I also hypothesized that the lowest marriage percentages would be with non-Hispanic Whites and non-Hispanic minorities. The results I obtained for both men and women provide support for the first part of my hypothesis, namely, that most of my respondents are married to fellow undocumented Mexicans. Furthermore, my data also support my expectation that the next highest percentage of undocumented Mexican men are married to a documented Mexican spouse, regardless of whether the spouse was born in Mexico or the U.S.

Also, the data for the women support my hypothesis that the percent of undocumented Mexicans married to non-Mexican Hispanics is higher than the percent married to non-Hispanic whites. The men's data, however, do not support this expectation; a few more men were married to non-Hispanic whites than to non-Mexican Hispanics. Finally, my data support the last part of my hypothesis that the lowest percentage of respondents are married to non-Hispanic minorities. So, for the most part, my data support my hypothesis on the order of marriage paths.

In an earlier part of my dissertation, I discussed the concept of homophily, that is, "the principle that contact between similar people occurs at a higher rate than among

dissimilar people" (McPherson et al. 2001:416). This concept of homophily suggests that most people marry others who are similar to them on a variety of characteristics, such as a likeness based on social class, occupation, educational attainment, race, ethnicity, age, language, religion, culture, values, attitudes, and beliefs, among others. For these reasons, I hypothesized that most of the respondents in my data would be married to fellow undocumented Mexicans. Thus, my dissertation provides support for marriage homophily, and specifically, homophily based on nativity and immigration status.

I also hypothesized that marriage with documented Mexicans would be the next largest percentage because respondents would still be married to fellow Mexicans, which could mean that couples would still share many characteristics. In particular, since undocumented immigrants are likely to live in poor, segregated communities alongside documented Mexicans with whom they share culture, language, and physical traits, this would seem to facilitate marriage with Mexicans of different generations (Qian et al. 2012). My dissertation results also provided support for this finding.

Furthermore, to a lesser extent, I found support for panethnic endogamy, that is, the practice of marrying within a related ethnic group, in the data for the women. Similar to the results produced by Qian and his associates (2012), I found that most Mexican women were married to Mexicans and to a lesser extent to other non-Mexican Hispanics. This was not the case for the men, who were more likely to marry non-Hispanic whites over non-Mexican Hispanics. This was not expected, because I believe undocumented Mexicans share the least similarities with non-Hispanic whites, since whites are

considered to be on the very top of the racial hierarchy in the U.S., and undocumented Mexicans towards the very bottom.

Undocumented Mexicans are likely to have a low socioeconomic status because their immigration status keeps them in low-wage, dead-end jobs (Hall et al. 2012). Thus, this can limit the marriage pool they can access. Furthermore, since very few non-Hispanic whites are likely to be undocumented, undocumented Mexicans may not feel comfortable opening up and disclosing their immigration status to non-Hispanic whites for fear that their white contacts may not be understanding about their situation. Thus, it was intriguing to find that the percent of undocumented Mexican men with non-Hispanic white spouses was higher than the percent of undocumented Mexican women with non-Hispanic white spouses. It was also interesting to me to find out that the percent of undocumented Mexican men with undocumented Mexican spouses was lower than the percent of undocumented Mexican women with undocumented Mexican spouses. These two interesting observations suggest that the dating and marriage behaviors of undocumented Mexican men may be less limited by their immigration status than those of undocumented Mexican women. Thus, men may have more marriage opportunities than women.

One explanation is that there may be more undocumented Mexican men than undocumented Mexican women in the U.S. I found that this was the case in the ACS. Research shows that contextual factors, such as the sex ratio, can affect marriage behavior (Shin 2011). Thus, if there are more undocumented Mexican men than undocumented Mexican women, I would expect more intermarriage among men than

among the women because there would not be enough undocumented Mexican women for them to marry so men would have to look outside of their group to find a spouse.

Another reason may be that in a patriarchal society, such as the U.S., undocumented men may have more job opportunities than undocumented women, and therefore, more mobility and power to date a variety of women. Also, since men are traditionally the ones who propose marriage, they may have more power deciding when and whom they marry. Regardless of what may be the case, it is important to note that they are still more likely to be married to an undocumented Mexican spouse than any other type of spouse.

Summary & Discussion: Multinomial Logistic Regression Models

The second part of my statistical analysis was to examine the effects of race, time living in the U.S., and English proficiency on the six main marriage paths. I estimated multinomial logistic regression models for my respondents in the four datasets and found that the coefficients for the males and females did not change much when I added the respondents with one or two years of college, via the lenient method. Thus, in order to be more inclusive, in this section I present the coefficients I obtained using the lenient method to infer status. Also, since most of my respondents have undocumented Mexican spouses, I used this category as the reference category in my multinomial logit equations.

Table 5.2 shows the multinomial logit coefficients for the men using the lenient method, and Table 5.4 show the results for the women (see the tables in Chapter 5 of my dissertation). The F-test values for both models were statistically significant which

allowed me to reject the null hypothesis that all the coefficients were zero. Also, the coefficients for men and women were very similar.

In general, I found that the variable representing the number of years the respondent has lived in the U.S. was not a very good predictor of the type of spouse an undocumented Mexican man or woman was likely to have. For the men, this variable was only significant for those married to Mexicans born in Mexico and for women, it produced inconsistent results: it was negative and significant for women married to documented Mexicans born in Mexico, but positive and significant for women married to Mexicans born in the U.S, and not significant for all others.

The dummy variable representing whether the respondent speaks only English, speaks English well or very well, on the other hand, produced more consistent results. It was positive and statistically significant for the majority of undocumented Mexican men and women. Also, for both sexes, English proficiency had the largest effect on the likelihood that an undocumented Mexican was married to a non-Hispanic white, versus an undocumented Mexican. Specifically, for men, those who were proficient in English, compared to those who were not, were 8.715 times ($e^{2.165} = 8.715$) more likely to be married to a non-Hispanic white, versus an undocumented Mexican, holding the other variables constant. That is, their odds of being married to a non-Hispanic white increased by 771.5 percent. For women, those who were proficient in English, compared to those who were not, were 8.811 times ($e^{2.176} = 8.811$) more likely to be married to a non-Hispanic white, versus an undocumented Mexican, holding the other variables constant. That is, the odds increased by 781.1 percent. Thus, I concluded that English proficiency

was a much better predictor of the type of spouse undocumented Mexicans were likely to have.

Finally, the dummy variable representing if the respondent identifies racially as white, produced inconsistent results. For men, it was positive and significant for those with Mexican spouses born in the U.S., but negative and significant for those with documented non-Mexican Hispanic spouses and non-Hispanic white spouses, and not significant for all others. For women, this variable was only significant for women with documented non-Mexican Hispanic spouses, and it was negative. Therefore, race, like time in the U.S., was not a very good predictor of the type of spouse undocumented Mexicans are likely to have.

In the earlier part of my dissertation, I hypothesized that identifying racially as white would probably not be statistically significant in the regression models. Research suggests that race may not accurately capture the identity of Mexicans and Mexican Americans in the U.S. Dowling (2014) found that although many Mexican Americans self-identify as white, often times they do not phenotypically look white and still experience racism and discrimination. Dowling argued that Mexicans identify as white to differentiate themselves from first generation immigrants and to avoid the racism and discrimination aimed at immigrants. My data show, that indeed most Mexicans self-identify as white. In the datasets using the lenient method to infer status, 58.6% of the men and 60.8% of the women identified as being white. Furthermore, my hypothesis is mostly supported by the women, since only one of the race coefficients was significant. Three race coefficients were significant for the men but as just mentioned, they were

inconsistent; some coefficients were positive and significant and others negative and significant. A previous study shows similar results. Shin (2011) examined the effects on race on the log odds of Mexicans having a spouse who is a: 1) non-Hispanic white; 2) non-Hispanic minority; and 3) non-Mexican Hispanic, compared to having a wife who is Mexican. He found that Mexicans who identified as "white" were not significantly different in their marriage behavior compared to those who identified as "some other race."

I also hypothesized that respondents who were proficient in English would be less likely to have undocumented Mexican spouses. That is, I believed those who spoke English well, would have better chances of having other types of spouses besides undocumented Mexican spouses. Shin writes "that linguistic assimilation promotes more intermarriage, because the social boundaries of immigrant-group members expand as they gain fluency in English, which can ease tensions with or prejudices from Anglos" (Shin 2011: 1394). My data support my hypothesis and suggest that indeed, being proficient in English facilitates intermarriage especially with non-Hispanic whites. Likewise, Shin (2011) found that Mexicans (and Cubans) who spoke fluent English, were more likely to marry whites than those who spoke limited English.

Finally, I hypothesized that time living in the U.S. would have a negative relationship with the likelihood of having an undocumented spouse. I believed that being in the U.S. longer, would facilitate intermarriage or at least marriages with spouses who were not undocumented Mexicans, which is in line with the assimilation perspective. In general, however, my data did not support this hypothesis. The variable representing the

number of years respondents have lived in the U.S., produced inconsistent results and was for the main part, not significant in the models. Similarly, Shin (2011) found that time lived in the U.S. was not statistically significant for Mexicans in his multinomial logistic regression models.

Earlier in this section, I mentioned that the coefficients I obtained for the men and women were very similar. Shin also found trivial differences between the male and female coefficients in his study and concluded that there is no gender difference in intermarriage behavior among Mexicans, Cubans and Dominicans (2011). So, despite my earlier findings on the percentages of undocumented Mexican men and women and their marriage paths, race, time living in the U.S., and English proficiency affects their marriage behavior similarly.

Future Research

I have mentioned that contextual factors such as the sex ratio, can affect the marriage behavior of men and women. In this dissertation I did not include contextual factors in my statistical analyses. I simply studied the marriage behavior of undocumented Mexicans in the U.S. as a whole. Thus, future research should include contextual factors, because while there is quantitative research that examines the effects of the sex ratio on the marriage behaviors of Mexicans (Shin 2011), it does not specify if they are undocumented. It would be interesting to see the effects of the number of undocumented Mexicans in a Metropolitan Statistical Area on the marriage behavior of undocumented Mexicans. One problem however, would be that there may not be enough undocumented Mexicans in each area to do such analysis.

Also, further research needs to be conducted on why undocumented Mexicans are marrying one another more than other types of people. I believe that one appropriate way to accomplish this objective would be by conducting qualitative research. I propose a study that would investigate the effects of having an undocumented status on the dating and marriage selection of immigrants. As I mentioned in the earlier part of my dissertation, dating while undocumented can be very difficult. Undocumented individuals must not only deal with the societal consequences of being undocumented, but they also must find partners who will be accepting and supporting of their status. Although I mentioned how self-disclosure of an undocumented status comes into play in intimate relationships, I did not investigate this in my dissertation. So, I would propose to undertake future research on whether and how people self-disclose their undocumented status to their partners, when they decide to disclose, and the implications of such self-disclosure. I would also research how people's status affects their partner preferences. Furthermore, I would investigate how having undocumented status affects the family life of couples where at least one member is undocumented. I believe that this type of research would greatly help us better understand the marriage behavior of undocumented Mexicans in the U.S.

Conclusion

I began this dissertation by stating why the topic of marriage patterns of undocumented immigrants is important. I now end it in the same manner. Not only does my study provide statistics and data about a demographic understudied group, but it also provides insight on a vulnerable group of individuals threatened by the new presidency.

My results show that most undocumented Mexicans are marrying one another, which also suggests that they are unable to legalize their status through their partners. But on the other hand, it also shows that many undocumented Mexicans are marrying other types of spouses, which are likely to also be affected by their partner's status. Therefore, I argue that efforts to better the lives of the undocumented are not only an issue of the Hispanic community, but an issue of concern for all Americans. As I stated in the introduction, there are approximately 11.3 million undocumented people in the U.S. (Krogstad and Passel 2015).

When I began writing, the future of most undocumented individuals was brighter. President Obama had announced executive actions that would provide deportation relief to many. Unfortunately, since then, the political atmosphere has changed dramatically. Now, possibly more than ever, the future of undocumented individuals in the U.S. is in limbo. As social scientists, it is our duty to provide our fellow citizens and their political representatives with solid facts on which they can base legislation. I hope that my dissertation helps these efforts by providing insights on the marriage behaviors of the undocumented Mexicans living in the U.S.

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APPENDIX

TABLES

Table 3.1: Percent of Cases Allocated by the ACS by Variable	
Independent Variables	**Percent Allocated**
Years in the U.S. of the Respondent	Not available
English Proficiency of the Respondent	2.87
Race of the Respondent	5.90
Age of the Respondent (control variable)	1.15
Variables Used to Infer Undoc. Status for Sample Dataset	**Percent Allocated**
Citizenship of the Respondent	3.94
Birthplace of the Respondent	2.91
Health Insurance through Medicare of the Respondent	0.00
Health Insurance through Medicaid of the Respondent	0.00
Social Security Income of the Respondent	5.78
Supplementary Security Income of the Respondent	0.00
Welfare Income of the Respondent	5.82
Class of Worker of the Respondent	Not available
Education of the Respondent	9.43

Table 4.1: Marriage Paths for the Undocumented Mexican Men (Conservative Method)		
Marriage with:	**N**	**Percent**
1) An Undocumented Mexican	881	40.03
2) A Documented Mexican Born in Mexico	451	20.49
3) A Documented Mexican Born in the U.S. (U.S. Citizen)	495	22.49
4) An Undocumented Non-Mexican Hispanic	55	2.50
5) A Documented Non-Mexican Hispanic	78	3.54
6) Non-Hispanic White Undocumented -1 Documented -190	191	8.68
7) Other Mexican (not born in U.S. or Mexico) - 19 Non-Hispanic - 31 Black - 11 American Indian or Alaska Native - 4 Chinese - 2 Japanese - 1 Other Asian or Pacific Islander - 6 Other race - 2 Two major races - 5	50	2.27
Total	2,201	100

Table 4.2: Marriage Paths for the Undocumented Mexican Men (Lenient Method)		
Marriage with:	**N**	**Percent**
1) An Undocumented Mexican	1,008	41.33
2) A Documented Mexican Born in Mexico	426	17.47
3) A Documented Mexican Born in the U.S. (U.S. Citizen)	563	23.08
4) An Undocumented Non-Mexican Hispanic	68	2.79
5) A Documented Non-Mexican Hispanic	87	3.57
6) Non-Hispanic White Undocumented -3 Documented -224	227	9.31
7) Other Mexican (not born in U.S. or Mexico) - 21 Non-Hispanic - 39 Black - 13 American Indian or Alaska Native - 5 Chinese - 4 Japanese - 1 Other Asian or Pacific Islander - 9 Other race - 2 Two major races - 5	60	2.46
Total	2,439	100

Table 4.3: Marriage Paths for the Undocumented Mexican Women (Conservative Method)		
Marriage with:	**N**	**Percent**
1) An Undocumented Mexican	874	54.22
2) A Documented Mexican Born in Mexico	315	19.54
3) A Documented Mexican Born in the U.S. (U.S. Citizen)	221	13.71
4) An Undocumented Non-Mexican Hispanic	37	2.30
5) A Documented Non-Mexican Hispanic	63	3.91
6) Non-Hispanic White Undocumented - 0 Documented -71	71	4.40
7) Other Mexican (not born in U.S. or Mexico) - 10 Non-Hispanic - 21 Black - 9 American Indian or Alaska Native - 2 Chinese - 0 Japanese - 1 Other Asian or Pacific Islander - 4 Other race - 2 Two major races - 3	31	1.92
Total	1,612	100

Table 4.4: Marriage Paths for the Undocumented Mexican Women (Lenient Method)		
Marriage with:	**N**	**Percent**
1) An Undocumented Mexican	1,000	54.44
2) A Documented Mexican Born in Mexico	295	16.06
3) A Documented Mexican Born in the U.S. (U.S. Citizen)	283	15.41
4) An Undocumented Non-Mexican Hispanic	50	2.72
5) A Documented Non-Mexican Hispanic	70	3.81
6) Non-Hispanic White Undocumented - 2 Documented -95	97	5.28
7) Other Mexican (not born in U.S. or Mexico) - 11 Non-Hispanic - 31 Black - 14 American Indian or Alaska Native - 3 Chinese - 1 Japanese - 1 Other Asian or Pacific Islander - 6 Other race - 2 Two major races - 4	42	2.29
Total	1,837	100

Table 4.5: Descriptive Statistics for the Independent Variables for the Undocumented Men and Women by Inferring Method				
Variable	**Men (Conservative Method)**	**Men (Lenient Method)**	**Women (Conservative Method)**	**Women (Lenient Method)**
Years in the U.S.				
Average	12.87 years	13.03 years	11.47 years	11.48 years
Min	0 years	0 years	0 years	0 years
Max	62 years	62 years	46 years	46 years
English Proficiency				
Does not speak English or speaks English but not well	43.39% (955 respondents)	40.96% (999 respondents)	56.64% (913 respondents)	53.18% (977 respondents)
Speaks only English, speaks English well or very well	56.61% (1,246 respondents)	59.04% (1,440 respondents)	43.36% (699 respondents)	46.82% (860 respondents)
Race				
Non-white	41.62% (916 respondents)	41.41% (1,010 respondents)	38.83% (626 respondents)	39.25% (731 respondents)
White	58.38% (1,285 respondents)	58.59% (1,439 respondents)	61.17% (986 respondents)	60.75% (1,116 respondents)
Age				
Average	30.81 years	30.90 years	30.39 years	30.16 years
Min	18 years	18 years	18 years	18 years
Max	68 years	68 years	62 years	62 years
N	2,201 respondents	2,439 respondents	1,612 respondents	1,837 respondents

Table 5.1: Multinomial Logistic Regression Results: Undocumented Mexican Men in the Conservative Dataset Taking Each of the Main Marriage Paths versus being Married to an Undocumented Mexican According to Selected Social and Demographic Factors: 2,151 Adult Men, United States, 2008-2012

Independent Variables	Doc. Mexican Born in Mexico	Doc. Mexican Born in the U.S.	Undoc. Non-Mexican Hispanic	Doc. Non-Mexican Hispanic	Non-Hispanic White
Years in the U.S.	0.011	0.040**	0.024	-0.041	-0.001
English Proficiency (1 = speaks only English, speaks English well or very well)	0.101	0.482**	0.640*	0.852**	2.015**
Race (1 = white)	-0.120	0.173	0.194	-0.449*	-0.448*
Age (years)	-0.008	-0.111**	0.015	0.009	-0.030*
Intercept	-0.656*	1.642**	-4.060**	-2.589**	-1.922**
N	451	495	55	78	191
F-Test	12.88**				

Notes

*p < .05

**p <.001
The reference group is marriage with an undocumented Mexican (N = 881)

Table 5.2: Multinomial Logistic Regression Results: Undocumented Mexican Men in the Lenient Dataset Taking Each of the Main Marriage Paths versus being Married to an Undocumented Mexican According to Selected Social and Demographic Factors: 2,379 Adult Men, United States, 2008-2012

Independent Variables	Doc. Mexican Born in Mexico	Doc. Mexican Born in the U.S.	Undoc. Non-Mexican Hispanic	Doc. Non-Mexican Hispanic	Non-Hispanic White
Years in the U.S.	0.011	0.041**	0.016	-0.028	-0.006
English Proficiency (1 = speaks only English, speaks English well or very well)	0.045	0.520**	0.694*	0.888**	2.165**
Race (1 = white)	-0.040	0.226*	0.050	-0.419*	-0.477*
Age (years)	-0.004	-0.096**	0.010	0.007	-0.023
Intercept	-0.996**	1.153**	-3.705**	-2.732**	-2.156**
N	426	563	68	87	227
F-Test	13.71**				

Notes

*p < .05

**p <.001

The reference group is marriage with an undocumented Mexican (N = 1,008)

Table 5.3: Multinomial Logistic Regression Results: Undocumented Mexican Women in the Conservative Dataset Taking Each of the Main Marriage Paths versus being Married to an Undocumented Mexican According to Selected Social and Demographic Factors: 1,581 Adult Women, United States, 2008-2012

Independent Variables	Doc. Mexican Born in Mexico	Doc. Mexican Born in the U.S.	Undoc. Non-Mexican Hispanic	Doc. Non-Mexican Hispanic	Non-Hispanic White
Years in the U.S.	-0.011	0.025	0.007	0.011	0.046*
English Proficiency (1 = speaks only English, speaks English well or very well)	0.148	1.116**	-0.242	0.833**	1.961**
Race (1 = white)	-0.064	0.221	0.885*	-0.633*	0.271
Age (years)	0.052**	-0.005	-0.006	0.025	0.036
Intercept	-2.652**	-2.316**	-3.502**	-3.646**	-5.632**
N	315	221	37	63	71
F-Test	12.16**				

Notes

*p < .05

**p <.001

The reference group is marriage with an undocumented Mexican (N = 874)

Table 5.4: Multinomial Logistic Regression Results: Undocumented Mexican Women in the Lenient Dataset Taking Each of the Main Marriage Paths versus being Married to an Undocumented Mexican according to Selected Social and Demographic Factors: 1,795 Adult Women, United States, 2008-2012

Independent Variables	Doc. Mexican Born in Mexico	Doc. Mexican Born in the U.S.	Undoc. Non-Mexican Hispanic	Doc. Non-Mexican Hispanic	Non-Hispanic White
Years in the U.S.	-0.020*	0.032*	0.003	-0.020	0.024
English Proficiency (1 = speaks only English, speaks English well or very well)	0.073	1.112**	0.162	0.996**	2.176**
Race (1 = white)	0.011	0.171	0.500	-0.542*	0.175
Age (years)	0.057**	-0.016	0.015	0.040	0.037*
Intercept	-2.982**	-2.000**	-3.800**	-3.893**	-5.357**
N	295	283	50	70	97
F-Test	13.70**				

Notes

*p < .05

**p <.001
The reference group is marriage with an undocumented Mexican
(N = 1,000)